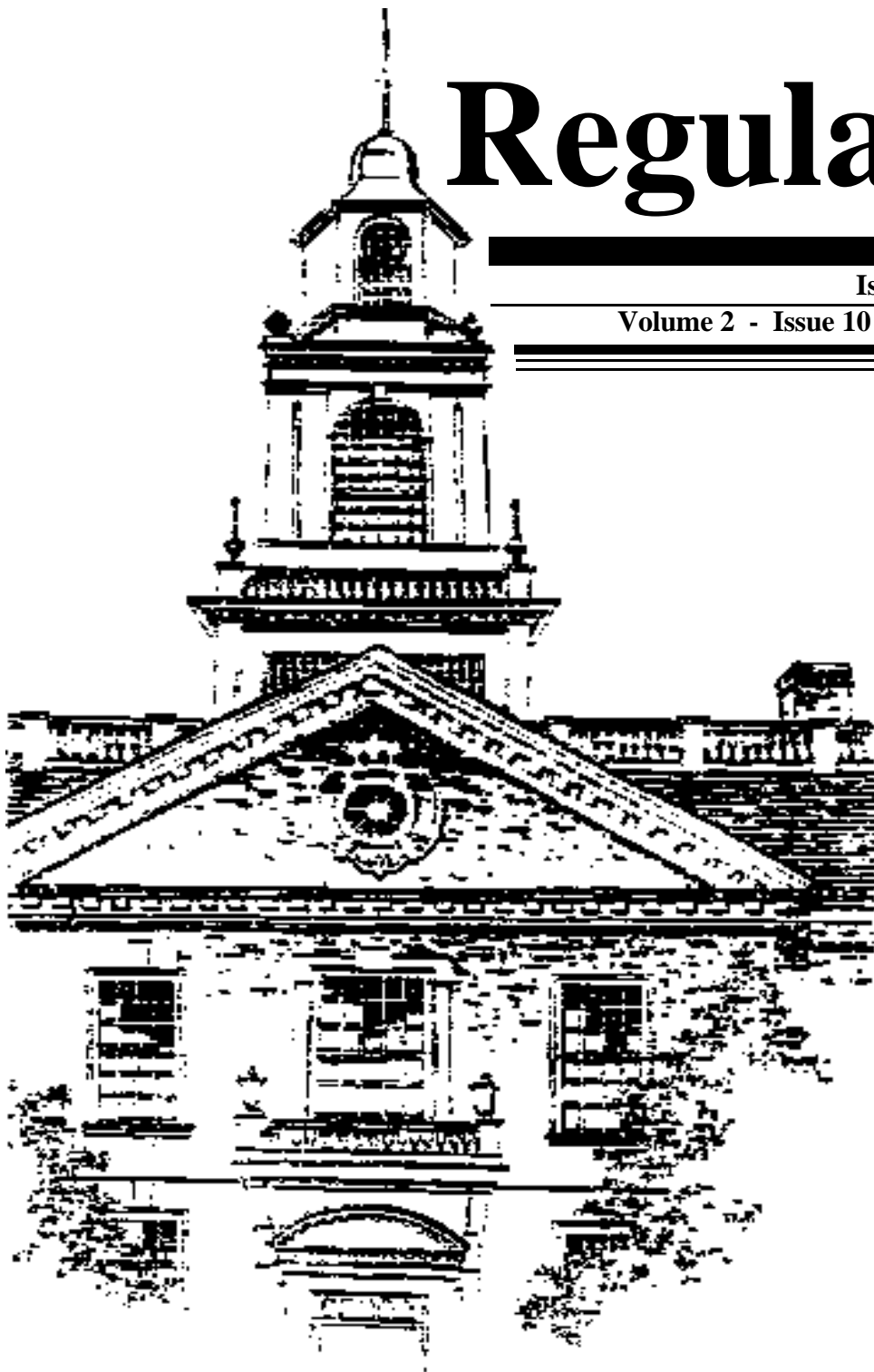

Delaware Register of Regulations



Issue Date: April 1, 1999

Volume 2 - Issue 10

Pages 1682 - 1918

IN THIS ISSUE:

Regulations:

- Errata
- Proposed
- Final

Governor

- Executive Order
- Appointments

General Notices

- Calendar of Events &
Hearing Notices



Pursuant to 29 Del. C. Chapter 11, Subchapter III, this issue of the Register contains all documents required to be published, and received on or before March 15, 1999.

INFORMATION ABOUT THE DELAWARE REGISTER OF REGULATIONS

1683

DELAWARE REGISTER OF REGULATIONS

The Delaware Register of Regulations is an official State publication established by authority of 69 Del. Laws, c. 107 and is published on the first of each month throughout the year.

The Delaware Register will publish any regulations that are proposed to be adopted, amended or repealed and any emergency regulations promulgated.

The Register will also publish some or all of the following information:

- Governor's Executive Orders
- Governor's Appointments
- Attorney General's Opinions in full text
- Agency Hearing and Meeting Notices
- Other documents considered to be in the public interest.

CITATION TO THE DELAWARE REGISTER

The Delaware Register of Regulations is cited by volume, issue, page number and date. An example would be:

2:6 **Del. R.** 1000 - 1010 (December 1, 1998) refers to Volume 2, Issue 6, pages 1000 - 1010 of the Delaware Register issued on December 1, 1998.

SUBSCRIPTION INFORMATION

The cost of a yearly subscription (12 issues) for the Delaware Register of Regulations is \$120.00. Single copies are available at a cost of \$12.00 per issue, including postage. For more information contact the Division of Research at 302-739-4114 or 1-800-282-8545 in Delaware.

CITIZEN PARTICIPATION IN THE REGULATORY PROCESS

Delaware citizens and other interested parties may participate in the process by which administrative regulations are adopted, amended or repealed, and may initiate the process by which the validity and applicability of regulations is determined.

Under 29 **Del.C.** §10115 whenever an agency proposes to formulate, adopt, amend or repeal a regulation, it shall file notice and full text of such proposals, together with copies of the existing regulation being adopted, amended or repealed, with the Registrar for publication in the Register of Regulations pursuant to §1134 of this title. The notice shall describe the nature of the proceedings including a brief synopsis of the subject, substance, issues, possible terms of the agency action, a reference to the legal authority of the agency to act, and reference to any other regulations that may be impacted or affected by the proposal, and shall state the manner in which persons may present their views; if in writing, of the place to which and the final date by which such views may be submitted; or if at a public hearing, the date, time and place of the hearing. If a public hearing is to be held, such public hearing shall not be scheduled less than 20 days following publication of notice of the proposal in the Register of Regulations. If a public hearing will be held on the proposal, notice of the time, date, place and a summary of the nature of the proposal shall also be published in at least 2 Delaware newspapers of general circulation. The notice shall also be mailed to all persons who have made timely written requests of the agency for advance notice of its regulation-making proceedings.

The opportunity for public comment shall be held open for a minimum of 30 days after the proposal is published in the Register of Regulations. At the conclusion of all hearings and after receipt, within the time allowed, of all written materials, upon all the testimonial and written

INFORMATION ABOUT THE DELAWARE REGISTER OF REGULATIONS

evidence and information submitted, together with summaries of the evidence and information by subordinates, the agency shall determine whether a regulation should be adopted, amended or repealed and shall issue its conclusion in an order which shall include: (1) A brief summary of the evidence and information submitted; (2) A brief summary of its findings of fact with respect to the evidence and information, except where a rule of procedure is being adopted or amended; (3) A decision to adopt, amend or repeal a regulation or to take no action and the decision shall be supported by its findings on the evidence and information received; (4) The exact text and citation of such regulation adopted, amended or repealed; (5) The effective date of the order; (6) Any other findings or conclusions required by the law under which the agency has authority to act; and (7) The signature of at least a quorum of the agency members.

The effective date of an order which adopts, amends or repeals a regulation shall be not less than 10 days from the date the order adopting, amending or repealing a regulation has been published in its final form in the Register of Regulations, unless such adoption, amendment or repeal qualifies as an emergency under §10119.

Any person aggrieved by and claiming the unlawfulness of any regulation may bring an action in the Court for declaratory relief.

No action of an agency with respect to the making or consideration of a proposed adoption, amendment or repeal of a regulation shall be subject to review until final agency action on the proposal has been taken.

When any regulation is the subject of an enforcement action in the Court, the lawfulness of such regulation may be reviewed by the Court as a defense in the action.

Except as provided in the preceding section, no judicial review of a regulation is available unless a complaint therefor is filed in the Court within 30 days of the day the agency order with respect to the regulation was published in the Register of Regulations.

CLOSING DATES AND ISSUE DATES FOR THE DELAWARE REGISTER OF REGULATIONS

ISSUE DATE	CLOSING DATE	CLOSING TIME
MAY 1	APRIL 15	4:30 P.M.
JUNE 1	MAY 15	4:30 P.M.
JULY 1	JUNE 15	4:30 P.M.
AUGUST 1	JULY 15	4:30 P.M.
SEPTEMBER 1	AUGUST 15	4:30 P.M.

DIVISION OF RESEARCH STAFF:

William S. Montgomery, Director, Division of Research; **Walter G. Feindt**, Deputy Director; **Kathleen K. Amalfitano**, Secretary; **Jeffrey W. Hague**, Registrar of Regulations; **Maryanne McGonegal**, Research Analyst; **Ruth Ann Melson**, Legislative Librarian; **Deborah J. Messina**, Print Shop Supervisor; **Alex W. Mull**, Assistant Registrar; **Deborah A. Porter**, Administrative Secretary; **Virginia L. Potts**, Administrative Assistant; **Barbara Ryan**, Public Information Clerk; **Don Sellers**, Printer; **Thom Shiels**, Legislative Attorney; **Marguerite P. Smith**, Public Information Clerk; **Alice W. Stark**, Legislative Attorney; **Mary Jane Starkey**, Senior Secretary; **Marvin L. Stayton**, Printer; **Rochelle Yerkes**, Senior Secretary.

TABLE OF CONTENTS

1685

Cumulative Tables..... 1687

ERRATA

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL DIVISION OF AIR & WASTE MANAGEMENT WASTE MANAGEMENT SECTION

Regulations Governing Solid Waste..... 1696

PROPOSED REGULATIONS

DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PROFESSIONAL REGULATION

Board of Landscape Architects..... 1697
Board of Occupational Therapy..... 1698

DEPARTMENT OF AGRICULTURE

Farmland Preservation Program..... 1701

HARNESS RACING COMMISSION

Procedure for determination of preference dates.. 1728
Procedure for selection of races in divisions..... 1728

DEPARTMENT OF EDUCATION

Repeal of Regulation on Necessary and Legal Absences..... 1728

DEPARTMENT OF HEALTH & SOCIAL SERVICES DIVISION OF SOCIAL SERVICES

DSSM Section 3002, Time Limit, Temporary Welfare Program..... 1730
DSSM Section 3031, Work For Your Welfare..... 1732
DSSM Section 3032, Diversion Assistance..... 1734
Eligibility Manual Section 14950, Guaranteed Eligibility..... 1735
General Policy Manual..... 1736

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL DIVISION OF AIR & WASTE MANAGEMENT HAZARDOUS WASTE MANAGEMENT SECTION

Regulations Governing Hazardous Waste..... 1737

PUBLIC SERVICE COMMISSION

Regulation Docket No. 4, Establishing Minimum Filing Requirements for All Regulated Companies under the Jurisdiction of the PSC..... 1741

FINAL REGULATIONS

DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PROFESSIONAL REGULATION

Board of Plumbing Examiners..... 1759
Delaware Gaming Board
Regulations Governing Bingo, Section 1.04(7).... 1761
Regulations Governing Charitable Gamblind other than Raffles, Section 3.12..... 1761
Delaware Real Estate Commission..... 1762

DEPARTMENT OF AGRICULTURE HARNESS RACING COMMISSION

Commission's Powers to Appoint Officials..... 1763
Overnight Events..... 1764
Procedure for Determination of Preference Dates 1765
Calculation of Time Allowance Based on Weather Conditions..... 1765

DEPARTMENT OF EDUCATION

School Calendar and Required Days and Hours of Instruction, Repeal of..... 1765
Technology, Repeal of..... 1766

DEPARTMENT OF HEALTH & SOCIAL SERVICES DIVISION OF PUBLIC HEALTH

Regulations Governing Public Drinking Water Systems 1767

TABLE OF CONTENTS

**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL
DIVISION OF AIR & WASTE MANAGEMENT
AIR MANAGEMENT SECTION**

Reg. 1 & 3, Governing the Control of Air Pollution.... 1851

DIVISION OF FISH & WILDLIFE

Boating Regulations..... 1880
Shellfish Reg. No. S-23, Lobster-Pot Design..... 1898
Shellfish REg. No. S-25, Lobster-Pot Season &
Limits for Commercial Lobster Pot License. 1898
Shellfish Reg. No. S-26, Possession of V-Notched
Lobsters Prohibited..... 1898
Tidal Finfish Reg. No. 4, Summer Flounder Size
Limits; Possession Limits; Season..... 1898
Tidal Finfish Reg. No. 23, Black Sea Bass Size
Limits; Seasons; Quotas..... 1898
Tidal Finfish Reg. No. 10, Weakfish Size Limits,
Possession Limits, Seasons..... 1902
Tidal Finfish Reg. No. 24, Fish Pot Requirements 1902
Tidal Finfish Reg. No. 26, American Shad &
Hickory Shad Creel Limits..... 1902

PUBLIC SERVICE COMMISSION

Public Service Commission, PSC Regulation Docket
No. 47, Discounts for Intrastate Telecommunications
and Information Services Provided to Schools
and Libraries..... 1906

GOVERNOR

Governor's Executive Order No. 59..... 1908
Appointments..... 1909

GENERAL NOTICES

**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

Delaware's State Implementation Plan (SIP) Revision
for the Implementation of the National Low
Emission Vehicle (NLEV) Program..... 1911

**CALENDAR OF EVENTS/
HEARING NOTICES**

Board of Landscape Architects, Notice of Public
Hearing 1915
Board of Occupational Therapy, Notice of Public
Hearing 1915
Dept. of Agriculture, Farmland Preservation Program,
Notice of Public Hearing..... 1915
Harness Racing Comm., Notice of Public Comment Period
Procedure for determination of preference dates.. 1915
Procedure for selection of races in divisions. 1916
Dept. of Education, Notice of Monthly Meeting.. 1916
Div. of Social Services, DSSM, Sections 3002,
3021 & 3032, Notice of Public Comment Period. 1916
Div. of Social Services, DSSM, Section 14950,
Eligibility Manual, Notice of Public Comment.... 1916
Div. of Social Services, DMAP, General Policy
Manual, Notice of Public Comment..... 1916
DNREC, Regulations Governing Hazardous Waste
(DRGHW), Notice of Public Hearing..... 1917
DNREC, Air Quality Management Section, Reg. 31,
Notice of Public Hearing..... 1917
Delaware River Basin Commission, Notice of
Monthly Meeting..... 1918
PSC, Reg. Docket Number 4, Establishing
Minimum Filing Requirements for All Regulated
Companies under the Jurisdiction of the PSC,
Notice of Public Comment..... 1918

The table printed below lists the regulations that have been proposed, adopted, amended or repealed in the preceding issues of the current volume of the Delaware Register of Regulations.

The regulations are listed alphabetically by the promulgating agency, followed by a citation to that issue of the Register in which the regulation was published. Proposed regulations are designated with (Prop.); Final regulations are designated with (Final); Emergency regulations are designated with (Emer.); and regulations that have been repealed are designated with (Rep.).

Attorney General

Opinion No. 98-IB03, Authority to Delegate Approval of Certain Personnel Transactions.	2:2	Del.R.	324
Opinion No. 98-IB04, FOIA Complaint Against Appoquinimink School District.....	2:2	Del.R.	325
Opinion No. 98-IB05, FOIA Complaint Against Appoquinimink School District.....	2:4	Del.R.	699
Opinion No. 98-IB06, Candidacy of Richard L. Abbott.....	2:4	Del.R.	700
Opinion No. 98-IB07, Sworn Payroll Information, 29 Del.C. 10002.....	2:4	Del.R.	703
Opinion No. 98-IB08, Complaint Against the Town of Townsend.....	2:4	Del.R.	705
Opinion No. 98-IB09, FOIA Complaint Against Woodbridge School District.....	2:8	Del.R.	1396
Opinion No. 98-IB10, Candidacy of Douglas Salter.....	2:8	Del.R.	1397
Opinion No. 98-IB11, Opinion of the Attorney General Concerning the Licensing of Oral Maxillofacial Surgeons.....	2:8	Del.R.	1398
Opinion No. 98-IB12, FOIA Complaint Against Woodbridge School District.....	2:8	Del.R.	1399
Opinion No. 98-IB13, FOIA Complaint Against Town of Laurel.....	2:8	Del.R.	1401
Opinion No. 98-IB14, FOIA Complaint Against City of Newark.....	2:8	Del.R.	1402

Delaware Health Care Commission

Delaware Health Information Network, Rules & Regulations.....	2:9	Del.R.	1434 (Prop.)
---	-----	---------------	--------------

Delaware Solid Waste Authority

DSWA, Rules and Regulations.....	2:8	Del.R.	1316 (Prop.)
Differential Disposal Fee Program.....	2:8	Del.R.	1328 (Prop.)
Proposed Amendment to the Statewide Solid Waste Management Plan.....	2:8	Del.R.	1329 (Prop.)

Delaware State Fire Prevention Commission

Part V, Chapter 5, Standard for the Marking, Identification, and Accessibility of Fire Lanes, Exits, Fire Hydrants, Sprinkler and Standpipe Connections.....	2:5	Del.R.	765 (Prop.)
	2:8	Del.R.	1331 (Prop.)

Department of Administrative Services

Division of Professional Regulation

Board of Clinical Social Work Examiners.....	2:2	Del.R.	164 (Prop.)
	2:5	Del.R.	775 (Final)
Board of Cosmetology and Barbering.....	2:4	Del.R.	440 (Prop.)
	2:8	Del.R.	1378 (Final)
Board of Funeral Services.....	2:2	Del.R.	207 (Final)
Board of Examiners in Optometry.....	2:1	Del.R.	95 (Final)
Board of Examiners of Psychologists.....	2:1	Del.R.	103 (Final)
	2:3	Del.R.	341 (Prop.)
	2:5	Del.R.	776 (Final)
Board of Examiners of Speech/Language Pathologists, Audiologists & Hearing Aid Dispensers	2:3	Del.R.	370 (Final)
Board of Funeral Services.....	2:7	Del.R.	1061 (Prop.)
Board of Nursing	2:4	Del.R.	682 (Final)

Board of Pharmacy	2:1 Del.R.	6 (Prop.)
	2:4 Del.R.	683 (Final)
Board of Plumbing Examiners.....	2:7 Del.R.	1065 (Prop.)
Board of Professional Counselors of Mental Health.....	2:1 Del.R.	12 (Prop.)
	2:3 Del.R.	371 (Final)
Delaware Board of Occupational Therapy.....	2:8 Del.R.	1340 (Prop.)
Delaware Council on Real Estate Appraisers.....	2:3 Del.R.	372 (Final)
Delaware Gaming Board		
Bingo, Charitable Gambling & Raffles.....	2:4 Del.R.	444 (Prop.)
	2:7 Del.R.	1224 (Final)
Regulations Governing Bingo.....	2:8 Del.R.	1349 (Prop.)
Regulations Governing Charitable Gambling other than Raffles.....	2:8 Del.R.	1349 (Prop.)
Delaware Real Estate Commission.....	2:8 Del.R.	1343 (Prop.)
Department of Agriculture		
Forest Service Regulations for State Forests.....	2:3 Del.R.	348 (Prop.)
Harness Racing Commission		
Administrator of Racing, Definition.....	2:4 Del.R.	457 (Prop.)
	2:7 Del.R.	1239 (Final)
Inclusion in List of Commission Officials.....	2:4 Del.R.	457 (Prop.)
	2:7 Del.R.	1240 (Final)
Calculation of Time Allowance Based on Weather Conditions.....	2:4 Del.R.	462 (Prop.)
	2:7 Del.R.	1244 (Final)
Calculation of Time Allowance Based on Weather Conditions.....	2:7 Del.R.	1068 (Prop.)
Commission's Powers to Appoint Officials.....	2:4 Del.R.	456 (Prop.)
	2:7 Del.R.	1238 (Final)
Commission's Powers to Appoint Officials.....	2:7 Del.R.	1068 (Prop.)
Commission's Powers to Regulate Drug Testing.....	2:4 Del.R.	457 (Prop.)
	2:7 Del.R.	1240 (Final)
Conditions for Non-Winners and Winners of Over \$100.00.....	2:4 Del.R.	461 (Prop.)
	2:7 Del.R.	1243 (Final)
Conditions for Number of Horses in Field.....	2:4 Del.R.	461 (Prop.)
	2:7 Del.R.	1244 (Final)
Creation of Racing Official Positions.....	2:4 Del.R.	457 (Prop.)
Definition of Investigator.....	2:4 Del.R.	456 (Prop.)
	2:7 Del.R.	1239 (Final)
Delaware Owned or Bred Races, Addition of.....	2:4 Del.R.	458 (Prop.)
	2:7 Del.R.	1240 (Final)
Conditions for	2:4 Del.R.	458 (Prop.)
	2:7 Del.R.	1240 (Final)
Definitions of	2:4 Del.R.	458 (Prop.)
	2:7 Del.R.	1240 (Final)
Filing of Claiming Authorization at Time of Declaration, Requirement of.....	2:4 Del.R.	460 (Prop.)
	2:7 Del.R.	1242 (Final)
Overnight Events	2:7 Del.R.	1068 (Prop.)
Payment of Court Reporter Costs by Licensees Filing Appeals.....	2:4 Del.R.	461 (Prop.)
	2:7 Del.R.	1243 (Final)
Procedure for Determination of Preference Dates.....	2:4 Del.R.	461 (Prop.)
	2:7 Del.R.	1244 (Final)
Procedure for Determination of Preference Dates.....	2:7 Del.R.	1068 (Prop.)
Procedure for Horses Placed on Steward's List.....	2:4 Del.R.	461 (Prop.)
	2:7 Del.R.	1243 (Final)
Prohibition on Racing Claimed Horses.....	2:7 Del.R.	1068 (Prop.)

Prohibition of Racing Horses 15 Years or Older.....	2:4	Del.R.	460	(Prop.)
	2:7	Del.R.	1243	(Final)
Revision of Procedures for Claiming Horse that Tests Positive for Illegal Substance..	2:4	Del.R.	460	(Prop.)
	2:7	Del.R.	1242	(Final)
Selection of Races in Division, Procedure for.....	2:4	Del.R.	460	(Prop.)
	2:7	Del.R.	1243	(Final)
Whipping	2:4	Del.R.	684	(Final)
Pesticide Rules & Regulations.....	2:5	Del.R.	724	(Prop.)
	2:8	Del.R.	1380	(Final)
Thoroughbred Racing Commission				
Administrator of Racing, Rule 4.10.....	2:7	Del.R.	1070	(Prop.)
Appointment of Racing Officials, Rule 4.01.....	2:7	Del.R.	1069	(Prop.)
Investigator, Rule 4.09.....	2:7	Del.R.	1070	(Prop.)
Limits on Claims, Rule 13.04.....	2:7	Del.R.	1071	(Prop.)
Prohibition on Racing Claimed Horses, Rule 13.18.....	2:1	Del.R.	93	(Final)
Qualification for Stewards, Rule 3.01.....	2:7	Del.R.	1069	(Prop.)
Racing Claimed Horses, Rule 13.19.....	2:1	Del.R.	6	(Prop.)
	2:3	Del.R.	373	(Final)
Statment of Purpose	2:7	Del.R.	1070	(Prop.)
Department of Education				
Career Guidance & Placement Counselors.....	2:5	Del.R.	740	(Prop.)
Comprehensive School Discipline Program.....	2:3	Del.R.	374	(Final)
Constitution & Bylaws of DSSAA.....	2:1	Del.R.	113	(Final)
Cooperative Education Program.....	2:1	Del.R.	110	(Final)
Delaware Testing Requirements for Initial Licensure.....	2:1	Del.R.	32	(Prop.)
Diversified Occupations Programs.....	2:1	Del.R.	111	(Final)
Establishing a School District Planning Process, Repeal of Policy.....	2:2	Del.R.	166	(Rep.)
General Education Development (GED).....	2:1	Del.R.	16	(Prop.)
	2:3	Del.R.	376	(Final)
James H. Groves High School.....	2:1	Del.R.	17	(Prop.)
	2:3	Del.R.	378	(Final)
K - 12 Guidance Programs.....	2:5	Del.R.	741	(Prop.)
Middle Level Education Regulation.....	2:2	Del.R.	167	(Prop.)
Middle Level Education Section of Handbook for K-12 Education, Repeal of.....	2:1	Del.R.	23	(Rep.)
Middle Level Mathematics & Science Certification.....	2:1	Del.R.	21	(Prop.)
	2:3	Del.R.	377	(Final)
Multicultural Education Regulations.....	2:4	Del.R.	462	(Prop.)
	2:7	Del.R.	1244	(Final)
Options for Awarding Credit Toward High School Graduation.....	2:7	Del.R.	1071	(Prop.)
	2:9	Del.R.	1542	(Final)
Policy for Establishing a School District Planning Process.....	2:4	Del.R.	464	(Prop.)
	2:6	Del.R.	960	(Final)
Policy for School Districts on the Possession, Use & Distribution of Drugs & Alcohol.....	2:2	Del.R.	213	(Final)
Prohibition of Discrimination.....	2:4	Del.R.	465	(Prop.)
	2:7	Del.R.	1276	(Final)
Promotion Policy	2:2	Del.R.	171	(Prop.)
Promotion Regulation	2:5	Del.R.	742	(Prop.)
	2:7	Del.R.	1247	(Final)
Releasing Students to Persons other than their Parents or Legal Guardians.....	2:3	Del.R.	357	(Prop.)
	2:5	Del.R.	778	(Final)
Safety	2:2	Del.R.	215	(Final)
School Attendance	2:2	Del.R.	172	(Prop.)
	2:4	Del.R.	685	(Final)

School Calendar and Required Days and Hours of Instruction.....	2:8	Del.R.	1350	(Prop.)
School Construction	2:6	Del.R.	807	(Prop.)
	2:8	Del.R.	1380	(Final)
School Custodians	2:3	Del.R.	353	(Prop.)
	2:5	Del.R.	778	(Final)
Student Progress, Grading & Reporting, Repeal of.....	2:2	Del.R.	171	(Prop.)
	2:4	Del.R.	686	(Final)
Student Rights & Responsibilities.....	2:1	Del.R.	112	(Final)
Students, Necessary & Legal Absences.....	2:9	Del.R.	1436	(Prop.)
Summer School Programs, Repeal of.....	2:2	Del.R.	172	(Prop.)
	2:4	Del.R.	687	(Final)
Technology	2:8	Del.R.	1350	(Prop.)
Title I Complaint Process.....	2:2	Del.R.	217	(Final)
Unit Count	2:1	Del.R.	25	(Prop.)
	2:3	Del.R.	382	(Final)
Use of Quick Relief Asthmatic Inhalers by Students in Schools.....	2:9	Del.R.	1437	(Prop.)
Department of Finance				
Division of Revenue				
Proposed Tax Ruling 98- , Contractors License Tax.....	2:1	Del.R.	40	(Prop.)
Proposed Technical Information Memorandum 98-2, Effect of Federal Small Business Job Protection Act.....	2:1	Del.R.	41	(Prop.)
	2:3	Del.R.	384	(Final)
Office of the State Lottery				
Video Lottery Regulations, Operations Employees, License Renewal, etc.....	2:1	Del.R.	115	(Final)
Video Lottery Regulations, 5.2(2) Maximum Bet Limit & 7.9 Redemption Period.....	2:3	Del.R.	358	(Prop.)
	2:5	Del.R.	779	(Final)
Department of Health & Social Services				
Division of Mental Retardation				
DMR Eligibility Criteria.....	2:8	Del.R.	1358	(Prop.)
Division of Public Health				
Office of Drinking Water.....	2:7	Del.R.	1094	(Prop.)
Office of Health Facilities Licensing & Certification				
Managed Care Organizations.....	2:1	Del.R.	42	(Prop.)
	2:6	Del.R.	962	(Final)
Office of Vital Statistics				
Vital Statistics Code, Regulations for.....	2:8	Del.R.	1351	(Prop.)
Regulations Governing Lead-Based Paint Hazards.....	2:2	Del.R.	234	(Final)
Division of Social Services				
A Better Chance/Food Stamp Program.....	2:1	Del.R.	118	(Final)
Community Support Services/Alcohol-Drug Abuse Provider Manual.....	2:6	Del.R.	811	(Prop.)
Community Support Services/Mental Health Provider Manual.....	2:6	Del.R.	823	(Prop.)
DMAP, 270.10, DMAP 301.25 & DMAP 307.60.....	2:3	Del.R.	385	(Final)
DMAP, 301.25 Composition of Budget Unit.....	2:2	Del.R.	219	(Final)
DMAP, 301.25C, Adult Expansion Population.....	2:3	Del.R.	387	(Final)
DMAP, Ambulatory Surgical Center Manual.....	2:4	Del.R.	495	(Prop.)
	2:6	Del.R.	985	(Final)
DMAP Durable Medical Equipment, EPSDT & Practitioner Provider Manuals.....	2:2	Del.R.	221	(Final)
DMAP, General Policy Manual.....	2:4	Del.R.	497	(Prop.)
	2:6	Del.R.	986	(Final)
DMAP, General Policy Manual.....	2:6	Del.R.	837	(Prop.)
DMAP, General Policy Manual, Aliens.....	2:1	Del.R.	67	(Prop.)
	2:3	Del.R.	389	(Final)

CUMULATIVE TABLES

1691

DMAP, General Policy Manual, Medicaid Credit Balance Report (MCBR).....	2:7	Del.R. 1076	(Prop.)
	2:9	Del.R. 1544	(Final)
DMAP, Inpatient Hospital Manual.....	2:4	Del.R. 496	(Prop.)
	2:6	Del.R. 986	(Final)
DMAP, Outpatient Hospital Manual.....	2:4	Del.R. 497	(Prop.)
	2:6	Del.R. 986	(Final)
DMAP, Practitioner Manual.....	2:4	Del.R. 496	(Prop.)
	2:6	Del.R. 985	(Final)
DMAP, Provider Manual, Reimbursement for Services.....	2:1	Del.R. 66	(Prop.)
	2:3	Del.R. 389	(Final)
DSSM Section 3005, TANF Program.....	2:4	Del.R. 494	(Prop.)
	2:7	Del.R. 1249	(Final)
DSSM Section 3008, Children Born to Teenage Parent.....	2:1	Del.R. 65	(Prop.)
	2:6	Del.R. 981	(Final)
DSSM Section 3024, Citizens and Aliens Eligibility for TANF.....	2:5	Del.R. 744	(Prop.)
	2:8	Del.R. 1384	(Final)
DSSM Section 3031, Work for your Welfare (Workfare) Program.....	2:5	Del.R. 745	(Prop.)
	2:8	Del.R. 1386	(Final)
DSSM Section 9007.1, Citizenship & Alien Status.....	2:3	Del.R. 359	(Prop.)
	2:6	Del.R. 982	(Final)
DSSM Section 9018.2, Work Requirements for Able-Bodied Adults Without Dependents.....	2:9	Del.R. 1447	(Prop.)
DSSM Section 9060, Income Deductions.....	2:9	Del.R. 1448	(Prop.)
DSSM Section 9068, Certification Periods.....	2:9	Del.R. 1448	(Prop.)
DSSM Section 9068, Food Stamp Program.....	2:2	Del.R. 174	(Prop.)
	2:7	Del.R. 1251	(Final)
DSSM Section 9085, Reporting Changes.....	2:7	Del.R. 1054	(Emer.)
	2:7	Del.R. 1074	(Prop.)
	2:9	Del.R. 1543	(Final)
DSSM Section 9092, Simplified Food Stamp Program.....	2:2	Del.R. 174	(Prop.)
	2:7	Del.R. 1251	(Final)
DSSM Section 11000 & 12000, Child Care & First Step Program.....	2:4	Del.R. 466	(Prop.)
	2:7	Del.R. 1249	(Final)
DSSM Section 14900, Eligibility Manual.....	2:4	Del.R. 493	(Prop.)
	2:6	Del.R. 984	(Final)
DSSM Section 16000, Eligibility Manual.....	2:4	Del.R. 492	(Prop.)
	2:6	Del.R. 984	(Final)
DSSM Section 18200, Uninsured Requirement.....	2:7	Del.R. 1075	(Prop.)
	2:9	Del.R. 1544	(Final)
DSSM, Title XXI, Delaware Healthy Children Program, General Policy Manual and Eligibility Manual.....	2:4	Del.R. 485	(Prop.)
Durable Medical Equipment Manual.....	2:9	Del.R. 1445	(Prop.)
General Policy Manual.....	2:9	Del.R. 1446	(Prop.)
Long Term Care, Home Health, Ground Ambulance & Hospice Provider Manuals.....	2:3	Del.R. 389	(Final)
Long Term Care Provider Manual, Durable Medical Equipment.....	2:1	Del.R. 68	(Prop.)
	2:3	Del.R. 389	(Final)
Medicaid Eligibility Manual, Renumbering of.....	2:3	Del.R. 359	(Prop.)
	2:5	Del.R. 780	(Final)
Medical Necessity, Definition of.....	2:5	Del.R. 748	(Prop.)
	2:7	Del.R. 1249	(Final)
Non-Emergency Transportation Provider Manual.....	2:6	Del.R. 837	(Prop.)
	2:8	Del.R. 1384	(Final)
Non-Emergency Transportation Provider Manual, Unloaded Mileage.....	2:3	Del.R. 389	(Final)

Outpatient Hospital Provider Manual.....	2:6 Del.R.	836 (Prop.)
	2:8 Del.R.	1384 (Final)
Pharmacy Provider Manual, Reimbursement for Services.....	2:1 Del.R.	67 (Prop.)
	2:3 Del.R.	389 (Final)
Practitioner Provider Manual.....	2:6 Del.R.	836 (Prop.)
	2:8 Del.R.	1384 (Final)
Private Duty Nursing Manual.....	2:6 Del.R.	838 (Prop.)
	2:8 Del.R.	1384 (Final)
Simplified Food Stamp Program, ABC Benefits.....	2:1 Del.R.	120 (Final)
Temporary Assistance for Needy Families (TANF).....	2:1 Del.R.	60 (Prop.)
	2:4 Del.R.	688 (Final)
Mandatory Pre-Employment Criminal History Record Checks & Drug Testing Regualtions	2:9 Del.R.	1440 (Prop.)
Department of Insurance		
Regulation No. 37, Defensive Driving Course Discount (Automobiles & Motorcycles)	2:1 Del.R.	68 (Prop.)
	2:6 Del.R.	989 (Final)
Regulation No. 41, Medicare Supplement Insurance Minimum Standards.....	2:9 Del.R.	1449 (Prop.)
Regulation No. 47, Education for Insurance Adjusters, Agents, Brokers, Surplus Lines Brokers & Consultants.....	2:1 Del.R.	122 (Final)
Regulation No. 63, Long-Term Care Insurance.....	2:2 Del.R.	187 (Prop.)
Regulation No. 65, Workplace Safety.....	2:1 Del.R.	71 (Prop.)
	2:4 Del.R.	688 (Final)
Regulation No. 80, Standards for Prompt, Fair and Equitable Settlements of Claims for Health Care Services.....	2:2 Del.R.	277 (Final)
Department of Natural Resources & Environmental Control		
Delaware Coastal Management Program, Federal Consistency Policies.....	2:4 Del.R.	500 (Prop.)
Delaware Coastal Zone Regulations.....	2:5 Del.R.	749 (Prop.)
Division of Air & Waste Management		
Air Quality Management Section		
1999 Rate-of-Progress Plan for Kent & New Castle Counties.....	2:8 Del.R.	1359 (Prop.)
Accidental Release Prevention Regulation.....	2:4 Del.R.	629 (Prop.)
	2:7 Del.R.	1252 (Final)
Delaware Low Enhanced Inspection & Maintenance (LEIM) Program.....	2:2 Del.R.	234 (Final)
Regulation 20, New Source Performance Standards for Hospital/Medical/Infectious Waste Incinerators.....	2:1 Del.R.	75 (Prop.)
	2:3 Del.R.	390 (Final)
Regulation 1 & 24, Definition of Volatile Organic Compounds (VOC).....	2:1 Del.R.	74 (Prop.)
	2:4 Del.R.	690 (Final)
Regulation 1 & 3, Governing the Control of Air Pollution.....	2:7 Del.R.	1195 (Prop.)
Regulation 24, Control of Volatile Organic Compound Emissions.....	2:5 Del.R.	761 (Prop.)
	2:8 Del.R.	1387 (Final)
Regulation No. 25, Requirements for Preconstruction Review.....	2:9 Del.R.	1508 (Prop.)
Regulation No. 31, Inspection & Maintenance Program.....	2:9 Del.R.	1519 (Prop.)
Regulation 37, NOx Budget Program.....	2:7 Del.R.	1170 (Prop.)
Regulation 38, Emission Standards for Hazardous Air Pollutants for Source Categories.....	2:5 Del.R.	759 (Prop.)
	2:8 Del.R.	1390 (Final)
Waste Management Section		
Regulations Governing Hazardous Waste.....	2:6 Del.R.	994 (Final)
Regulations Governing Solid Waste.....	2:4 Del.R.	545 (Prop.)
	2:6 Del.R.	838 (Prop.)
	2:9 Del.R.	1545 (Final)

Division of Fish & Wildlife

Boating Regulations.....	2:6 Del.R. 930 (Prop.)
Reproposal.....	2:7 Del.R. 1197 (Prop.)
Shellfish Reg. No. S-23, Lobster-Pot Design.....	2:8 Del.R. 1373 (Prop.)
Shellfish Reg. No. S-25, Lobster-Pot Season & Limits for Commercial Lobster Pot License.....	2:8 Del.R. 1374 (Prop.)
Shellfish Reg. No. S-26, Possession of V-Notched Lobsters Prohibited.....	2:8 Del.R. 1375 (Prop.)
Shellfish Reg. No. S-55-A, Public Lottery for Horseshoe Crab Dredge Permits... ..	2:7 Del.R. 1055 (Emer.)
Tidal Finfish Reg. No. 4, Summer Flounder Size Limits; Possession Limits; Season... ..	2:8 Del.R. 1375 (Prop.)
Tidal Finfish Reg. No. 10, Weakfish Size Limits, Possession Limits, Seasons.....	2:7 Del.R. 1213 (Prop.)
Tidal Finfish Reg. No. 23, Black Sea Bass Size Limit; Trip Limits; Seasons; Quotas ..	2:8 Del.R. 1376 (Prop.)
Tidal Finfish Reg. No. 24, Fish Pot Requirements.....	2:7 Del.R. 1215 (Prop.)
Tidal Finfish Reg. No. 26, American Shad & Hickory Shad Creel Limits.....	2:7 Del.R. 1216 (Prop.)
Wildlife & Fresh Water Fish Regulations.....	2:6 Del.R. 916 (Prop.)

Division of Water Resources

NPDES General Permit Program Regulations Governing Storm Water Discharges Associated with Industrial Activity.....	2:3 Del.R. 393 (Final)
Water Supply Section Regulations for Licensing Water Well Contractors, Pump Installer Contractors, Well Drillers, Well Drivers & Pump Installers.....	2:2 Del.R. 176 (Prop.) 2:6 Del.R. 997 (Final)
Watershed Assessment Section Total Maximum Daily Loads (TMDLs) for Indian River, Indian River Bay, and Rehoboth Bay, Delaware.....	2:2 Del.R. 183 (Prop.) 2:6 Del.R. 1004 (Final)
Total Maximum Daily Loads (TMDLs) for Nanticoke River & Broad Creek,.....	2:2 Del.R. 185 (Prop.) 2:6 Del.R. 1006 (Final)

Department of Pubic Safety

Rules of the Delaware Alcoholic Beverage Control Commission, Rule 29.....	2:7 Del.R. 1216 (Prop.) 2:9 Del.R. 1630 (Final)
Reproposal, Rule 29	2:9 Del.R. 1538 (Prop.)

Department of Services for Children, Youth & Their Families

Office of Child Care Licensing Child Abuse Registry.....	2:1 Del.R. 129 (Final)
Revision of Requirements for Residential Child Care Facilities, Transitional Living Programs and Day Treatment Programs.....	2:9 Del.R. 1630 (Final)

Department of State

Office of the State Banking Commissioner Regulation No. 5.121.0002, Procedures Governing the Creation & Existence of an Interim Bank.....	2:4 Del.R. 669 (Prop.) 2:6 Del.R. 1021 (Final)
Regulation No. 5.1403.0001, Procedures Governing Filings and Determinations Respecting Applications for a Foreign Bank Limited Purpose Branch or Foreign Bank Agency....	2:2 Del.R. 299 (Final)
Regulation No. 5.1403.0002, Application by a Foreign Bank for a Certificate of Authority to Establish a Foreign Bank Limited Purpose Branch or Foreign Bank Agency Pursuant to 5 Delaware Code §1403.....	2:2 Del.R. 299 (Final)
Regulation No. 5.1403/1101.0003, Regulations Governing the Organization, Chartering Supervision, Operation and Authority of a Delaware Foreign Bank Limited Purpose Branch, a Delaware Foreign Bank Agency and a Delaware Foreign Bank Representative Office.....	2:2 Del.R. 312 (Final)

Regulation No. 5.1422.0004, Application by a Foreign Bank for a License to Establish a Foreign Bank Representative Office Pursuant to Subchapter II, Chapter 14, Title 5, Delaware Code.....	2:2	Del.R.	315	(Final)
Regulation No. 5.2102(b)/2112.0001, Mortgage Loan Brokers Operating Regulations.....	2:3	Del.R.	361	(Prop.)
	2:5	Del.R.	782	(Final)
Regulation No. 5.2210(d).0001, Licensed Lenders Operating Regulations.....	2:3	Del.R.	362	(Prop.)
	2:5	Del.R.	782	(Final)
Regulation No. 5.2218/2231.0003, Licensed Lenders Regulations Itemized Schedule of Changes	2:3	Del.R.	364	(Prop.)
	2:5	Del.R.	784	(Final)
Regulation No. 5.2741.0001, Licensed Cashier of Checks, Drafts or Money Orders Operating Regulations.....	2:3	Del.R.	365	(Prop.)
	2:5	Del.R.	786	(Final)
Regulation No. 5.2743.0002, Licensed Cashier of Checks, Drafts or Money Orders Posting of the Fee Schedule & Minimum Requirements for Content of Books and Records	2:3	Del.R.	366	(Prop.)
	2:5	Del.R.	786	(Final)
Regulation No. 5.2905(e)/122(b).0001, Motor Vehicle Sales Finance Companies Minimum Requirements for Content of Books and Records.....	2:3	Del.R.	366	(Prop.)
	2:5	Del.R.	787	(Final)
Regulation No. 5.2905(e).0002, Motor Vehicle Sales Finance Companies Operating Regulations	2:3	Del.R.	367	(Prop.)
	2:5	Del.R.	788	(Final)
Regulation No. 5.3404.0001, Preneed Funeral Contracts Regulations Governing Irrevocable Trust Agreements.....	2:2	Del.R.	319	(Final)
Regulation No. 5.701/774.0001, Procedures for Applications to Form a Bank, Bank & Trust Company or Limited Purpose Trust Company, Pursuant to Chapter 7 of Title 5 of the Delaware Code.....	2:4	Del.R.	671	(Prop.)
	2:6	Del.R.	1023	(Final)
Regulation No. 5.751.0013, Procedures Governing the Dissolution of a State Chartered Bank or Trust Company.....	2:2	Del.R.	296	(Final)
Regulation No. 5.833.0004, Application by an Out-of-State Savings Institution, Out-of-State Savings & Loan Holding Company or Out-of-State Bank Holding Company to Acquire a Delaware Savings Bank or Delaware Savings and Loan Holding Company.....	2:4	Del.R.	673	(Prop.)
	2:6	Del.R.	1025	(Final)
Regulation No. 5.844.0009, Application by an Out-of-State Bank Holding Company to Acquire a Delaware Bank or Bank Holding Company, 5 Del.C. 844.....	2:4	Del.R.	676	(Prop.)
	2:6	Del.R.	1029	(Final)
Regulation No. 5.853.0001P, Procedures Governing the Registration of Delaware Bank Holding Companies with the Bank Commissioner Pursuant to the Provision of Section 853 of Title 5, Delaware Code, Repeal of.....	2:2	Del.R.	320	(Final)
Regulation No. 5.852.0002, Application to Become a Delaware Bank Holding Company..	2:2	Del.R.	297	(Rep.)
Department of Transportation				
Aeronautical Regulations	2:1	Del.R.	130	(Final)
Subdivision Plan Review Fee Procedures.....	2:4	Del.R.	693	(Final)
Governor's Office				
Appointments & Nominations.....	2:1	Del.R.	145	
	2:2	Del.R.	322	
	2:3	Del.R.	425	
	2:4	Del.R.	696	
	2:5	Del.R.	790	

Appointments & Nominations		2:6 Del.R. 1037	
		2:7 Del.R. 1295	
		2:8 Del.R. 1395	
Executive Order No. 54	2:1	Del.R. 143	
Executive Order No. 55	2:6	Del.R. 1033	
Executive Order No. 56	2:7	Del.R. 1293	
Executive Order No. 57	2:8	Del.R. 1394	
Executive Order No. 58	2:9	Del.R. 1675	
Public Service Commission			
PSC Regulation Docket No. 4, Minimum Filing Requirements for all Regulated			
Companies Subject to the Jurisdiction of the Public Service Commission.....	2:1	Del.R. 81	(Prop.)
PSC Regulation Docket No. 10.....	2:6	Del.R. 946	(Prop.)
PSC Regulation Docket No. 12 (Track III), Rules to Govern Payphone Services.....	2:4	Del.R. 695	(Final)
PSC Regulation Docket No. 41, Implementation of the Telecommunications Technology			
Investment Act	2:2	Del.R. 280	(Final)
PSC Regulation Docket No. 44, Information Required to be Filed by a Manufacturer to			
Establish an Additional Dealer or to Relocate an Existing Dealership Pursuant to			
6 Del.C. 4915(a)	2:4	Del.R. 679	(Prop.)
		2:6	Del.R. 1009 (Final)
PSC Regulation Docket No. 45.....	2:6	Del.R. 954	(Prop.)
PSC Regulation Docket No. 47, Discounts for Intrastate Telecommunications and Information			
Services Provided to Schools and Libraries.....	2:7	Del.R. 1057	(Emer.)
		2:7	Del.R. 1220 (Prop.)
Violent Crimes Compensation Board			
Rules XXVI, XXVIII, XXIX, XXX.....	2:5	Del.R. 773	(Prop.)
		2:9	Del.R. 1670 (Final)

**DEPARTMENT OF NATURAL
RESOURCES AND
ENVIRONMENTAL CONTROL**
DIVISION OF AIR & WASTE MANAGEMENT
WASTE MANAGEMENT SECTION

Statutory Authority: 7 Delaware Code,
Chapter 60 (7 Del.C. Ch. 60)

submit a letter of intent to the Department. The letter should indicate the projected design and usage of the proposed facility. The letter of intent shall be followed by submission, by the applicant, of the following additional information:

The final **Delaware Regulations Governing Solid Waste** were published in Volume 2, Issue 9 of the Register beginning at page 1545. Two corrections should be noted.

1. On page 1567, Section 4: PERMIT REQUIREMENTS AND ADMINISTRATIVE PROCEDRES, Subsection E. APPLICATION PROCEDURES FOR TRANSFER STATIONS, the entry "1. Application" should not be stricken through. The entry should read as follows:

E. APPLICATION PROCEDURES FOR TRANSFER STATIONS

~~1. New Facilities~~

~~a. Construction and operation~~

1. Application

Any person desiring to ~~obtain a permit to~~ construct ~~and/or~~ [or] operate a transfer station must submit a letter of intent to the Department. The letter should indicate the projected design and usage of the proposed facility. The letter of intent shall be followed by the submission, by the applicant, of the following additional information:

2. On page 1569, Section 4: PERMIT REQUIREMENTS AND ADMINISTRATIVE PROCEDRES, Subsection F. APPLICATION PROCEDURES FOR FACILITY FOR INFECTIOUS WASTE MANAGEMENT, the entry "F. APPLICATION PROCEDURES FOR FACILITY FOR INFECTIOUS WASTE MANAGEMENT", should not be stricken through. The entry should read as follows:

F. APPLICATION PROCEDURES FOR FACILITY FOR INFECTIOUS WASTE MANAGEMENT

~~1. New facilities~~

~~a. Construction~~

1. Application

Any person desiring to ~~obtain a permit to~~ construct or operate an infectious waste management facility must

Symbol Key

Roman type indicates the text existing prior to the regulation being promulgated. Underlined text indicates new text. Language which is ~~stricken~~ through indicates text being deleted.

Proposed Regulations

Under 29 Del.C. §10115 whenever an agency proposes to formulate, adopt, amend or repeal a regulation, it shall file notice and full text of such proposals, together with copies of the existing regulation being adopted, amended or repealed, with the Registrar for publication in the Register of Regulations pursuant to §1134 of this title. The notice shall describe the nature of the proceedings including a brief synopsis of the subject, substance, issues, possible terms of the agency action, a reference to the legal authority of the agency to act, and reference to any other regulations that may be impacted or affected by the proposal, and shall state the manner in which persons may present their views; if in writing, of the place to which and the final date by which such views may be submitted; or if at a public hearing, the date, time and place of the hearing. If a public hearing is to be held, such public hearing shall not be scheduled less than 20 days following publication of notice of the proposal in the Register of Regulations. If a public hearing will be held on the proposal, notice of the time, date, place and a summary of the nature of the proposal shall also be published in at least 2 Delaware newspapers of general circulation; The notice shall also be mailed to all persons who have made timely written requests of the agency for advance notice of its regulation-making proceedings.

**DEPARTMENT OF
ADMINISTRATIVE SERVICES
DIVISION OF PROFESSIONAL REGULATION
BOARD OF LANDSCAPE ARCHITECTS**
Statutory Authority: 24 Delaware Code,
Section 205(a)(1) (24 Del.C. 205(a)(1))

Architects, 861 Silver Lake Boulevard, Dover, Delaware
19904.

**BOARD OF LANDSCAPE ARCHITECTS
PROPOSED CHANGES TO RULES AND
REGULATIONS¹**

Notice of Public Hearing

PLEASE TAKE NOTICE, pursuant to 29 Del.C. Chapter 101 and 24 Del.C. Section 205(a)(1), the Delaware Board of Landscape Architects proposed to revise and adopt Rules and Regulations. The proposed rules and regulations will eliminate the period of time in which licenses can be renewed after the end of the license period, except in cases of exceptional hardship and will require licensees to submit proof of continuing education hours by November 1 of the year preceding the renewal date.

A public hearing will be held on the proposed Rules and Regulations on May 12, 1999 at 8:30 a.m. in the Second Floor Conference Room A of the Cannon Building, 861 Silver Lake Boulevard, Dover, Delaware. The Board will receive and consider input from interested persons on the proposed rules and regulations, and individuals are urged to submit their comments in writing. Anyone wishing to obtain a copy of the proposed regulations, or to make comments at the public hearing, should contact the Board's Administrative Assistant, Sheila Wolfe, by calling (302) 739-4522 or write to the Delaware Board of Landscape

Amend Rule 6 to read as follows:

6. LATE RENEWAL OF LICENSES

Each application for license renewal shall be submitted on or before the date of the expiration of the current licensing period. Except on a showing of exceptional hardship, there shall be no extension of time for license renewals for practitioners who fail to renew their licenses on or before the renewal date. "Exceptional hardship" includes, but is not limit to, disability and illness. The Board reserves the right to require a letter from a physician attesting to the licensee's physical condition when the hardship request is based on disability or illness.

Statutory reference: 24 Del.C. §210(b)

Revise Rule 8 by adding a subsection (c) as follows and relettering the remaining subsections:

8. CONTINUING EDUCATION AS A CONDITION OF

1. Effective date of current regulations is February 24, 1997.

BIENNIAL RENEWAL

(c) For license periods beginning February 1, 1999 and thereafter, requests for approval of continuing education activity, along with the required supporting documentation, shall be submitted to the Board on or before November 1 of the year preceding the biennial renewal date of the licenses. A license shall not be renewed until the Board has approved twenty (20) hours of continuing education hours as provided in Rule 8(a) or has granted an extension of time for reasons of hardship.

Statutory reference: 24 Del.C. §205(12)

Revise Rule 8(a)(2)(ii) as follows:

8. CONTINUING EDUCATION AS A CONDITION OF BIENNIAL RENEWAL

(a)2.(ii) The Board shall meet at least once during each ~~three months~~ calendar quarter of the year and act on each course, seminar, session or program properly submitted for ~~it~~ its review. Each program, or a portion thereof, shall be either recommended for approval, recommended for disapproval or deferred for lack of information. If deferred or disapproved, the licensee will be notified and may be granted a period ~~to~~ of time in which to correct deficiencies. The Board may also seek verification of information submitted by the licensee.

**DIVISION OF PROFESSIONAL REGULATION
BOARD OF OCCUPATIONAL THERAPY**

Statutory Authority: 24 Delaware Code,
Section 2007(a)(1) (24 **Del.C.** 2007(a)(1))

NOTICE OF PUBLIC HEARING

PLEASE TAKE NOTICE, pursuant to 29 Del.C. Chapter 101 and 24 Del.C. §2007(a)(1), the Delaware Board of Occupational Therapy proposes the following changes to Rule 1(C)(3) to read as follows:

An occupational therapist may supervise up to three (3) occupational therapy assistants but never more than two (2) occupational therapy assistants who are under direct supervision at the same time.

A public hearing will be held on the proposed Rules and Regulations on Wednesday, April 21, 1999 at 4:30 p.m. in the Second Floor Conference Room A of the Cannon Building, 861 Silver Lake Blvd., Dover, DE 19904. The Board will receive and consider input in writing from any person on the proposed changes Rule 1(C)(3). Written comments should be submitted to the Board in care of Mary Paskey at the above address. Final date to submit written

comments shall be at the above scheduled public hearing. Anyone wishing to obtain a copy of the proposed Rules and Regulations or to make comments at the public hearing should contact Mary Paskey at the above address or by calling (302) 739-4522, ext. 207.

This notice will be published in two newspapers of general circulation not less than twenty (20) days prior to the date of the hearing.

**DELAWARE STATE BOARD OF OCCUPATIONAL
THERAPY
PROPOSED RULES AND REGULATIONS**

TABLE OF CONTENTS

RULE 1: Definitions/Requirements for Supervision of OTA/L

RULE 2: Licensure Procedure

RULE 3: Temporary Licensure/Examination Eligible OT

RULE 4: Temporary Licensure/Examination Eligible OTA

RULE 5: Continuing Education

RULE 1: SUPERVISION/CONSULTATION REQUIREMENTS FOR OCCUPATIONAL THERAPY ASSISTANTS:

(A) "Occupational therapy assistant" shall mean a person licensed to assist in the practice of occupational therapy under the supervision of an occupational therapist. Title 24, Delaware Code, §2002(4). (emphasis added)

"Under the supervision of an occupational therapist" means the interactive process between the licensed occupational therapist and the occupational therapy assistant. It shall be more than a paper review or co-signature. The supervising occupational therapist is responsible for insuring the extent, kind, and quality of the services rendered by the occupational therapy assistant.

The phrase, "Under the supervision of an occupational therapist," as used in the definition of occupational therapist assistant includes, but is not limited to the following requirements:

1. Communicating to the occupational therapy assistant the results of patient/client evaluation and discussing the goals and program plan for the patient/client;
2. In accordance with supervision level and applicable health care, educational, professional and institutional regulations, reevaluating the patient/client, reviewing the documentation, modifying the program plan if necessary and co-signing the plan.
3. Case management;
4. Determining program termination;

5. Providing information, instruction and assistance as needed;

6. Observing the occupational therapy assistant periodically; and

7. Preparing on a regular basis, but at least annually, a written appraisal of the occupational therapy assistant's performance and discussion of that appraisal with the assistant.

The supervisor may assign to a competent occupational therapy assistant the administration of standardized tests, the performance of activities of daily living evaluations and other elements of patient/client evaluation and reevaluation that do not require the professional judgment and skill of an occupational therapist.

(B) Supervision for Occupational Therapy Assistants is defined as follows:

(1) Direct Supervision requires the supervising occupational therapist to be on the premises and immediately available to provide aid, direction, and instruction while treatment is performed in any setting including home care. Occupational therapy assistants with experience of less than one (1) full year are required to have direct supervision.

(2) Routine Supervision requires direct contact at least every two (2) weeks at the site of work, with interim supervision occurring by other methods, such as telephonic or written communication.

(3) General Supervision requires at least monthly direct contact, with supervision available as needed by other methods.

(C) Minimum supervision requirements:

(1) Occupational therapy assistants with experience of less than one (1) full year are required to have direct supervision.

Occupational therapy assistants with experience greater than one (1) full year must be supervised under either direct, routine or general supervision based upon skill and experience in the field as determined by the supervising OT.

(2) Supervising occupational therapists must have at least one (1) year clinical experience after they have received permanent licensure.

(3) ~~An occupational therapist can supervise no more than three (3) occupational therapy assistants (two (2) if in separate locations).~~

An occupational therapist may supervise up to three (3) occupational therapy assistants but never more than two (2) occupational therapy assistants who are under direct supervision at the same time.

(4) Levels of supervision should be determined by the occupational therapist before the individuals enter into a supervisor/supervisee relationship. The chosen level of supervision should be reevaluated regularly for

effectiveness.

(5) The supervising occupational therapist, in collaboration with the occupational therapy assistant, shall maintain a written supervisory plan specifying the level of supervision and shall document the supervision of each occupational therapy assistant. Levels of supervision should be determined by the occupational therapist before the individuals enter into a supervisor/supervisee relationship. The chosen level of supervision should be reevaluated regularly for effectiveness.

This plan shall be reviewed at least every six months or more frequently as demands of service changes.

(6) A supervisor who is temporarily unable to provide supervision shall arrange for substitute supervision by an occupational therapist licensed by the Board with at least one (1) year of clinical experience, as defined above, to provide supervision as specified by Rule 1 of these rules and regulations.

RULE 2: LICENSURE PROCEDURES:

(A) To apply for an initial license, an applicant shall submit to the Board:

(1) A completed notarized application on the form approved by the Board;

(2) Verification of a passing score on the NBCOT standardized exam submitted by the exam service or NBCOT;

(3) Official transcript and proof of successful completion of field work submitted by the school directly to the Board office;

(4) Fee payable to the State of Delaware.

(B) To apply for a reciprocal license, in addition to the requirements listed in Title 24, Delaware Code, §2011, an applicant shall submit the following to the Board:

(1) A completed notarized application on the form approved by the Board;

(2) Verification of a passing score on the NBCOT standardized exam submitted by the exam service or NBCOT;

(3) Letter of verification from any state in which the applicant has been licensed (the applicant is responsible for forwarding the blank verification form to all states where they are now or ever have been licensed);

(4) Fee payable to the State of Delaware.

(C) To apply for renewal, an applicant shall submit:

(1) A completed renewal application on the form approved by the Board;

(2) Evidence of meeting continuing education requirements as designated by the Board in Rule 5;

(3) Renewal fee payable to the State of Delaware.

(D) To apply for inactive status:

A licensee may, upon written request to the Board, have his/her license placed on inactive status if he/she is not

actively engaged in the practice of occupational therapy in the State.

(E) To apply for reactivation of an inactive license, a licensee shall submit:

- (1) A letter requesting reactivation;
- (2) A completed application for renewal
- (3) Proof of continuing education attained within the past two years (20 contact hours) The twenty (20) hours must be in accordance with Rule 5 of these rules and regulations;
- (4) Fee payable to the State of Delaware.

(F) To apply for reinstatement of an expired license, an applicant shall submit (within three (3) years of the expiration date):

- (1) A completed application for renewal;
- (2) Proof of continuing education attained within the past two years (20 contact hours). The twenty (20) hours must be in accordance with Rule 5 of these rules and regulations;
- (3) Licensure and late fee payable to the State of Delaware.

RULE 3: TEMPORARY LICENSURE/EXAMINATION ELIGIBLE OT:

(A) To apply for a temporary license, an applicant shall submit to the Board:

- (1) A completed, notarized application on the form approved by the Board;
- (2) Official transcript and proof of successful completion of field work submitted by the school directly to the Board office;
- (3) A letter indicating the date on which the applicant proposes to take the NBCOT examination;
- (4) A signed agreement from an occupational therapist currently licensed by the state of Delaware certifying that the applicant will be supervised while practicing, in accordance with the definitions for supervision as stated herein, in paragraph (c);
- (5) Fee payable to the State of Delaware.

(B) Following the examination, the temporary licensee shall submit to the Board a notarized copy of the verification of exam scores, if the Board has not directly received the results of the examination. If the temporary licensee has not successfully passed the examination the temporary license will be surrendered to the Board immediately upon notification of exam results.

(C) Supervision of the exam-eligible occupational therapist with a temporary license shall be defined as follows:

- (1) The supervising occupational therapist must hold a current license to practice in the state of Delaware;
- (2) Must have completed a minimum of one year of practice from the date of their permanent licensure status;
- (3) Supervision must consist of daily face to face

contact between the supervisor and the temporary licensee;

(4) The supervising occupational therapist shall at no time supervise more than four (4) temporarily licensed occupational therapists. In the event that the temporary licensees should be working at separate sites, the supervising therapist shall supervise no more than two (2) temporarily-licensed therapists. A supervising therapist can assume responsibility for no more than five (5) including temporarily licensed OTs and OTAs and licensed OTAs.

RULE 4: TEMPORARY LICENSURE/EXAMINATION ELIGIBLE OTA:

(A) To apply for a temporary license, an applicant shall submit to the Board:

- (1) A completed, notarized, application on the form provided by the Board;
- (2) Official transcript and proof of successful completion of field work submitted by the school directly to the Board Office;
- (3) A letter indicating the date on which the applicant proposes to take the NBCOT examination;
- (4) A signed agreement from an occupational therapist currently licensed by the state of Delaware certifying that the applicant will be supervised while practicing, in accordance with the definitions for supervision as stated herein, in paragraph (c);
- (5) Fee payable to the State of Delaware.

(B) Following the examination, if the Board has not directly received the results of the examination, the temporary licensee shall submit to the Board a notarized copy of the verification of exam scores. If the temporary licensee has not successfully passed the examination, the temporary license will be surrendered to the Board immediately upon notification of exam results.

(C) Supervision for the examination-eligible occupational therapy assistant with a temporary license shall be defined as follows:

- (1) The supervising occupational therapist must hold a current license to practice in the state of Delaware;
- (2) Must have completed a minimum of one year of practice from the date of their permanent licensure status;
- (3) Direct Supervision as defined in Rule 1 shall be required of all temporarily licensed occupational therapy assistants;
- (4) The supervising occupational therapist shall at no time supervise more than three (3) temporarily licensed occupational therapy assistants. A supervising therapist can assume responsibility for no more than five (5) including temporarily licensed OT, OTAs and licensed OTAs).

RULE 5: CONTINUING EDUCATION:

(A) Continuing Education Units (CEUs):

Contact hours shall be prorated for new licensees in accordance with the following schedule:

- **21 months up to and including 24 months remaining in the licensing cycle requires 20 hours
- **16 months up to and including 20 months remaining in the licensing cycle requires 15 hours
- **11 months up to and including 15 months remaining in the licensing cycle requires 10 hours
- **10 months or less remaining in the licensing cycle exempt

(B) Definition of Acceptable Continuing Education Credits:

Credits must be earned in two (2) or more of the seven (7) categories for continuing education beginning on page 8.

(C) Continuing Education Content:

Activities must be in a field of health and social services related to occupational therapy. Approval will be at the discretion of the Board. CEUs earned in excess of the required credits for the two (2) year period may not be carried over to the next biennial period.

(D) Definition of Contact Hours:

(1) Academic course work, correspondence courses, or seminar/workshop shall be equivalent to one (1) contact hour.

(2) One (1) academic semester hour shall be equal to fifteen (15) contact hours.

(3) One (1) academic quarter hour shall be equal to ten (10) contact hours.

(4) The preparing of original lectures, seminars, or workshops in occupational therapy or health care subjects shall be granted one (1) contact hour for preparation for each contact hour of presentation. Credit for preparation shall be given for the first presentation only.

(E) Categories for Continuing Education:

(1) COURSES: The maximum number of hours for course work which shall not exceed nineteen (19) hours, (1.9 CEUs), are hour-for-hour program content only, courses from extension courses, refresher courses, workshops, seminars, lectures, conferences, in-services, as long as they enhance occupational therapy services. Excluded are any job related duties in the workplace such as fire safety, OSHA or CPR.

(2) PROFESSIONAL MEETINGS & ACTIVITIES: The maximum number of credit hours shall not exceed ten (10) hours, (1.0 CEUs). Approved credit includes attendance at: DOTA business meetings, AOTA business meetings, AOTA Representative Assembly meetings, NBCOT meetings, OT Licensure Board meetings and AOTA National Round Table discussions. Credit will be given for participation as an elected or appointed member/officer on a board, committee or council in the field of health and social service related to occupational therapy. Excluded are any job related meetings such as department meetings, supervision of students and business meetings

within the work setting.

(3) PUBLICATIONS: The maximum number of credit hours shall not exceed fifteen (15) hours, (1.5 CEUs). These include writing chapters, books, abstracts, book reviews accepted for publication and media/video for professional development in any venue. Prior approval by the Board for individual credit is mandatory for the licensee. Publications submitted at the close of the licensure period, which have not been previously reviewed and approved by the Board, will not be considered for continuing education credits.

(4) PRESENTATIONS: The maximum number of credit hours shall not exceed fifteen (15) hours, (1.5 CEUs). This includes workshops and community service organizations presentations that the licensee presents. Credit will not be given for the presentation of information that the licensee has already been given credit for under another category.

(5) RESEARCH/GRANTS: May be used one time for CEUs per study/topic regardless of length of project, not to exceed ten (10) hours, (1.0 CEUs). CEUs accumulated under this category may not be used under the publication category. Licensee must submit documentation of authorship or letters from authorizing entity to receive continuing education credit. Documentation must be presented for prior Board approval to determine the number of CEU hours.

(6) SPECIALTY CERTIFICATION: Approval of credit hours for specialty certification, requiring successful completion of courses and exams attained during the current licensure period will be at the discretion of the Board. Examples include Certified Hand Therapist (CHT) and Certified Pediatric Occupational Therapist (BCP).

(7) HOME STUDY COURSES: The maximum number of credit hours shall not exceed ten (10) hours, (1.0 CEUs). These include distance learning and correspondence courses. Documentation must be presented for prior Board approval for home study courses.

DEPARTMENT OF AGRICULTURE

Statutory Authority: 3 Delaware Code,
Sections 904(a)(1-3), 904(b)(7) & 904(b)(21)
(3 Del.C. 904(a)(1-3), 904(b)(7) & 904(b)(21))

PUBLIC NOTICE FARMLAND PRESERVATION PROGRAM CHANGES PROPOSED

Pursuant to 3 Delaware Code §904(a) (1)-(3), and §904(b)(7), and §904(b)(21) and other pertinent provisions of 3 Delaware Code, Chapter 9, the Delaware Agricultural Lands Preservation Foundation will conduct a public hearing to consider amendments to the following document:

The Delaware Agricultural Lands Preservation Foundation, Policies - Procedures - By-Laws and Statewide Agricultural, Lands Preservation Strategy.

The hearing is to provide opportunity for public comment on the proposed amendments. The public record will close at the close of the Hearing unless a request is made to keep the record open.

The hearing will be held April 21, 1999, starting at 9:30 a.m., in the Conference Center of the Delaware Dept. of Agriculture, 2320 S. DuPont Hwy., Dover, DE 19901.

Copies of the proposed amendments will be available March 1, 1999 from the Delaware Dept. of Agriculture upon request. The proposed amendments will also be published in the April 1, 1999 edition of the "Register of Regulations."

If you have any questions regarding the hearing, please contact Cathy Mesick, Delaware Dept. of Agriculture, 2320 S. DuPont Hwy., Dover, DE 19901 or call (302) 739-4811 or 1-800-282-8685.

***Please note: The Delaware Lands Preservation Strategy Chart is not reproducible in the Register. Copies of the Delaware Lands Preservation Strategy Chart are available from the Department of Agriculture or the Registrar.**

**DELAWARE AGRICULTURAL LANDS
PRESERVATION FOUNDATION POLICIES -
PROCEDURES - BY-LAWS
ADOPTED JANUARY 17, 1995
REVISED DRAFT JANUARY 25, 1999**

Table of Contents

<p>The Delaware Agricultural Lands Preservation Foundation, Policies - Procedures - By-Laws and Statewide Agricultural, Lands Preservation Strategy.</p> <p>The hearing is to provide opportunity for public comment on the proposed amendments. The public record will close at the close of the Hearing unless a request is made to keep the record open.</p> <p>The hearing will be held April 21, 1999, starting at 9:30 a.m., in the Conference Center of the Delaware Dept. of Agriculture, 2320 S. DuPont Hwy., Dover, DE 19901.</p> <p>Copies of the proposed amendments will be available March 1, 1999 from the Delaware Dept. of Agriculture upon request. The proposed amendments will also be published in the April 1, 1999 edition of the "Register of Regulations."</p> <p>If you have any questions regarding the hearing, please contact Cathy Mesick, Delaware Dept. of Agriculture, 2320 S. DuPont Hwy., Dover, DE 19901 or call (302) 739-4811 or 1-800-282-8685.</p> <p>*Please note: The Delaware Lands Preservation Strategy Chart is not reproducible in the Register. Copies of the Delaware Lands Preservation Strategy Chart are available from the Department of Agriculture or the Registrar.</p> <p style="text-align: center;">DELAWARE AGRICULTURAL LANDS PRESERVATION FOUNDATION POLICIES - PROCEDURES - BY-LAWS ADOPTED JANUARY 17, 1995 REVISED DRAFT JANUARY 25, 1999</p> <p style="text-align: center;">Table of Contents</p> <p>Legislative Intent 1</p> <p>Program Intent 1</p> <p>Delaware's Agricultural Lands Preservation Foundation By-laws 2</p> <p>Preamble 2</p> <p>Article I: Origin of the Organization 2</p> <p>Article II: Mission Statement 2</p> <p>Article III: Organizational Structure 3</p> <p>Article IV: Officers 4</p> <p>Article V: Organizational Function 4</p> <p>Article VI: Organizational Authority Granted by Title 3, Chapter 9 of the Delaware Code 5</p> <p>Article VII: Organizational Responsibilities 6</p> <p>Article VIII: Parliamentary Matters 7</p> <p>Article IX: Adoption 8</p> <p>Guidelines Used for The Delaware Agricultural Lands Preservation Program 9</p> <p>Criteria for District Eligibility 9</p>	<p>Application Procedures 9</p> <p>Application Review Procedures 10</p> <p>Creation of a District 11</p> <p>District Restrictions 11 <u>12</u></p> <p>Continuation of a District 12 <u>13</u></p> <p>Expansion of a District 13</p> <p>Inspection of Districts 13</p> <p><u>Dwelling Property Hardship Exceptions</u> 14</p> <p>Delaware Farmland Preservation Fund 14 <u>16</u></p> <p>Authority 14 <u>16</u></p> <p>Sources of Funding 14 <u>16</u></p> <p>Criteria for the Purchase Of Agricultural Lands</p> <p>Preservation Easements { 3 <u>Del.C.</u>, §904(a)(2)} 15 <u>17</u></p> <p>Intent 15 <u>17</u></p> <p>Schedule for Acquisition of Agricultural Lands Preservation Easements 15 <u>17</u></p> <p>Local <u>Matching</u> Contributions to the Program 16 <u>18</u></p> <p>Eligibility Criteria for Agricultural Lands Preservation Easements 16 <u>19</u></p> <p>Application Procedures 16 <u>19</u></p> <p>Review and Evaluation of Agricultural Lands Preservation Easement Application 18 <u>20</u></p> <p>Weighting and Scoring System for Prioritizing Agricultural Lands Preservation Easements 18 <u>21</u></p> <p>Lesas Score 19 <u>21</u></p> <p>Productivity of Current Farm Operations 19 <u>22</u></p> <p>Other Factors 20 <u>22</u></p> <p>Non-scoring Factors for Consideration 20</p> <p>Appraisals 21 <u>24</u></p> <p>Comparable Sales Data 22 <u>25</u></p> <p>Agricultural Lands Preservation Easement Value and Purchase Price 23 <u>26</u></p> <p>Offer of Purchase by the Foundation 23 <u>26</u></p> <p>The Agricultural Lands Preservation Easement-Deed <u>25</u> <u>29</u></p> <p>Title Quality 25 <u>30</u></p> <p>Appendix A Application for a Preservation District 26 <u>31</u></p> <p>Appendix B District Agreement 27 <u>33</u></p> <p>Appendix C Criteria Checklist/Staff Report 32 <u>38</u></p> <p>Appendix D Time-line to Establish a District 35</p> <p>Appendix E D Application for an Agricultural Lands Preservation Easement 36</p> <p>Delaware Agricultural Lands Preservation Foundation Agricultural Preservation Easement Application 37 <u>42</u></p> <p>Appendix F <u>E</u> Types of Farm Operations by Value/intensity & Investment 41 <u>47</u></p> <p>Appendix G <u>F</u> Agricultural Land Preservation Easement 42 <u>48</u></p> <p>Appendix H <u>G</u> Strategy Map Numerical Formula 45 <u>51</u></p>
--	---

Appendix I ~~H Adoption of the Purchase of
Agricultural Lands Preservation
Easements Order~~

47 53

* PLEASE NOTE THAT THE ABOVE PAGE NUMBERS REFER TO THE ORIGINAL DOCUMENT AND NOT TO THE REGISTER.

LEGISLATIVE INTENT

Delaware farms and farmlands are vanishing at an alarming rate. Thirty-nine percent of the agricultural land in Delaware disappeared in the last 70 years due to commercial and population expansion. In 1920, there were 10,300 farms tilling 944,500 acres of land. In 1990, there were 2,900 farms operating and only 570,000 acres of land dedicated to the profession of farming. These figures impact all Delawareans because agriculture employs more people than any other industry in Delaware and is a leading contributor to the State's economy. If the loss of farmland continues at the current rate, then the State of Delaware will be in danger of losing its number one industry, agriculture.

On JULY 8, 1991, Governor Michael N. Castle signed House Bill 200 to amend CHAPTER 9, TITLE 3, of the DELAWARE CODE. The legislation established a comprehensive agricultural lands preservation program to serve the long-term needs of the agricultural community and the citizens of Delaware. It is the declared policy of the State to conserve, protect and encourage improvement of agricultural lands within the State for the production of food and other agricultural products useful to the public which are grown, raised or harvested on land and water in the State of Delaware.

The Agricultural Lands Preservation Foundation was created by this legislation to accomplish this mission by establishing Agricultural Preservation Districts of viable and productive farmland and forest land. The Foundation is directed to provide economic incentives and benefits to agribusiness, purchase development rights from landowners; encourage development in areas where infrastructures exist, and promote the agricultural industry and the concept of preserving viable land for the future. [3 Del. C., §901]

PROGRAM INTENT

The Agricultural Lands Preservation Program was created as a long-term response to the depletion of valuable farmland. It is designed to provide landowners with an incentive to remain in agriculture as opposed to subdividing and selling productive farmland. The Agricultural Lands Preservation Foundation was established to develop and implement a comprehensive agricultural lands preservation program. These program guidelines represent policies and procedures adopted by the Agricultural Lands Preservation

Foundation and the "Guidelines for the Delaware Agricultural Lands Preservation Program" section represents an exercise of the Foundation's regulatory responsibilities under 3 Del. C., §904(a) and (b)(21). These guidelines will govern the work of the Foundation. The program contained herein augments CHAPTER 9, TITLE 3 of the DELAWARE CODE.

Delaware's Agricultural Lands Preservation Foundation By-Laws

PREAMBLE

The Agricultural Lands Preservation Foundation, also referred to as the Foundation, accepts and assumes its responsibility to develop and implement a comprehensive agricultural lands preservation program to serve the long-term needs of the citizens of Delaware. In accordance with 3 Del. C., §904 (b)(20), the Foundation hereby adopts these BY-LAWS.

1. ARTICLE I: ORIGIN OF THE ORGANIZATION

On July 8, 1991, Governor Castle signed House Bill 200 which created the Agricultural Lands Preservation Foundation. This organization is established and created as an independent entity by Section 1 of Chapter 9, Title 3 of the Delaware Code.

2. ARTICLE II: MISSION STATEMENT

The Foundation's mission is to develop and implement a comprehensive agricultural lands preservation program for Delaware. Encompassed in the enabling legislation are the following goals for the Foundation:

2.1 Establish criteria for Agricultural Preservation Districts (For the purpose of this document, they will be referred to as "Districts").

2.2 Establish Districts of viable and productive farmland and forest land in accordance with the established criteria.

2.3 Develop and implement an application process that includes County Farmland Preservation Advisory Boards, County Planning and Zoning authorities, and the Foundation.

2.4 Develop a strategy map identifying the critical agricultural areas of the State, to be used as a guide for establishing Districts and purchasing preservation easements.

2.5 Establish criteria for purchasing development rights from landowners in Districts, including the prioritization of purchases in those areas located near and adjacent to designated growth zones.

2.6 Purchase development rights of landowners in a District in accordance with established criteria.

2.7 Encourage development in areas where infrastructures exist.

2.8 Provide economic incentives and benefits to encourage landowners who preserve their land.

2.9 Promote and encourage the preservation and support of agriculture as an industry and a valued occupation.

2.10 Work closely with the Department of Agriculture, Department of Natural Resources and Environmental Control, other state agencies, and private organizations concerned with promoting Delaware's agricultural sector and protecting open space.

2.11 Work with county and local governments to encourage farmland preservation in land use planning and zoning activities.

3. ARTICLE III: ORGANIZATIONAL STRUCTURE

3.1 The Foundation is comprised of nine (9) Trustees, all appointed by the Governor. Each Trustee must be a resident of Delaware and qualified to vote in the State of Delaware.

3.2 The Chairperson of the Foundation, will serve at the pleasure of the Governor and will be confirmed by the Senate.

3.3 The Secretary of the Department of Agriculture or designee, the Secretary of the Department of Natural Resources or designee, and the State Treasurer or designee will serve an indefinite term.

3.4 Each county will have a representative who is actively engaged in agribusiness to serve on the Foundation for an initial period of three (3) years.

3.5 For the four (4) Trustees appointed to the positions indicated in sections 3.2 and 3.4 above, Trustees registered in either major political party shall not exceed the other major political party by more than one (1).

3.6 One (1) representative from the Delaware Farm Bureau, selected from a list of three (3) nominees, will serve for an initial term of two (2) years.

3.7 One (1) representative from the Delaware State Grange, selected from a list of three (3) nominees, will serve for an initial term of two (2) years.

3.8 The Governor will appoint an interim Trustee in the event of a death, permanent disability, resignation, or failure to perform duties of a Trustee. The replacement will serve the unexpired term of the departing Trustee. The Chairperson's replacement must be confirmed by the Senate if his/her residual term exceeds six (6) months. [3 Del.C., §903]

4. ARTICLE IV: OFFICERS

4.1 Other officers of the Foundation besides the Chairperson shall include a Vice Chairperson, a Secretary and a Treasurer.

4.2 The Chairperson shall preside and maintain order at all meetings of the Foundation.

4.3 The Vice Chairperson shall act for the Chairperson

in his/her absence.

4.4 The Secretary shall be responsible for recording the minutes of the Foundation meetings.

4.5 The Treasurer shall be responsible for maintaining records of all receipts and disbursements and shall submit a monthly financial report to the Foundation.

5. ARTICLE V: ORGANIZATIONAL FUNCTION

5.1 The Foundation will meet at least quarterly; executive meetings or an emergency meeting may be called by the Chairperson.

5.2 All Foundation meetings, except for executive sessions, are open to the public and advance notice will be given in accordance with applicable statutory requirements. Public hearings shall be conducted in accordance with the requirements of 3 Del. C., §928.

5.3 Minutes of every meeting will be recorded and available to the public. An agenda will be sent to each Trustee no less than seven (7) days before the next scheduled meeting, if feasible, provided however that the agenda may be modified as necessary in advance of a meeting in which case the maximum period of notice will be provided.

5.4 Five (5) Trustees will constitute a *quorum* for conducting business of the Foundation.

5.5 A majority vote of members constituting a *quorum* is required for action on any matter before the Foundation.

5.6 A Trustee is not entitled to vote on any matter before the Foundation if such Trustee knowingly has a financial interest in the outcome of such matter. The Trustee will inform the Chairperson of his/her conflict of interest and will be recorded in the minutes of the meeting.

5.7 The Foundation may adopt policies and guidelines as necessary for the proper conduct of its work.

5.8 The BY-LAWS will be reviewed periodically by the Trustees.

5.9 Amendments to these BY-LAWS and policies will be introduced with prior notice to the Trustees.

5.10 An Annual Report will be prepared summarizing proceedings and activities for the annual period ending September 30. The Annual Report shall be submitted prior to January 1 following the close of the reporting period. [3 Del. C., §903, §904]

6. ARTICLE VI: ORGANIZATIONAL AUTHORITY GRANTED BY TITLE 3, CHAPTER 9 OF THE DELAWARE CODE

6.1 To purchase, sell, manage, lease, or rent real and personal property for use of the Foundation.

6.2 To seek, obtain, and utilize federal and private funding.

6.3 To accept gifts, grants or loans of funds, property or service from any source, private or public.

6.4 To receive funds from the sale of general bonds, revenue bonds or other obligations of the State or under the

name of the Foundation.

6.5 To establish a Delaware Farmland Preservation Fund.

6.6 To recover reasonable costs for service provided and to collect rollback taxes from real estate transactions.

6.7 To adopt procedural rules to govern how internal affairs of the Foundation are conducted.

6.8 To select an Executive Director, who shall be chief executive officer of the staff to the Foundation.

6.9 To employ a staff subject to the availability of funding.

6.10 To retain by contract auditors, accountants, appraisers, legal counsel, surveyors, private consultants, financial advisors, or other contractual services required by the Foundation.

6.11 To delegate to one (1) of its members, its Executive Director or its agent, such powers and duties necessary to conduct authorized business on behalf of the Foundation.

6.12 To adopt, after notice and public hearing, policies and guidelines to fulfill the Foundation's responsibilities.

6.13 To undertake such other activities authorized by the Foundation's enabling legislation and the amendments thereto. [3 Del. C., §904]

7. ARTICLE VII: ORGANIZATIONAL RESPONSIBILITIES

7.1 To develop and implement, after public hearing, a statewide agricultural lands preservation strategy which specifically identifies the areas in which viable, productive agriculture lands are located and which are considered most vital for permanent preservation, and to identify growth zones, and those areas located near and adjacent to designated growth zones to be given priority for acquisition of preservation easements.

7.2 To adopt, after public hearing, criteria for establishing and maintaining Agricultural Preservation Districts.

7.3 To adopt, after public hearing, criteria for establishing and maintaining a program to purchase development rights.

7.4 To establish a program of cooperation and coordination with the counties, municipalities, and other governmental bodies of Delaware and with private non-profit or public organizations to assist in the statewide preservation of agricultural land.

7.5 To monitor and enforce the requirements, restrictions and policies developed by the Foundation.

7.7 To administer, operate, and supervise, the Delaware Farmland Preservation Fund.

7.8 To engage the services of an independent certified public accountant to conduct an annual audit of the Foundation's accounts at the end of each fiscal year.

7.9 To develop and establish a program of education and promotion of agricultural lands preservation.

7.10 To engage in such other activities designed to promote an effective program.
[3 Del. C., §904]

8. ARTICLE VIII: PARLIAMENTARY MATTERS

8.1 In all matters not covered in 3 Del. C., Chapter 9 or these By-Laws, Roberts Rules of Order shall apply.

9. ARTICLE IX: ADOPTION

These BY-LAWS have been adopted at a regular Foundation meeting and are effective as of ~~1992-~~ 1999, and supercede all prior By-Laws adopted by the Foundation.

Dr. Donald F. Crossan, Chairperson

Robert F. Garey, Vice Chairperson,
Kent County Representative

Jane T. Mitchell, Secretary,
Grange Representative

Dennis H. Clay, Treasurer,
New Castle County Representative

John F. Tarburton, Secretary of Agriculture

Mary McKenzie, Acting Secretary of the Dept. of Natural
Resources & Environmental Control

Jack Markell, State Treasurer

Alden Hopkins, Farm Bureau Representative

GUIDELINES USED FOR THE DELAWARE AGRICULTURAL LANDS PRESERVATION PROGRAM

The Foundation is granted authority to establish criteria for Agricultural Preservation Districts (hereinafter referred to as "Districts") and the purchase of preservation easements.
[3 Del. C. §904]

1. CRITERIA FOR DISTRICT ELIGIBILITY

1.1 In order to qualify for the Agricultural Lands Preservation Program, the lands proposed as a Agricultural Preservation District in the application must meet the following criteria:

a) owner(s) shall hold fee simple title to all land to be placed in a District;

b) must constitute at least 200 acres of contiguous farmland or lesser acreage if the farmlands are located within three (3) miles of an established District;

c) shall be zoned for agricultural purposes and shall not be subject to any major subdivision plan;

d) applicant(s) including all fee simple title holders, must sign a written agreement committing to District restrictions set forth in this Section and 3 Del. C., §909 and other adopted requirements.

e) must be viable and productive agricultural land and meet the minimum County Land Evaluation and Site Assessment (LESA) scoring requirements for eligibility as established by the Foundation. [3 Del. C., §908 (a)(3)]

f) must include all of the eligible real property located in the tax parcel or tax parcels subject to application.

1.2 For the purposes stated in this chapter, the phrase "viable and productive agricultural land" is defined as land that qualifies under provisions of the Farmland Assessment Act. [9 Del. C., §8329 - 8333]

1.3 The minimum LESA score for an eligible District or Expansion shall be 170 points out of a possible 300 points for each county in the State as computed under the currently approved LESA program of the Delaware Department of Agriculture.

2. APPLICATION PROCEDURES

2.1 The Foundation will provide application forms (Appendix A) on which applicants who volunteer to place their lands into an Agricultural Preservation District will provide the following information:

1. name of petitioner(s)
2. mailing address(es)
3. telephone number(s)
4. property location
 - a. county
 - b. community name
5. deed or property description
6. area - total acreage of:
 - a. cropland
 - b. woodland
 - c. pasture
 - d. aquaculture
 - e. tidal wetlands
 - f. farm structures
 - g. residence/buildings
 - h. other
7. land use/zoning designation or designations
8. easements/rights-of-way (identify, if any)
9. mortgages/liens (identify, if any)
 - a. mortgagee or lien holder's name or names
 - b. date of mortgages or liens
10. number of dwelling units
11. soil and water conservation plan (if any)
12. proof of eligibility under the Farmland Assessment Act
13. evidence of historical significances (if any)
14. information regarding the occupancy of dwelling units on the property

2.2 The Foundation shall provide assistance to potential applicants in completing application forms when requested [3 Del. C., §907 (a)]

2.3 Foundation staff ~~shall~~ may conduct on-site

inspections and/or phone interviews with the applicants to acquire data necessary to perform LESA analyses and write a staff report.

2.4 In conjunction with the application, all fee simple owners shall sign a District Agreement (Appendix B) which serves as a declaration in recordable form of acknowledgment of the policies and restrictions that must be followed, and all benefits realized in a District.

3. APPLICATION REVIEW PROCEDURES

The Foundation has the authority to approve applications, establishing Agricultural Preservation Districts and purchasing preservation easements. [3 Del. C., §904]

3.1 The Foundation staff will review applications and determine whether or not the minimum eligibility requirements under Section 1.1 have been met.

3.2 If the minimum eligibility requirements have not been met, then the applicant will be notified by letter from the Foundation indicating that the application does not qualify for further review, and the reasons for ineligibility.

3.3 If an applicant excludes a portion of property otherwise includable in a proposed District, then the Foundation ~~reserves the right to~~ shall deny the application.

3.4 Subject to Section 3.3 above, if the lands proposed as a District in the application meet minimum eligibility criteria, then the Foundation staff will submit to the Foundation, the County Farmland Preservation Advisory Board and the County Planning and Zoning Authority, applications and criteria checklists describing and summarizing the criteria as established in this chapter (see Appendix C).

3.5 If the applicant disagrees with the staff evaluation of the proposed District, then the applicant may contact the Foundation staff to discuss the application review. Foundation staff will meet with the landowner to discuss the review within thirty (30) days from receiving such telephone call or letter.

3.6 If the issue is not resolved to the applicant's satisfaction, he/she may request an administrative review with the Foundation by submitting a letter to the Foundation within fourteen days (14) of the applicant's last meeting with Foundation staff.

3.7 This letter must include reasons and documentation to justify the applicant's claim(s).

3.8 Within seven (7) working days from the receipt of the landowner's letter, the Foundation will schedule a meeting and notify the applicant by certified letter of the date, time, and place of the meeting, at least seven (7) days in advance.

3.9 At the administrative review meeting, the applicant(s) shall present information or documentation as to how the proposed District satisfies the eligibility criteria.

3.10 The Foundation will render a decision within thirty (30) days from the administrative review meeting and

notify the applicant in writing of its decision.

4. CREATION OF A DISTRICT

4.1 To establish an Agricultural Preservation District, the application must be approved by two out of three of the entities listed under section 3.4 of these guidelines. [3 Del. C., §907 (c)]

4.2 After review by the Foundation, the application is subject to a review period of thirty (30) days in which the Secretary of Agriculture may reject the application. The application is officially approved at the end of the review period, if it is not rejected by the Secretary of Agriculture. [3 Del. C., §919]

4.3 The property legally becomes a District when the applicant and Foundation Chairperson (or designee) have signed the District Agreement and no rejection has been exercised by the Secretary of Agriculture, or the Secretary of Agriculture has specifically approved the application.

4.4 Copies of the District Agreement shall be filed with the County Planning and Zoning and Tax Assessor's Offices and recorded in the Office of the Recorder of Deeds. The Foundation shall require from these Offices proof of recording and/or receipt of the District Agreement.

4.5 ~~Applicants shall receive~~ The Foundation shall endeavor to provide written notification of the date of establishment of the Agricultural Preservation District and ~~shall receive~~ provide a copy of the District Agreement to the applicant, however, the failure of the Foundation to satisfy any formality following execution of a District Agreement shall not affect the validity of the District Agreement.

5. DISTRICT RESTRICTIONS

5.1 Any rezoning or major subdivision of real property included in an Agricultural Preservation District is prohibited. [3 Del. C., §909 (a)(1)]

5.2 The submission of applications or preliminary rezoning or subdivision plans for any property within an Agricultural Preservation District to a county or municipality shall be considered evidence of the intent to rezone or subdivide and is prohibited.

5.3 All activities on the property shall be limited to "agricultural and related uses." [3 Del. C., §909 (a)(2)]

5.4 For the purposes of ~~this chapter~~ these guidelines, the phrase 'agricultural and related uses' shall be defined as, all forms of farming including but not limited to, agriculture, horticulture, forestry, aquaculture, or silviculture as defined in the Farmland Assessment Act of 1968 [9 Del. C., Chapter 83] and 3 Del.C., §403 or by the National Agricultural Statistics Service.

5.5 Excavation or filling, borrow pits, extraction, processing and removal of sand, gravel, loam, rock or other minerals is prohibited unless such action is currently required by or ancillary to any preparation for, or operation

of any activities including, but not limited to: aquaculture, farm ponds, cranberry operations, manure handling facilities, and other activities directly related to agricultural production.

5.6 Activities that would be detrimental to drainage, flood control, water conservation, erosion control or soil conservation are prohibited;

5.7 Any other activity that might negatively affect the continued agricultural use of the land is prohibited.

5.8 The term "usable land owned in the district" [3 Del. C., §909 (a)(2)], shall be defined as any land meeting the requirements for agricultural, horticultural or forest land in the Farmland Assessment Act of 1968 [9 Del. C., Chapter 83] and 3 Del. C., §403 or criteria for farm definition as established by the National Agricultural Statistics Service.

5.9 The District Agreement and District requirements and benefits shall be binding on the heirs, successors and assigns of property owners of lands within a District. A property owner in a District shall provide written notice to a successor or assign in advance of the date of transfer of the property that the property is subject to District restrictions. The party taking title shall execute a ~~written acknowledgement that the transferred property is subject to District restrictions~~ document as required by 3 Del. C. §909(a) (2) (iii) acknowledging the acreage allowed for dwelling housing and the restrictions which apply to the property.

5.10 ~~Under 3 Del. C., §909 (a)(3), all restrictions shall be covenants which run with and bind the lands in the District for a minimum of ten (10) years, beginning when the District Agreement takes effect as specified in section 4.3 of these guidelines.~~ the District Agreement.

6. CONTINUATION OF A DISTRICT

6.1 All properties are to remain in an Agricultural Preservation District for at least ten (10) years, subject to the allowance of hardship exceptions for exclusion of dwelling pursuant to 3 Del. C. §909(a) (2) (ii) and Section 9 of these guidelines.

6.2 If a landowner wishes to withdraw from, or terminate a District, then the Foundation must receive a written notice of intent to withdraw no less than six (6) months prior to the ten (10) year anniversary date of initial establishment of the District. [3 Del. C., §909 (b)]

6.3 If the Foundation does not receive a written notification of the landowner's intent to withdraw from the District six (6) months prior to the ten (10) year anniversary date of that District, then the land shall remain in the District, unless notice of intent to withdraw shall be given within six months of the end of each additional five-year period.

7. EXPANSION OF A DISTRICT

7.1 An Agricultural Preservation District can be expanded for the purpose of preserving additional lands.

Lands added to a District may be under 200 acres.

[3 Del. C., §907 (d)]

7.2 Land which is less than 200 usable acres, yet meets the other criteria established by the Foundation is eligible to be an expansion of an Agricultural Preservation District if it is within ~~one mile~~ three (3) miles of any portion of an established Agricultural Preservation District. [3 Del. C., §907 (a)]

~~7.3 The Foundation will re-evaluate Districts at the time of removal of any lands. If any remaining parcels of land subsequently fail to meet the minimum requirements for a District as set forth in 3 Del. C., §908, then the Foundation, after notice to the owner or owners, may terminate the District Agreement(s) upon expiration.~~

8. INSPECTION OF DISTRICTS

The Foundation has the authority to enter upon lands as may be necessary to perform surveys, appraisals, and investigations to accomplish its mission; consistent with applicable statutes. [3 Del. C., §904 (b)(14)]

8.1 The Foundation or its designee reserves the right to inspect restricted land and enforce agreements on its own behalf.

8.2 If any violations of the terms and the conditions of the District Agreement occur, the Foundation may institute proceedings in the appropriate court to enforce the terms and seek appropriate relief. [3 Del. C., §920 (a)]

9. DWELLING PROPERTY HARDSHIP EXCEPTIONS

In accordance with 3 Del. C. §909(a) (2) (ii), the legal or equitable owners of real property subject to a District Agreement or Preservation Easement are entitled to apply to the Foundation for a hardship exception allowing for the transfer of dwelling property to parties who are not otherwise entitled to residential use of the dwelling property under the District Agreement or Preservation Easement, subject to the provisions of 3 Del. C. §909(a) (2) (ii) and the following requirements.

9.1 An applicant for a hardship exception shall submit the following information in writing to the Foundation:

1. name and property interest of the applicant in the dwelling property
2. acreage of the dwelling property subject to application
3. date on which the District was established
4. number of dwellings and acreage of residential use currently on the property in the District
5. the nature of the hardship condition and reasons justifying the granting of a hardship exception
6. the extent to which the hardship condition is unavoidable

9.2 The Foundation shall consider hardship conditions involving the following circumstances:

1. the sale or transfer of the dwelling property

compelled by foreclosure, court order, or marital property division agreement.

2. the sale or transfer of the dwelling property compelled by job transfer.

3. the sale or transfer of the dwelling property compelled by health conditions.

4. the sale or transfer of the dwelling property required to avoid insolvency or bankruptcy.

5. other circumstances of an unusual and extraordinary nature which pose a practical hardship to continued ownership of the dwelling property and which are unavoidable.

9.3 Hardship exceptions will not be granted when no real hardship exists and the primary consequence of the sale or transfer of the dwelling property is financial gain.

9.4 The applicant shall bear the burden of establishing the existence of hardship circumstances, and shall provide to the Foundation documentation in support of the application, and any documentation requested by the Foundation, provided however, that documentation involving privileged information may be submitted on a confidential basis.

9.5 The Foundation may require the applicant for a hardship exception to appear before the Foundation Board to present the application, and an applicant shall be entitled to appear before the Board to make a presentation by submitting a written request to the Foundation.

9.6 The granting of a hardship exception by the Foundation shall be subject to the following conditions:

1. the dwelling property following transfer shall be used only for residential purposes.

2. the transferred property shall not qualify for District benefits or benefits of Preservation Easements.

3. if the transferred property is subject to a Preservation Easement prior to transfer, payment shall be made to the Foundation in an amount equal to twenty-five (25) percent of the current fair market value of the land subject to transfer.

4. the transferee shall execute a Declaration in recordable form as prescribed by the Foundation which includes the acreage allowed for dwelling housing and the restrictions which apply to the real property.

5. the Foundation may require the transferor to execute a Declaration in recordable form as prescribed by the Foundation to evidence the status of allowable dwelling housing property on lands retained by the transferor which are in the District or subject to a Preservation Easement.

6. such other terms and conditions considered necessary by Foundation to address the nature of the hardship condition.

DELAWARE FARMLAND PRESERVATION FUND

9. INTENT

The Delaware Farmland Preservation Fund, hereinafter

referred to as the "Fund" was enacted under 3 Del. C., §905 for the exclusive application by the Foundation to achieve the desired goals of preserving viable agricultural lands and conducting the business of the Foundation.

10. AUTHORITY

10.1 The Foundation Trustees shall manage and administer the Fund according to the requirements as stated in 3 Del. C., §905. A Trustee shall be elected as Foundation Treasurer to monitor and supervise the Fund.

10.2 The Foundation has the authority to hire an Executive Director and any other staff necessary to accomplish its mission. Salaries for these positions and retention of consultants and other professionals will be paid from the Fund.

10.3 The Foundation members, by a majority vote, can purchase all the necessary materials, equipment, and services to perform its mission. All necessary expenses incurred by the Trustees to enable the performance of their duties are paid from the Fund.

10.4 The Foundation has the authority to establish accounts at any bank or financial institution, purchase certificates of deposit or other appropriate investment instruments.

10.5 Any two officers, or one officer and a designated staff person, are authorized to sign checks and drafts against any accounts established by the Foundation, providing such expenditures have been budgeted or specifically approved by the Board.

11. SOURCES OF FUNDING

11.1 The Foundation may accept donations, property, or development rights as gifts and monetary gifts from any source, public or private.

11.2 Monies not needed on a current basis by the Foundation will be invested with the approval of the Board of Trustees.

11.3 The Fund is subject to an annual audit to be prepared by an independent, certified public accountant. The findings of all audits shall appear in the Foundation's Annual Report.

11.4 The Foundation shall manage the monies appropriated to it by the General Assembly in accordance with the terms of the appropriations.

CRITERIA FOR THE PURCHASE OF AGRICULTURAL LANDS PRESERVATION EASEMENTS {3 DEL.C., §904(a)(2)}

12. INTENT

12.1 The intent of this section is to provide a framework for the acquisition of Agricultural Lands Preservation Easements (hereinafter referred to as "Preservation Easements") to protect in perpetuity those

lands of the state most suitable for long-term agricultural production, ~~and to~~ preserve a sufficient critical mass of agricultural land to insure the economic viability of the agriculture industry, and to protect farmland from development in those areas located near and adjacent to designated growth zones.

12.2 The Foundation will place greatest emphasis on acquiring Preservation Easements in areas where significant agricultural acreage can be maintained for long-term agricultural production and prioritize acquisitions in areas located near and adjacent to designated growth zones.

12.3 ~~Based on the long range goal of preserving a sufficient critical mass,~~ the Foundation will give primary consideration to the Agricultural Lands Preservation Strategy Map for the State of Delaware {3 Del.C., §904(a)(2)} in the acquisition of Preservation Easements.

12.4 In the criteria established for the prioritization of Preservation Easements, the Foundation will also give weight to the Land Evaluation and Site Assessment (LESA) score for the subject parcel, and the eligibility criteria used in the establishment of agricultural districts, and factors designed to prioritize acquisitions in areas located near and adjacent to designated growth zones.

13. SCHEDULE FOR ACQUISITION OF AGRICULTURAL LANDS PRESERVATION EASEMENTS

13.1 Recognizing that voluntary applications by agricultural preservation district landowners may exceed available funds for the procurement of Preservation Easements, it is necessary to establish a procedure for pooling, reviewing, prioritizing, and funding applications for permanent Preservation Easements.

13.2 ~~Application and funding cycles will take place in six month intervals, starting at the beginning of the Foundation's fiscal year, October 1~~ on schedules established by the Foundation.

13.3 ~~Applications for the purchase of Preservation Easements received between October 1 and March 31 in each fiscal year cycle will be pooled together for review during the period April 1 through June 30, and for funding decisions to be made on these applications during the period July 1 through September 30.~~ in Rounds of Purchases shall be subject to deadlines established by the Foundation.

13.4 ~~Funding decisions pertaining to applications received between October 1 and March 31 will be announced during the last ten days of the Foundation's fiscal year (September 21-30).~~ For each Round of Preservation Easement Purchases the Foundation shall rank the applications in the Round in accordance with the criteria set forth in Section 13. Following the ranking the Foundation shall establish a cut-off score, and arrange for the appraisal of the Preservation Easement value of those properties at or above the cut-off score.

13.5 ~~Applications received between April 1 and September 30 of each fiscal year will be pooled together for review during the period October 1 through December 31, and for funding decisions to be made on these applications during the period January 1 through March 31. Upon completion, the appraisals shall be provided to the landowners, and procedures set forth in Section 23 involving offers for the sale of preservation easements shall be initiated.~~

13.6 ~~Funding decisions pertaining to applications received between April 1 and September 30 will be announced during the last ten days of March (March 22-31). After receipt of offers for the sale of preservation easements, the Foundation shall review the offers and announce the selections in accordance with the provisions of Section 23.~~

13.7 ~~The Foundation is under no obligation to purchase a permanent Preservation Easement which is offered for sale. Following the selection of properties for acquisition of Preservation Easements, the Foundation shall arrange for surveys of the properties to be conducted, and proceed to settlement under the terms of the Option Agreements, subject to the availability of funding and satisfaction of regulatory, financial or other restrictions or limitations.~~

13.8 ~~The Foundation is under no obligation to purchase a Preservation Easement which is offered for sale. 3 Del.C., §913.~~

14. LOCAL MATCHING CONTRIBUTIONS TO THE PROGRAM

14.1 ~~The Foundation may establish a reserve of available funds for the matching of federal, county, state, or local, or private funds for the preservation of farmland.~~

15. ELIGIBILITY CRITERIA FOR AGRICULTURAL LANDS PRESERVATION EASEMENTS

The criteria for eligibility of acquisition of a Preservation Easement shall be the same as the criteria for district eligibility. In addition, offered preservation easement lands shall be in an established district and in compliance with district requirements to be eligible.

16. APPLICATION PROCEDURES

16.1 ~~A separate application shall be required for each farmland tract (operating farm unit) offered for Preservation Easement purchase. The application shall consist of a completed application form, location maps, a soils report and a crop report. The Foundation shall not be obligated to process any incomplete application.~~

16.2 The Foundation shall develop, and make available to landowners or other interested parties, an application form which requires the following information (See Appendix E):

1. Name, address, telephone number and signature of the owner of the farmland tract.

2. County, municipality or hundred, and Agricultural Preservation District in which the farmland tract is located.

3. Total acreage of the farmland tract and the number of acres of that tract proposed for Preservation Easement purchase.

4. Street/Road location of the farm, and directions from the nearest State route.

5. Deed reference - book, volume and page.

6. County tax map records, including tax parcel number, or account number of each parcel.

7. If a conservation plan has been approved by the County Conservation District, specify the date of the plan.

8. Name, address and telephone number of the person to be contacted to view the farmland tract.

~~9. Declaration of assurance that the applicant has good title to the premises, free of encumbrances such as liens, mortgages, options, rights of others in extraction or mineral rights, land use restrictions, adverse ownership interest, and other encumbrances which would adversely impact the Preservation Easement interest in the farmland tract, or that any such encumbrances would be subordinate to the Preservation Easement to be conveyed to the Foundation.~~

16.3 The applicant shall provide the following information on the application:

1. Major assets and investments related to agricultural production such as buildings, packing equipment, dairy equipment, irrigation/water supply, etc.

2. Use of the land for the most recent crop year.

16.4 The applicant shall provide information on the farmland tract for the highest three crop production years out of the last five crop years on crops where comparable statistics are available from the Delaware Agricultural Statistics Service (DASS) on the Crop Production/Livestock Production form (See Appendix E).

16.5 The applicant shall provide a livestock report for the farmland tract for the most recent calendar year for which comparable statistics are available from the Delaware Agricultural Statistics Service (DASS) on the Crop Production/Livestock Production form (See Appendix E).

16.6 If the applicant grows crops or produces livestock that are of a type not reported by DASS, the ~~Foundation applicant shall obtain~~ provide two years of production data ~~from the applicant to the Foundation.~~

17. REVIEW AND EVALUATION OF AGRICULTURAL LANDS PRESERVATION EASEMENT APPLICATION

17.1 Application periods shall be October 1 - March 31, and April 1 - September 30.

17.2 ~~1~~ The Foundation shall review the application to determine if it is complete and meets the minimum criteria set forth in Section 15.

17.3 ~~2~~ If the application is complete and the minimum

criteria are met, ~~an agent or member~~ a representative of the Foundation ~~Board of Trustees~~ shall view the farmland tract and ~~discuss the Preservation Easement program with the applicant.~~

17.4 ~~3~~ The Foundation shall for each Round of Preservation Easement Purchases evaluate applications which meet the minimum criteria ~~during the two review periods; April 1 - June 30, and October 1 - December 31 of each year, and rank them according to the Foundation's weighting system for prioritizing Preservation Easements. The Foundation shall then determine whether to appraise the farmland tract, and rank the applications in accordance with the criteria of Section 18.~~

18. ~~WEIGHTING AND SCORING SYSTEM FOR PRIORITIZING RANKING CRITERIA FOR AGRICULTURAL LANDS PRESERVATION EASEMENTS APPLICATIONS~~

18.1 A ~~guidance weighting~~ system for ranking Preservation Easement applications is established to assist the Foundation in reaching a final decision.

18.2 ~~Four~~ Five categories will be utilized to ~~initially~~ rank the Preservation Easement applications during the Foundation's review periods with a maximum score of 100 points, with 10 points added to establish a priority for ranking applications for farms near or adjacent to designated growth zones (Priority Preservation Areas).

18.3 Agricultural Lands Preservation Strategy Map - 50 Points.

In order to follow a rational, statewide plan for the acquisition of development rights on agricultural lands, the Foundation will give weight to applications for sale of Preservation Easements according to location on the Agricultural Lands Preservation Strategy Map. Scoring will be based on location relative to preservation categories on the map:

- Class I = 50 Points
- Class II = 40 Points
- Class III = 25 Points
- Class IV = 15 Points
- Class V = 0 Points

Land will be categorized according to which class comprises the majority of the active cropland on the farm. Farms within two or more classes ~~may~~ shall be placed in the predominant class.

18.4 LESA Score - 20 Points. Weight will be given to the LESA scoring on parcels being submitted for the purchase of permanent Preservation Easements. Using the highest LESA score for an Agricultural Preservation District within the county as 100%, and 170 points as 0%, then:

- 76 greater than 75-100% = 20 Points
- 51 greater than 50-75% = 15 Points
- 26 greater than 25-50% = 10 Points
- 0-25% = 0 Points

Farms with tidal wetlands and other non-productive lands will receive a LESA score based on the cropland and forest land ~~proposed for~~ subject to Preservation Easement acquisition by the Foundation.

18.5 Productivity of current farm operations - 15 Points.

Weight will be given to the current level of productivity exhibited on the land where a Preservation Easement is offered for sale. The score is based on the type of farming being pursued, the value of investments in agriculture and the recent, proven yields of the operation.

- Investment: High (upper 1/3 for type of operation) = 4 points
- See Appendix F Medium (middle 1/3 for type of operation) = 2 points
- Low (lower 1/3 for type of operation) = 0 points
- Management: Excellent = 4 points
- Average = 2 points
- Low = 0 points
- Past Yields: High (greater than 110% or more of state avg.) = 4 points
- Medium-High (greater than 90% - ~~49~~ 110 % of state avg.) = 3 points
- Medium (greater than 70% to ~~89~~ 90 % of state avg.) = 2 points
- Low (~~less than~~ less than or equal to 70% of state avg.) = 0 points

Farms reporting more than one crop will receive points based on the average of points computed for each crop.

- Type of Of operation: High value/intensity = 3 points
- Medium-High value/intensity = 2 points
- See Appendix F Medium value/intensity = 1 point
- Low value/intensity = 0 points

18.6 Other factors - 15 Points.

Other criteria for eligibility used in the determination of areas to be included in the Agricultural Preservation District program will be taken into account in the decision to procure a Preservation Easement. Scores will be based on the consideration of factors specified in 3 Del. C., §908(b), relative to the Preservation Easement application.

- 1. The extent to which long-term preservation of

the farmland and forestland is consistent with land use plans adopted at the state ~~and~~ or county levels.

2. ~~The permanent protection of farmland that is near or adjacent to protected open space. The subject property is contiguous to protected open space.~~

3. ~~The impact that the procurement of the Preservation Easement would have on the expansion of existing agricultural districts and the purchase of Preservation Easements on other lands in the future. The subject property is contiguous to existing agricultural districts or permanently protected farmland.~~

4. ~~The socio-economic benefits derived from the long-term preservation of the agricultural land, and the history of the surrounding area and the role that it has played in Delaware agriculture. The extent to which the subject property provides documented historic, cultural, archeological, or socio-economic benefits for Delaware agriculture.~~

5. ~~The potential of a Preservation Easement in this area for reducing development pressures on adjacent and nearby farmlands. The potential of a Preservation Easement in this area for reducing development pressures on adjacent and nearby farmlands and is officially documented as a high priority for preservation by another state agency or a county.~~

6. ~~Lands that have implemented resource protection measures as approved by the Delaware Department of Natural Resources and Environmental Control.~~

An application will receive the following scores:

4 or more factors present	=	15 points
3 " "	=	10 points
2 " "	=	6 points
1 " "	=	3 points
0 " "	=	0 points

18.7 Priority Preservation Areas - 10 Points

For applications for properties which are located in, or which border in part, any Priority Preservation Area as shown on the Priority Preservation Area Map adopted by the Foundation, an additional ten (10) points shall be added to the ranking score for the application.

~~19. NON-SCORING FACTORS FOR CONSIDERATION~~

~~The Foundation may consider the following additional factors beyond the weighting and scoring system and minimum criteria on an application which may affect the decision to purchase a Preservation Easement.~~

~~19.1 Discount to Appraisal - A discounted sale price of a Preservation Easement versus the appraised value of the Preservation Easement will be considered after the ranking of applications with appraisals.~~

~~19.2 Availability of Other Funding Sources - The availability of additional funding from private or public~~

~~sources to assist in the purchase of a Preservation Easement shall be considered.~~

~~20-19. APPRAISALS [3 Del. C., §916]~~

~~20-1 19.1 An offer to purchase a Preservation Easement shall be based upon one or more appraisal reports which estimate the full market value of the land under its agricultural zoning designation and the agriculture-only value of the farmland tract.~~

~~20-2 19.2 An appraisal to the extent possible shall be based primarily on an analysis of comparable sales.~~

~~20-3 19.3 The value of buildings or other improvements on the farmland tract may be considered in determining the Preservation Easement value. The value of the buildings or other improvements shall appear separately in appraisal report. Excluded from the value of the Preservation Easement shall be the value of the one (1) acre of land for each dwelling structure on the property.~~

~~20-4 19.4 The appraiser shall be:~~

~~1. An independent, licensed real estate appraiser who is qualified to appraise a property for easement purchase. An appraiser shall be selected on the basis of experience, expertise and professional designation, and~~

~~2. A member of an organization which subscribes to the "Uniform Standards of Professional Appraisal Practice" published by the Appraisal Standards Board of the Appraisal Foundation, and shall follow their ethical and professional standards.~~

~~20-5 19.5 The appraiser shall supply a narrative report which contains the following information and is in the following format:~~

- 1) Introduction
 - a. Professional qualifications of the appraiser
 - b. Letter of transmittal or appraiser certificate
 - c. Table of contents
 - d. Summary of salient facts and conclusions
 - e. Purpose of the appraisal
 - f. Easement value definition as provided in 3

~~Del. C. §916(a).~~

- 2) Description of property
 - a. Area or neighborhood description
 - b. Description of appraised property
 - i. Legal description
 - ii. Property data and zoning
 - iii. Description of improvements
 - iv. Photos and sketches (if available) of subject property
 - v. Tax map of subject property. In

~~instances where the county does not have tax maps available, the sketch map required under vi below shall include the boundary lines and acreage of properties adjoining the subject property and the names of all adjoining property owners~~

vi. Location map
vii. Soils map
~~ix. vii.~~ Development constraints. The appraiser shall report whether the farmland tract has public or private land use restrictions, is within a flood plain, or has other physical attributes which limit its developmental capability

- 3) Analyses and conclusions
- a. Analysis of highest and best development use
 - b. Full market valuation
 - i. Comparable sales data
 - ii. Adjustment grid
 - iii. Location map of comparable sales
 - iv. Market value estimate
 - c. Agriculture-only valuation
 - i. Comparable sales data or value based on income capitalization
 - ii. Location map of comparable sales (as applicable)
 - iii. Agriculture-only value estimate
 - ~~d. Value of Improvements~~
 - ~~e. d.~~ Agricultural Lands Preservation Easement value

~~20.6~~ 19.6 The appraiser shall provide at least one original and ~~four~~ three copies of each report to the Foundation. The original of each report and all copies shall be bound with rigid covers.

~~21.~~ 20. COMPARABLE SALES DATA

The appraiser shall supply information concerning comparable sales as follows:

1) At least four comparable sales shall be used for an appraisal. If the appraiser cannot obtain sufficient comparable sales data within the same general area as the subject farmland tract, the appraiser may use comparable sales from other areas within the county, state or outside the state, after consultation with the Foundation. The use of comparable sales which require adjustment of 50% or more is permitted only with the approval of the Foundation.

2) Pertinent data for each comparable sale used in the preparation of the appraisal shall be stated in the appraisal report, including date of sale, purchase price, road frontage in feet, soil series, an estimate of the range of slope and other relevant information. The appraisal shall include an analysis comparing the pertinent data for each comparable sale to the subject farmland tract.

3) The location of each comparable sale used in the appraisal report shall be shown accurately on the comparable sales map and sufficiently identified and described so as to be located easily.

4) For comparable sales used to estimate the agriculture-only value, the appraiser may use sales of land that are confined to agricultural use because of legal

restrictions or physical impairments that make the land valuable only for agricultural use. Data may also be gathered from farm real estate markets where farms have no apparent developmental value.

5) If comparable sales data is not available for agriculture-only value, the Foundation may assign an agriculture-only value based on crop production and/or a capitalization of rental income.

~~22.~~ 21. AGRICULTURAL LANDS PRESERVATION EASEMENT VALUE AND PURCHASE PRICE

~~22.1~~ 21.1 The value of a Preservation Easement in perpetuity ~~for purposes of making an offer to purchase a Preservation Easement under Section 18.2~~ shall be the difference between the full market value and the agriculture-only value contained in the appraisal report.

~~22.2~~ 21.2 The price ~~offered~~ paid by the Foundation for the purchase of a Preservation Easement ~~under Section 18.2~~ may not exceed, but may be less than the value of the Preservation Easement. 3 Del. C. §916(a)

21.3 In the event an applicant is not satisfied with the appraisal provided by the Foundation, the applicant shall be entitled to have an independent appraisal performed at the applicant's expense by a qualified appraiser as specified in Section 19. The alternative appraisal shall be prepared in the same format as the Foundation's appraisal and shall be submitted to the Foundation within forty-five (45) days of the applicant's date of receipt of the appraisal provided by the Foundation. The forty-five (45) day period may be extended by the Foundation provided the time extension does not delay the time frame established by the Foundation for making selection and acquisition decisions.

21.4 The review of the alternative appraisals by the Foundation shall be based on written submissions under such procedures as specified by the Foundation.

21.5 The maximum adjusted Preservation Easement value which the Foundation will accept is the difference between the agriculture-only value and the full market value, determined as follows:

(a) The agriculture-only value shall equal the sum of:

- i. The agriculture-only value determined by the applicant's appraiser and
- ii. Up to one-half of the positive difference between the agriculture-only value determined by the Foundation's appraiser and his/her values which exceed those determined by the applicant's appraiser.

(b) The full market value shall equal the sum of:

- i. The full market value determined by the Foundation's appraiser, and
- ii. Up to one-half of the positive difference between the full market value determined by the applicant's appraiser and his/her values which exceed those determined by the Foundation's appraiser.

23-22. OFFER OF PURCHASE BY THE FOUNDATION

~~23-1~~ 22.1 The Foundation has the authority to incorporate bidding and/or negotiation as part of the procurement process. 3 Del. C., §915

22.2 The Foundation has incorporated the evaluation criteria for acquisition of Preservation Easements in the evaluation of applications using the ranking system of Section 18. In reviewing the offers of applicants to sell Preservation Easements to the Foundation, the Foundation shall, subject to adoption by Resolution of any alternative criteria by the Foundation to satisfy special objectives, select those offers providing the highest level of percentage donation or percentage discount to the finally appraised value of the Preservation Easement, in accordance with the procedures and requirements of this Section.

22.3 The applications for sale of Preservation Easements selected for appraisal shall be divided into two categories; (1) priority preservation area applications for those properties located in whole or in part in a priority preservation area as shown on the Priority Preservation Area Map, and (2) non-priority applications.

22.4 The Foundation shall accept offers in the form of Option Agreements from all eligible applicants who wish to submit offers, and after all offers are received, list the offers with the highest to the lowest level of percentage donation or percentage discount to the finally appraised value of the Preservation Easement for each of the two categories of applications.

22.5 For the category of priority preservation area applications, the percentage donation or percentage discount offer provided by the applicants shall be reduced by twenty (20) percent (for example, an offer of a forty (40) percent donation or discount would be reduced to twenty (20) percent for purposes of evaluation and purchase) if the funding for the acquisition of the Preservation Easement has a matching requirement of twenty (20) percent and the matching requirement has been waived. In no event shall any purchase of a Preservation Easement be for an amount greater than the appraised value, and the Foundation shall be entitled to reject any offers. Of the monies available to the Foundation in a Round of Purchases of Preservation Easements, at least seventy-five (75) percent of the monies shall be committed for Preservation Easements on properties located in priority preservation areas. The priority for making purchases of Preservation Easements in priority preservation areas shall be those offers providing the highest percentage level of donation or discount, after adjustment for any applicable donation or discount reduction.

22.6 For the category of non-priority applications, the Foundation shall commit the balance of the monies available after commitment to priority preservation area purchases for purchases of Preservation Easements in non-priority areas. The priority for making purchases of

Preservation Easements in non-priority areas shall be those offers providing the highest percentage level of donation or discount.

22.7 Notwithstanding the priority and non-priority requirements set forth in this Section, the Foundation (1) shall be entitled to accept donations of preservation easements under such terms and conditions that may be imposed in the donations, provided the preservation easements contain the restrictions imposed under 3 Del. C. Ch. 9 and (2) the Foundation shall be entitled to participate in programs which make monies available for the purchase of preservation easements, subject to the requirements of such programs, provided the preservation easements contain the restrictions imposed under 3 Del. C. Ch. 9.

23.2 In determining whether to offer to purchase a Preservation Easement, the Foundation shall consider the following:

- 1) Evaluation according to the Foundation's weighting and scoring system under Section 18 of these regulations.
- 2) Consistency with the Agricultural Lands Preservation Strategy Map.
- 3) Discount to appraisal (Section 19.1).
- 4) Availability of other funding sources (Section 19.2).
- 5) Proximity to other lands subject to Preservation Easements.
- 6) Cost relative to total allocations and appropriations.

23.3 If the Foundation approves an offer to purchase a Preservation Easement on the farmland tract, the Foundation, or a representative of the Foundation, shall meet with the applicant to review the appraisal report. The Foundation or its representative shall negotiate the lowest agreeable price with the applicant as provided in 3 Del. C., §915. The Foundation may also receive as gift or bequest, in whole or in part, the Preservation Easement proposed, as specified in 3 Del. C., §904(b)(11).

23.4 An offer to purchase a Preservation Easement shall be submitted to the applicant in writing and be accompanied by the appraisal report.

23.5 Within 30 days of receipt of the written offer from the Foundation, an applicant may do one of the following:

- 1) Accept the offer, in which case the Foundation and the applicant shall enter into a contract of sale. The contract shall be subject to the ability of the applicant to provide good title to the premises, free of encumbrances such as liens, mortgages, options, rights of others in extraction or mineral rights, land use restrictions, adverse ownership interest, and other encumbrances which would adversely impact the Preservation Easement interest in the farmland tract, or a subordination of any such encumbrance which is satisfactory to the Foundation.

2) Reject the offer and advise the Foundation that the application is withdrawn.

3) Advise the Foundation that the applicant is retaining, at applicant's expense, an independent licensed real estate appraiser to determine a Preservation Easement value. The appraiser shall be qualified and the appraisal shall be completed under Section 20 of these regulations. The appraisal shall be submitted to the Foundation within 120 days of receipt of the Foundation's offer to purchase. Upon completion, three copies of the applicant's appraisal shall be submitted to the Foundation. The applicant's decision to obtain an independent appraisal under this paragraph shall not constitute a rejection of the Foundation's offer. The Foundation's offer shall remain open unless increased by the Foundation under subsection 23.5.4 or rejected by the applicant under subsection 23.5.2.

4 If the applicant retains an independent appraiser, the maximum adjusted Preservation Easement value may be the difference between the agriculture-only value and the full market value, determined as follows:

a. The agriculture-only value shall equal the sum of:

i. The agriculture-only value determined by the applicant's appraiser and

ii. Up to one-half of the positive difference between the agriculture-only value determined by the Foundation's appraiser and his/her values which exceed those determined by the applicant's appraiser.

b. The full market value shall equal the sum of:

i. The full market value determined by the Foundation's appraiser, and

ii. Up to one-half of the positive difference between the full market value determined by the applicant's appraiser and his/her values which exceed those determined by the Foundation's appraiser.

5) The Foundation shall, within 30 days of receipt of the applicant's appraisal:

a. Submit a written offer to purchase in an amount in excess of the amount offered under subsection 23.4 to the applicant; or

b. Notify the applicant, in writing, that the offer made under subsection 23.4 remains open and will not be modified.

6) The applicant shall, within 30 days of receipt of the Foundation's written offer or notice under subsection 23.5.4 notify the Foundation in writing that the applicant either accepts or rejects the offer(s) made under subsections 23.4 and 23.5.5.

7) If the offer of purchase is accepted, the Foundation and the applicant shall enter into a contract of sale containing the same requirements and subject to the same conditions as set forth in Sections 5 and 8 of these regulations.

8) Failure by the applicant to act within the time frames set forth under this subsection shall constitute a rejection of the Foundation's offer.

23.6 The contract of sale shall be in a form acceptable to the Foundation.

23.7 Settlement will be scheduled at a time and place convenient to both buyer and seller.

24.23. THE AGRICULTURAL LANDS PRESERVATION EASEMENT DEED

24.1 23.1 The owners of the subject farmland tract shall execute a deed document conveying the Preservation Easement which ~~deed~~ document shall be in the form of Appendix F, or such other form which contains conditions contained in Option Agreements executed by landowners.

24.2 23.2 The ~~deed~~ document shall be in recordable form and contain:

1) A legal description setting forth the metes and bounds of the farmland tract subject to the Preservation Easement.

2) At least one course and distance referencing a fixed marker or monument of a type commonly placed in the field by a surveyor.

24.3 23.3 The legal description shall not contain a closure error greater than one foot per 200 linear feet in the survey.

24.4 23.4 The farmland tract on which a Preservation Easement is to be purchased must be surveyed unless the legal description contained in the deed recorded in the land records of the county in which the farmland tract is located satisfies the requirements of Sections 24.2 and 24.3. Survey required by the provisions of this paragraph must comply with the boundary survey measurement standards for a survey as published by the Delaware Society of Land Surveyors.

25. TITLE QUALITY:

The Preservation Easement conveyed to the Foundation shall be unencumbered except of standard exceptions and be capable of being insured as such by an established and recognized title insurance company doing business in the State of Delaware.

APPENDIX A: APPLICATION FOR A PRESERVATION DISTRICT

DELAWARE AGRICULTURAL LANDS- PRESERVATION FOUNDATION AGRICULTURAL- PRESERVATION DISTRICT APPLICATION

RETURN TO: Delaware Agricultural Lands Preservation Foundation

2320 S. duPont Highway, Dover, DE 19901-
(302) 739-4811, (800) 282-8685 in DE only

PROPOSED REGULATIONS

PLEASE TYPE OR PRINT:

Name(s) of Petitioner(s) (All Fee Simple Owners of Record)

Mailing Address:

Telephone Number: (H) (W)

Location:

County Community Name (Hundred)

Adjoining Roads

Deed References - Liber/Folio

County Tax Parcel Number(s)

Total Acreage of Farm: Zoning Designation:

Type of Land Use:

Crop Land acres Tidal Wetlands acres

Aquaculture acres Farm Structures acres

Pasture Land acres Residence/building acres

Woodland acres Other (specify) acres

Metes & Bounds Description or Deed Reference (Attached)

Easements/Rights-of-Way (identify, if any):

Mortgages/Liens (identify, if any):

of Dwelling Units: Is a soil and water conservation plan in effect? yes no

Is any portion of the proposed District currently subject to subdivision? yes no

Will other parcels be included in this District? yes no (If "yes", please send all applications to be included in this District together)

FILE NO. (for office use only):

APPENDIX A: APPLICATION FOR A PRESERVATION DISTRICT

DELAWARE AGRICULTURAL LANDS PRESERVATION FOUNDATION AGRICULTURAL PRESERVATION DISTRICT APPLICATION

RETURN TO: Delaware Agricultural Lands Preservation Foundation File#

2320 S. duPont Highway, Dover, DE 19901 (302) 739-4811, (800) 282-8685 in DE only

PLEASE TYPE OR PRINT:

Name(s) of Petitioner(s) (All Fee Simple Owners of Record)

Mailing Address:

Telephone Number: (H) (W)

Farm Location (County):

Adjoining Roads Attach an aerial photo of the farm, if you have one. # of Dwelling Units:

County Tax Parcel Number(s)

Total Acreage of Farm: Zoning Designation: (Call County Planning for zoning designation)

Type of Land Use:

Crop Land acres Tidal Wetlands acres

Aquaculture acres Farm Structures acres

Pasture Land acres Residence/buildings acres

Woodland acres Other (specify) acres

Type of Farm Operation:

Historic Significance of Farm (if any)

Easements/Rights-of-Way (identify, if any):

Is there a Federally approved soil and water conservation plan in effect? Yes No

Is any portion of the proposed District currently subject to subdivision? Yes No

District Name You would Prefer

APPENDIX B: DISTRICT AGREEMENT:

Delaware Agricultural Lands Preservation Foundation Agricultural Preservation District Agreement

This Agricultural Preservation District Agreement, in the nature of a declaration of a Restriction on the Use of Land for the purpose of preserving productive agricultural land, is made this ___ day of ___, 19 ___ by and between ___, their heirs, successors and assigns (hereafter "GRANTORS"), of the County of ___, Delaware, and the DELAWARE AGRICULTURAL LANDS PRESERVATION FOUNDATION, its successor, nominee or assign, a body politic and corporate constituting a public instrumentality of the State, created and organized under the laws of the State of Delaware, with its offices at 2320 S. DuPont Highway, Dover, Delaware 19901 (hereinafter "GRANTEE").

WHEREAS, GRANTORS are the owners in fee of lands (Property) subject to agricultural use as shown on Exhibit "A" which Grantors desire to be included in an Agricultural Preservation District such Property being located in ___ County, Delaware, more fully described in whole or in part in a deed

recorded in the Office of the Recorder of Deeds in and for _____ County, Delaware in Deed Book _____, Page _____, _____ County Parcel Nos. _____. The Property consists of _____ acres on which _____ acre(s) are devoted to dwelling housing; and

WHEREAS, in consideration of those benefits conferred under 3 Del.C. §910 and §911 GRANTORS voluntarily enter into this Agreement;

WHEREAS, public open space benefits result from the protection and conservation of farmland including the protection of scenic areas for public visual enjoyment from public rights-of-way; that the conservation and protection of agricultural lands as valued natural and ecological resources provide needed open spaces for clean air as well as for aesthetic purposes; and that public benefit will result from the conservation, protection, development and improvement of agricultural lands for the production of food and other agricultural products; and

WHEREAS, GRANTEE has declared that the preservation of prime agricultural land is vital to the public interest of the State, the region, and the nation through its economic, environmental, cultural and productive benefits; and

WHEREAS, GRANTORS desire and intend that the agricultural and open space character of the Property be preserved, protected, and maintained; and

WHEREAS, GRANTEE is entitled to enforce this Agricultural Preservation District Agreement and to preserve and protect for ten years from the effective date of this Agreement, or any extension period, the Property subject to the restrictions imposed under this Agreement;

NOW, THEREFORE, in consideration of the foregoing and as required by 3 Del.C. §908(a)(4), the undersigned GRANTORS agree to the following restrictions which shall apply to the Property of GRANTORS as shown on Exhibit "A" and/or referenced in whole or in part in Deed Book _____, Page _____, _____ County Parcel Nos. _____ as recorded in the Office of the Recorder of Deeds in and for _____ County:

1. No rezoning or major subdivision of the Property, or any portion thereof, shall be allowed.

2. Activities conducted on the Property shall be limited to agricultural and related uses.

3. The residential use of the Property shall be limited to dwelling housing for the Owner, relatives of the Owner, and persons providing permanent or seasonal farm labor services. The dwelling housing allowed hereunder shall be further limited to usage of no more than one (1) acre of land for each twenty (20) acres of usable land on the Property, with a maximum of ten (10) acres of land being used for dwelling housing on the Property. The Property consists of _____ acres, of which _____ acres are usable for agricultural and related uses. There (is) (are) currently

_____ acre(s) used for dwelling housing on the Property, and only _____ additional acre(s) for dwelling housing shall be allowed.

4. For purposes of this Agreement the term "agricultural and related uses" shall mean all forms of farming, including agriculture, horticulture, aquaculture, silviculture, and activities devoted to the production for sale of food and other products useful to man which are grown, raised or harvested on lands and waters. The term "agricultural and related uses" does not include, among other things, such activities as:

(a) excavation, filling, borrow pits, extraction, processing and removal of sand, gravel, loam, rock or other minerals, unless such activities are currently required by or ancillary to any preparation for, or operation of any activities involving aquaculture, farm ponds, cranberry operations, manure handling facilities, and other activities directly related to agricultural production.

(b) acts, actions and neglect which are detrimental to drainage, flood control, water conservation, erosion control or soil conservation.

(c) acts, actions and neglect that negatively affect the continued agricultural use of the land.

(d) uses that are not directly and functionally related to the farming activities conducted on the Property.

5. The allowability of a general use, conditional use, special use or other use under any zoning law or ordinance shall not have any effect on the restrictions imposed on the Property under this Agreement.

5.6. This Agreement shall become effective as of the date the necessary approvals have been rendered and the Secretary of Agriculture has either failed to exercise or waived the right of rejection allowed within the thirty (30) day period following Foundation action on the District Application. At the time of recording of the Agreement the Foundation shall certify the date of creation of the District or extension thereto, and such date shall serve as the effective date of this Agreement.

6.7. This Agreement shall remain in effect for a minimum period of ten (10) years from the effective date. Unless GRANTOR(s) provide written notification to the Foundation of intent to withdraw the Property from the District at least six (6) months prior to expiration date of this Agreement or any extension thereto, this Agreement shall continue for additional five (5) year periods.

7.8. This Agreement shall be considered a covenant which runs with and binds the Property and the terms and conditions shall be subject to specific performance, and other action allowed under 3 Del.C. §920. GRANTOR(s) agree to abide by the provisions of 3 Del. C. Chapter 9 and the duly adopted regulations thereunder as such provisions relate to the Property.

8.9. By executing this Agreement the GRANTOR(s) verify that individually or collectively GRANTOR(s) hold a

PROPOSED REGULATIONS

fee simple interest in the Property and (is) (are) entitled to enter into this Agreement. GRANTOR(s) further verify that the information contained in the District Application is true and correct.

9.10. The Agreement shall be binding on the heirs, successors and assigns of GRANTOR(s). In the event of transfer of any interest in the Property during the term of this Agreement GRANTOR(s) shall provide advance written notification of this Agreement and the restrictions contained herein to the party acquiring such interest and a copy of such written notification shall be provided to the Foundation.

IN WITNESS WHEREOF, the (party) (parties) have set (his) (her) (their) hands and seals this ____ day of _____, 19 ____.

WITNESS:

_____(S)
Grantor
_____(S)
Grantor

STATE OF DELAWARE)
) SS.:
COUNTY OF _____)

ON THIS, the ____ day of _____, 19 ____, before me, the undersigned Notary Public, personally appeared _____, known to me (or satisfactorily proven) to be the person or persons whose names are subscribed to the within instrument and acknowledged that he/she/they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I have hereunto set my hand and notarial seal.

Notary Public
My Commission Expires: _____

I, THE UNDERSIGNED, being the Chairman of the Delaware Agricultural Lands Preservation Foundation or authorized assignee of the Delaware Agricultural Lands Preservation Foundation, hereby execute this Agricultural Preservation District Agreement on behalf of the Foundation, and certify that the District or extension of existing District has been established as of _____, 19 ____.

IN WITNESS WHEREOF, I have set my hand and seal this ____ day of _____, 19 ____.

WITNESS:

_____(S)
Chairman, Delaware Agricultural
Lands Preservation Foundation or
Authorized Designee

STATE OF DELAWARE)
) SS.:
COUNTY OF _____)

ON THIS, the ____ day of _____, 19 ____, before me, the undersigned Notary Public, personally appeared _____, known to me (or satisfactorily proven) to be the person or persons whose names are subscribed to the within instrument and acknowledged that he/she/they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I have hereunto set my hand and notarial seal.

Notary Public
My Commission Expires: _____

CERTIFICATION:

The Property subject to this District Agreement was accepted into an Agricultural Preservation District on _____ which is the effective date of this District Agreement.

APPENDIX C: CRITERIA CHECKLIST/STAFF REPORT

Place an "A", "B", or "C" in the space to the left of each criteria. "A" means that the proposed District rates high for that criteria, in your opinion. "C" means that the proposed District rates low for that criteria, in your opinion.

TOTAL LESA SCORE:

LE SA (300 points maximum) 100 pts.) (200 pts.)

STRATEGY MAP LEVEL = PRIORITY**LIKELIHOOD OF CONVERSION TO NON-AG USE:****AG DISTRICT EXPANSION POTENTIAL:**

DISTRICT SIZE: _____ acres TOTAL AREA OF APPLICANT'S _____% IN AG USE: _____ PROPERTY: _____ acres

GROSS FARM SALES: _____ average in past two years

AESTHETIC VALUE: _____ adjacent to open space
historic significance ecological significance _____

CURRENT ZONING DESIGNATION & SUBDIVISION STATUS:**CONSISTENCY WITH COUNTY COMPREHENSIVE PLAN:****STAFF RECOMMENDATION:**

The criteria checklist & staff report is designed to give Foundation Trustees, the County Farmland Preservation Advisory Boards and the County Planning & Zoning authorities a concise method of reviewing and prioritizing applications for Agricultural Preservation Districts. All of the criteria for application evaluation are referenced under 3 Del. C., §908, but only some of them are requirements for minimum program eligibility. The report includes information that should prove helpful in approving or rejecting an application.

Voting members of each body will rate each criteria with an "A", "B" or "C", with "C" being the lowest rating and "A" being the highest. When all forms have been completed the voting body should discuss the results and approve or reject the application by a majority vote. An application receiving an "A" or "B" on a majority of the criteria is likely to be approved by the voting body. Please note that this is not a scoring mechanism where an application needs a certain number of points to be approved. It is simply a tool to help analyze and evaluate the significant factors of each application. However, criteria should be rated very carefully because they may be instrumental in prioritizing properties for the purchase of development rights.

TOTAL LESA SCORE:

An application must have a minimum Land Evaluation and Site Assessment (LESA) score of 170 points out of a possible 300. The higher the LESA score, the more suitable the property is for long-term agricultural production.

STRATEGY MAP LEVEL:

There are five levels for this criteria ranging from high priority to low priority. The higher the priority, the more likely the property should be placed in an Agricultural Preservation District.

LIKELIHOOD OF CONVERSION TO NON-AG USE:

This criteria examines the level of urgency for preserving the property, and the chances of its development if it is not accepted into the program. If the probability of future development is very high, then the preservation of the property will dictate future urban growth boundaries.

AG DISTRICT EXPANSION POTENTIAL:

This criteria examines the future prospect for increasing the size of protected farming areas. Emphasis will be on location and surrounding properties.

DISTRICT SIZE:

An Agricultural Preservation District must be at least 200 contiguous acres.

PERCENTAGE OF PROPERTY IN AG USE:

Determines how much of the property is utilized for crops, livestock, or forest management. This becomes increasingly important when considering the potential purchase of a Preservation Easement.

GROSS FARM SALES:

This criteria examines the total output (gross sales) of agricultural products from the property, owned or rented in a proposed District. This factor is reviewed because it is important to recognize farms that exceed the Farmland Assessment requirements and farmers who have incentive to maintain their operations in the long term. For Farmland Assessment, a farm needs only to have an average of \$10,000 gross sales per year for the past two years or show potential for this average for the next two years, if the farm is less than 10 acres. Due to the long-term nature of sales in forestry, special consideration will be given to parcels showing potential income from forestry sales.

AESTHETIC VALUE:

This criteria examines extra benefits to be realized if the application is approved. Emphasis will be placed on the preservation of certain rural characteristics such as adjacent open space (State Parks or Forests), historical areas (Century Farm) and natural heritage areas.

PROPOSED REGULATIONS

~~CURRENT ZONING DESIGNATION & SUBDIVISION STATUS:-~~

~~This factor must be reviewed because parcels often have more than one zoning designation, or have subdivision plans.~~

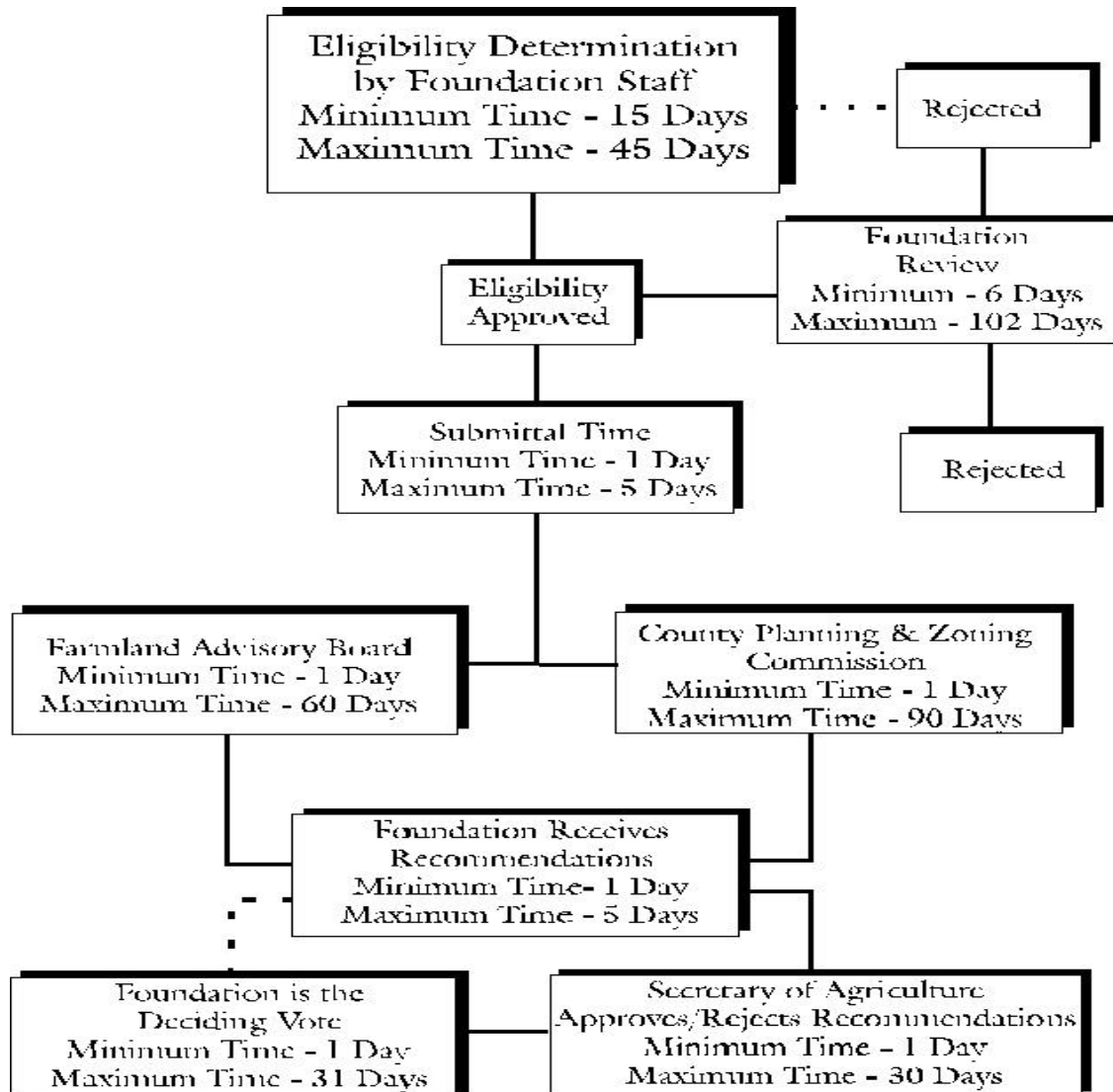
~~CONSISTENCY WITH THE COUNTY COMPREHENSIVE PLAN:-~~

~~This criteria is needed to ensure that the proposed District is not located in an area planned for future development.~~

~~STAFF RECOMMENDATION:-~~

~~A database will be used to track all criteria and summarize how the application compares overall to other applications or established Districts. The staff will make a recommendation based on the results of the above criteria, site visits and interviews.~~

~~APPENDIX D: TIME-LINE TO ESTABLISH A DISTRICT~~



PROPOSED REGULATIONS

APPENDIX E D: APPLICATION FOR AN AGRICULTURAL LANDS PRESERVATION EASEMENT

A complete application package shall include: *

- 1. A complete application form.
- 2. All available deeds, surveys, or maps which describe the property. Recent transfers of property may not be on file.
- 3. An Agricultural Preservation District map showing the boundaries of the land proposed for easement sale if the amount of land proposed for easement sale is less than the amount of land owned within the District.
- 4. A recent appraisal if available (Note: The Foundation does not initially require a landowner's appraisal but will include it in an appraisal review).
- 5. Most recent assessment notice.

Submit the application package to:

The Delaware Agricultural Lands Preservation Foundation
2320 S. DuPont Highway, Dover, Delaware 19901

*The foundation will not process an incomplete application.

DELAWARE AGRICULTURAL LANDS PRESERVATION FOUNDATION AGRICULTURAL PRESERVATION EASEMENT APPLICATION

Please Type or Print

I/ We _____ owner(s), of agricultural land, which has been established by recorded agreement as an Agricultural Preservation District in County, Delaware, apply to the Delaware Agricultural Lands Preservation Foundation to sell an Agricultural Preservation Easement. Agricultural Preservation Easement sale to the Delaware Agricultural Lands Preservation Foundation is offered in consideration of not less than

- 1) \$_____ for the entire farm; or 2) \$_____ per acre; or
- 3) an amount to be determined by appraisal and acceptable to buyer and seller ____ (please check).

The land proposed for easement sale equals _____ acres and consists of (check one):

___the entire property owned as identified and stated in the District Agreement.

___the property as outlined on the Agricultural Preservation District map attached (highlight the land proposed for an Agricultural Preservation Easement).

Tax Parcel Number(s): _____

Deed Reference(s): _____

Street/Road Location: _____

Mortgages or Leins on the Property: _____

Easements/Right-of-Way (identify, if any): _____

of Dwelling Units: _____ Date of Soil & Water Conservation Plan, if any: _____

Applicant(s): Corporate or Business Name: _____

Federal I.D. Number (if applicant is a corporation or business) _____

Name: _____

Address: _____

Telephone Number: (H) _____ (W) _____

FOR OFFICE USE ONLY

File #: _____ District Name: _____ Date Received: _____

LAND TYPE AND USE

Tillable Cropland: ___ acres Aquaculture ___ acres

Pasture: ___ acres Farm Structures: ___ acres

Woodland ___ acres Residence/Buildings: ___ acres

Orchard/Vineyard/Nursery: ___ acres Other (Specify):

acres

List Crops Grown on Land Proposed for Easement Sale for the Highest Three Crop Production Years Out of the Last Five Crop Years:

CROP ACRES GROWN YIELD PER ACRE

Year ____

- 1.
- 2.
- 3.
- 4.
- 5.

Year ____

- 1.
- 2.
- 3.
- 4.
- 5.

Year ____

- 1.
- 2.
- 3.
- 4.
- 5.

LIVESTOCK PRODUCTION (MOST RECENT YEAR)

Average Product Amount

PROPOSED REGULATIONS

Livestock Numbers Sold Sold

- 1.
- 2.
- 3.
- 4.

City, State & Zip Code City, State & Zip Code

Signature of Individual or Signature of Individual or
Company Representative Company Representative

Gross Income From Sales During the Three Crop Years
Listed (past three years for livestock production):

Date Date

Year ___ = \$ _____, Year ___ = \$ _____, Year ___ = \$ _____

AGRICULTURAL ASSETS

List and briefly describe major assets and investments related to agricultural production such as buildings, packing equipment, dairy equipment, irrigation/water supply, machinery, etc. Use additional paper if necessary.

Asset Approximate Dimensions or Capacity

If farm is not owner-occupied or owner-operated, list name(s) and telephone number(s) of tenant and/or farm operator (farm operator should assist and supply information to applicant as needed).

I/We submit this application, true and complete, to convey an Agricultural Preservation Easement to the Delaware Agricultural Lands Preservation Foundation, and declare that good title is provided to the premises, free of encumbrances such as liens, mortgages, options, rights of others in extraction or mineral rights, land use restrictions, adverse ownership interests, and other encumbrances which would adversely impact the State of Delaware's interest in the farmland tract. I/We understand that any false information may be cause for rejection of application.

Landowner Signature Social Security # Date

Landowner Signature Social Security # Date

Landowner Signature Social Security # Date

Landowner Signature Social Security # Date

Tenant: _____ Farm operator: _____

The name, address and phone number of person to be contacted to view farm if different from landowner(s):

1. MINERAL RIGHTS: Does a party or parties other than yourself own or lease mineral rights on this property? Yes ___ No ___ If yes, secure signatures and addresses of such parties:

2. MORTGAGES OR LIENS: Is there a mortgage or other lien on this property? Yes ___ No ___ If yes, secure signatures and addresses of such holders:

I/We hereby agree to subordinate my/our interest in this property to the Delaware Agricultural Lands Preservation Foundation.

Name or Individual or Company Name of Individual or Company

Street Address Street Address

APPENDIX F E: TYPES OF FARM OPERATIONS BY VALUE/INTENSITY & INVESTMENT

APPENDIX G E: AGRICULTURAL LAND PRESERVATION EASEMENT

FARM OPERATION VALUE/INTENSITY (EXAMPLES)	INVESTMENT		
	HIGH	MEDIUM	LOW
High: Mushrooms Greenhouse Aquaculture (enclosed) Layers (enclosed) Vineyards Dairy	Modern production facilities. Most capital investments are less than 10 years old. Outstanding maintenance & appearance. Machinery up to date & maintained. Soil & Water Conservation Plan implemented.	Good production facilities. Capital investment less than 10 years old & better than average maintenance and appearance. Machinery maintained. Soil & Water Conservation Plan exists.	Adequate to poor production facility. Capital investments over 10 years old, poor appearance and machinery not well maintained. No Soil and Water Conservation Plan.
Medium-High: Poultry (enclosed) Livestock (enclosed) Nursery stock Fruit Vegetables Turf	SAME AS ABOVE	SAME AS ABOVE	SAME AS ABOVE
Medium-Low: Row Crops Hay Livestock (range) Tree Farm (planted)	Same as above, plus the following: Grain drying & storage available. Firebreaks to specification & well maintained. Proof of implementation of a Forest Management Plan.	Same as above, plus the following: Grain storage available. Adequate firebreaks. Forest Management Plan exists.	Same as above, plus the following: No storage available. Inadequate firebreak. No Forest Management Plan exists.
Low: Forestry Non-crop rotation	Firebreaks to specification and well maintained. Proof of implementation of a Forest Management Plan.	Adequate firebreaks. Forest Management Plan exists.	Inadequate firebreak. No Forest Management Plan exists.

**STATE OF DELAWARE
AGRICULTURAL LANDS PRESERVATION
PROGRAM**

THIS PRESERVATION EASEMENT, made, granted, assigned and conveyed this _____ day of _____, 19____, by _____, whose address is _____, and who is hereinafter referred to as "Grantor", AND the DELAWARE AGRICULTURAL LANDS PRESERVATION FOUNDATION, a body politic and corporate constituting a public instrumentality of the State of Delaware, and which is herein after referred to as "Grantee" and/or "Foundation".

WHEREAS, Grantor is fee simple title holder of certain lands situated in _____ Hundred, _____ County, Delaware, being of record in Deed Record Book _____, at the Office of the Recorder of Deeds in and for _____ County, at _____, Delaware, hereinafter referred to as the "Parcel" and more particularly described in Schedule A Exhibit "A" (annexed hereto); and as shown on plot entitled "Delaware Agricultural Lands Preservation Foundation -Preservation Easement Area - _____" as prepared by _____, dated _____ and recorded in the aforesaid Office of the Recorder of Deeds in Plot Book _____, Page _____.

WHEREAS, the General Assembly of the State of Delaware has declared that the preservation of the State's farmlands and forestlands is considered essential to maintaining agriculture as a viable industry and as an important contributor to Delaware's economy; and

WHEREAS, the General Assembly of the State of Delaware has recognized that a need exists to create sufficient economic incentives and benefits to encourage agricultural landowners to voluntarily place viable agricultural lands under protective restrictions through the creation of and participation in agricultural preservation districts and sale and/or donation of development rights; and

WHEREAS, the Grantor desires to grant and convey to the Foundation an agricultural lands preservation easement as provided in Chapter 9, Title 3 of the Delaware Code Annotated. for the consideration of the sum of One Dollar (\$1.00), receipt of which is hereby acknowledged, and in consideration of the benefits conferred under 3 Del. C. §§910 and 911;

NOW, THEREFORE, the Grantor, for and in consideration of the sum of _____, the receipt and sufficiency of which are hereby acknowledged, and in consideration of the benefits conferred under 3 Del.C. Ch. 9, hereby grants and conveys to the Foundation, its successors and assigns, an agricultural lands preservation easement on

B=6 = statewide importance
C=3 = marginal
D=0 = other (not important)

Sewer (weight = 8) County Engineering
A=9 = no sewer ~~within 1/4 mile of area~~
B=6 = proposed/planned sewer ~~within 1/4 mile of area~~ (proposed meaning \$ committed in the capital budget)
C=0 = area has sewer ~~within 1/4 mile of area~~

Land Use/Land Cover (weight = 5) ~~1984~~ 1992 Land Use/
Land Cover Map
A=9 = cropland
B=7 = forest
C=0 = other

% of Area in Agriculture (weight = 4) SCS Soil map grids were used. Then LU/LC cropland % within each map calculated by computer.
A=9 = high
B=6 = medium
C=3 = low
D=0 = very low

Agricultural Investment (weight = 4) County ASCS Maps
A=9 = high barns, storage facilities,
B=6 = medium grain elevators, feed
C=3 = low mills, livestock shelters,
D=0 = none poultry houses,
slaughter facilities deep
water wells, irrigation
systems low milking &
loafing facilities,
equipment dealers,
chemical & fertilizer
suppliers, canneries &
freezing processing
facilities, tax ditches;

Natural Areas (weight = 3) DNREC Natural Areas Map
A=9 = high Federal Lands - National Wildlife Refuge
B=6 = medium Army Core of Engineers
C=3 = low National Guard Lands
D=0 = none State Lands - Foundation Easements
State Parks, Fish & Wildlife
Management Areas, State Forests,
State Nature Preserves, State Ponds,
Dept. of State (Museums/Cultural
Resources) DNREC (donated) Local
Lands - County Parks, Municipal Parks
Private Lands: Conservation Organizations
include: Delaware Wild Lands, Inc.,
Nature Conservancy

Delaware Nature Society, preserved lands were given a 4:1 weight over "proposed" lands for protection and privately preserved lands.

Regimes:

The maximum possible scoring range in Delaware is 0 - 297. Each county may have a different range based on the land characteristics of each layer. For instance, if Kent County's top score was 280 and the lowest was 40, then the range would be from 40 - 280. An eight-regime model is used in each county meaning that Kent County may have 30 points in each regime. For each county; regimes 1-4 = dk. yellow, 5 = lt. yellow, 6 = blue, 7 = lt. green, 8 = dk. green

Yellow areas are a lower priority for farmland preservation. Blue areas are a medium priority. Green areas are a higher priority for farmland preservation, with dark green being the highest.

APPENDIX I ORDER

AND NOW, TO-WIT: This _____ day of _____, A.D. 1999, the Delaware Agricultural Lands Preservation Foundation having held public hearings and satisfied the requirements of 3 Del. C. §904(a) and (3), and having duly considered the Hearing Examiner's Report with regard to the proposed Revisions to Guidelines for the Purchase of Agricultural Lands Preservation Easements, proposed Priority Preservation Area Map, and proposed revisions to the Strategy Maps, and having acted unanimously in favor thereon at a duly noticed public meeting.

IT IS HEREBY ORDERED that the revised Guidelines for the Purchase of Agricultural Lands Preservation Easements, the Proposed Priority Preservation Area Map, and the mathematical formula for the revised Strategy Map are hereby adopted and shall be in full force and effect as of _____, 1999.

IT IS SO ORDERED.

Dr. Donald F. Crossan, Chairperson
Robert F. Garey, Vice Chairperson,
Kent County Representative
Jane T. Mitchell, Secretary, Grange Representative
Dennis H. Clay, Treasurer,
New Castle County Representative
John F. Tarburton, Secretary of Agriculture
Mary McKenzie, Acting Secretary of the
Dept. of Natural Resources & Environmental Control
Jack Markell, State Treasurer
Alden Hopkins, Farm Bureau Representative

DEPARTMENT OF AGRICULTURE

HARNESS RACING COMMISSION

Statutory Authority: 3 Delaware Code,
Section 10027 (3 Del.C. 10027)

Notice of Public Comment

The Commission proposes the following amendments:

1. Amend chapter VII, rule I-F to revise the procedure for determination of preference dates.
2. Amend chapter VI, rule II-A-5 to revise the procedure for selection of races in divisions.

The public may obtain copies of the proposed regulations from the Commission's Office, 2320 S. DuPont Highway, Dover, DE 19901, phone (302) 739-4811. The Commission will accept written public comments from April 1, 1999 through April 30, 1999.

Proposed Amendments to Harness Racing Regulations

1. Amend chapter VII, rule I-(F) to now provide as follows:

F. Preference Dates

Preference dates shall be given to horses in all overnight events at extended pari-mutuel tracks in accordance with the following:

1. The date of the horse's last previous start in a purse race ~~during the current year~~ is its preference date with the following:

- a) The preference date on a horse that has drawn to race has been scratched is the date of the race from which scratched.

- b) When a horse is racing for the first time after ~~February 1 in the current year~~ August 1st, the date of ~~the first declaration into a purse race~~ its last qualifying race shall be considered its preference date.

- c) Wherever horses have equal preference in a race, the actual preference of said horses in relation to one another shall be determined by lot.

- d) When an overnight race has been re-opened because it did not fill, all eligible horses declared into the race prior to the re-opening shall receive preference over other horses subsequently declared, irrespective of the actual preference dates, excluding dates, excluding horses already in to go.

2. When a horse is racing for the first time ever, the date of its last qualifying race shall be considered its preference date.

2. 3. This rule relative to preference is not applicable at any meeting at which an agricultural fair is in

progress. All horses granted stalls and eligible must be given an opportunity to compete at these meetings.

2. Amend chapter VI, rule II-A-5 to now provide as follows:

II. Overnight Events

A. General Provisions

5. Regularly scheduled races or substitute races may be divided where necessary to fill a program of racing, or may be divided and carried over to a subsequent racing program, subject to the following:

- a) No such divisions shall be used in the place of regularly scheduled races which fill.

- b) Where races are divided in order to fill a program, starters for each division must be determined by lot after preference has been applied, unless conditions provide for divisions based upon age, performance, earnings or sex may be determined by the racing secretary.

- c) However, where necessary to fill a card, not more than three ~~one~~ races per day may be divided into not more than ~~two~~ three divisions after preference has been applied. The divisions may be selected by the racing secretary. For all other overnight races are divided, the division must be by lot unless the conditions provide for a division based on performance, earning or sex.

DEPARTMENT OF EDUCATION

Statutory Authority: 14 Delaware Code,
Section 122(d) (14 Del.C. 122(d))

Repeal of Regulation on Necessary and Legal Absences

The Secretary seeks the consent of the State Board of Education to repeal the regulation entitled Necessary and Legal Absences found on page 2 of Appendix A in the Handbook for K-12 Education.

The repeal is recommended because 14 Del. C., Section 27 gives local district Boards of Education and their Superintendents the responsibility of setting and enforcing the rules and regulations for school absences. The repeal of the regulation was recommended by the State Board of Education during their discussion on amending the regulation.

~~NECESSARY AND LEGAL ABSENCES FROM THE RULES AND REGULATIONS OF THE STATE BOARD OF EDUCATION~~

~~The superintendent of schools of each local school district as the chief school officer is responsible for enforcing the attendance laws of the State and is the person~~

~~who may excuse or cause to be excused any child for "Necessary and Legal Absences" in accordance with Title 14, *Delaware Code*, not subject to the "Rules and Regulations" of the State Board of Education. The following excuses are recognized as valid for Necessary and Legal Absences:~~

~~1. Illness of child, attested, if necessary by a physician's certificate.~~

~~2. Contagious disease in the home of the child, subject to regulations of the Division of Public Health.~~

~~3. Pregnancy of the student (14 *Del. C.*, §122(b)(11)).~~

~~4. Children are elsewhere receiving regular and thorough instruction during at least 180 days in the subjects prescribed for the public schools of the State in accordance with 14 *Del. C.*, §2702.~~

~~5. Death in the child's own home, or in the home of the grandparents, time not to exceed one week. Funerals of other relatives or close friends, not to exceed one day, if in the locality; or three days, if at some distance or outside of the state.~~

~~6. Provisions of §2705, Title 14 of the *Delaware Code* describe exclusions which may apply to some handicapped children. Specific guidelines can be found in the *Administrative Manual: Programs for Exceptional Children*, March, 1987.~~

~~7. An amendment to §2706, Title 14 of the *Delaware Code* describes truancy cases.~~

~~8. Legal business.~~

~~9. Suspension or expulsion from school for misconduct. Suspension is the exclusion of a pupil from school for a short and definite period of time. Suspension is a temporary measure for handling a behavior problem and may be delegated to the chief school officer or a building principal. Expulsion is the exclusion of a pupil from school on a permanent basis or for an indefinite period of time. Expulsion can be authorized only by the local district board. The designation of suspension and expulsion as a "Necessary and Legal Absence" applies specifically to 14 *Del. C.*, §2702 and §2706, and such authorized absence may not be construed to represent approval for the make-up of classwork missed due to suspension or expulsion.~~

~~10. The Superintendent of Schools shall have the authority for determining and approving other necessary and legal absences as deemed valid within the enforcement provisions of the compulsory attendance law.~~

~~a. Applications to remain out of school for an extended period of time shall be made to the local chief school officer.~~

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

DIVISION OF SOCIAL SERVICES

Statutory Authority: 31 Delaware Code,
Section 512 (31 **Del.C.** 512)

PUBLIC NOTICE

DIVISION OF SOCIAL SERVICES A BETTER CHANCE PROGRAM

The Delaware Health and Social Services / Division of Social Services / A Better Chance Program is proposing to implement a policy change to the Division of Social Services' Manual Section 3002, 3031 and adding 3032. These changes arise from Public Law 104-193, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (national welfare reform), as an option and was first announced in January 1995, as part of the original A Better Chance (ABC) waiver design.

SUMMARY OF PROPOSED REVISIONS:

Changing the time limit from forty-eight (48) cumulative months to twenty-four (24) cumulative months for all households headed by an employable adult applying on or after 10/01/99.

Eliminating the provision that families can reapply after expiration of the time limit when the family has not received assistance for 96 consecutive months.

Creating diversion assistance provision as an alternative to receiving A Better Chance benefits effective 10/01/99.

Revising language in the Work For Your Welfare provision to include individuals on the twenty-four (24) month time limit effective 10/01/99.

PUBLIC COMMENT

The Division will conduct a series of public hearings at which this proposal will be discussed. The schedule for these hearings is as follows:

May 4, 1999	Carvel State Office Building (Wilmington) 6 p.m. to 8 p.m.
May 5, 1999	Del Tech Stanton Campus Conference Facility 7 p.m. to 9 p.m.
May 12, 1999	Del Tech Terry Campus (Dover) Lecture Hall 7 p.m. to 9 p.m.
May 19, 1999	Del Tech Owens Campus (Georgetown) 4 p.m. to 6 p.m.

Any person unable to attend these hearings who wishes to make written suggestions, compilations of data,

testimony, briefs or other written materials concerning the proposed new regulations must submit same to the Director, Division of Social Services, P. O. Box 906, New Castle, DE, by May 31, 1999.

The action concerning the determination of whether to adopt the proposed regulations will be based upon the results of Department and Division staff analysis and the consideration of the comments and written materials filed by other interested persons.

PROPOSED REGULATIONS:

3002 Time Limit, Temporary Welfare Program

3002.1 Two-Parent Families - Time Limit, Temporary Welfare Program

A) A Better Chance (ABC), cash benefits are time-limited for households headed by two employable adult's age 19 or older who are included in the grant. For households applying after 10/01/1999, the lifetime time limit will be twenty-four (24) cumulative months. Families will receive these benefits only through participation in a pay-after-performance work experience position or if the adults are working at least 20 hours per week and the family has countable income that is below the need standard.

Time Limits will not apply when Delaware's unemployment rate exceeds the national average by 2% or when the Delaware unemployment rate is greater than 7.5%.

Time limits apply when four conditions are met:

- the caretaker is included in the grant,
- the caretaker is age 19 or older,
- the caretaker is employable, and
- the unemployment rate does not exceed the national average by 2% or the Delaware unemployment rate is equal to or lower than 7.5%.

When one or more of the conditions listed above is not met, the family receives benefits in the non-time limited program known as the Children's Program.

B) During the time-limited period, employable adult recipients will receive full cash benefits only as long as they fulfill their Contract of Mutual Responsibility, and participate in a pay-after-performance work experience program or they are working and family income is below the need-standard of 75% of the Federal Poverty level.

The pay-after-performance work experience position is intended for families who do not have unsubsidized employment. Determine the number of hours of work required by dividing the ABC benefit by the minimum wage. In addition, participants will be required to conduct up to ten (10) hours of job search each week. Failure to

comply with the job search requirements will result in an employment and training sanction being applied as described in DSSM 3011.2.

C) Periodic Alerts to Families Regarding Time Remaining before the Family Reaches the Time Limit

The Division will track the time remaining before a family's time limits expire and alert the family. The Division will notify families on a quarterly basis of the time they have remaining before the time limits expire.

~~3002.3 Periodic Alerts to Families Regarding Time Remaining before the Family Reaches the Time Limit~~

~~The Division will track the time remaining before a family's time limits expire and alert the family. The Division will notify families on a quarterly basis of the time they have remaining before the time limits expire.~~

3002.2 Single Parent / Non-Parent Caretaker Families

A). A BETTER CHANCE (ABC), cash benefits are time-limited for households headed by an employable adult, who is age 19 or older and included in the grant. For households applying after 10/01/1999 the lifetime time limit will be twenty-four (24) cumulative months. Families will receive these benefits only through participation in a pay-after-performance work experience position or if the adult is working at least twenty hours per week and the family has countable income that is below the need standard.

Time limits will not apply when Delaware's unemployment rate exceeds the national average by 2% or when the Delaware unemployment rate is greater than 7.5%.

Time limits apply when four conditions are met:

- the caretaker is included in the grant;
- the caretaker is age 19 or older;
- the caretaker is employable; and
- the unemployment rate does not exceed the national average by 2% or the Delaware unemployment rate is equal to or lower than 7.5%.

When one or more of the conditions listed above is not met, the family receives benefits in the non-time-limited program known as the Children's Program.

B) Periodic Alerts to Families Regarding Time Remaining before the Family Reaches the Time Limit

The Division will track the time remaining before a family's time limits expire and alert the family. The Division will notify families on a quarterly basis of the time they have remaining before the time limits expire.

3002.3 TIME LIMITS FOR THOSE ON ASSISTANCE PRIOR TO 10/01/1999

If a family was headed by an employable adult age 19 or older who was included in the grant and received A BETTER CHANCE (ABC) cash benefits prior to 10/01/1999 they had a forty-eight (48) cumulative month time limit. This lifetime time limit will still apply for those families. After twenty-four (24) cumulative months these families can only receive benefits if the adult is working at least twenty hours per week or through participation in a pay-after-performance work experience position. The family must still have countable income that is below the need standard. Families with a forty-eight (48) month cumulative time limit who reapply for assistance after 10/01/99 can only receive benefits if the adult is working at least twenty hours per week or if through participation in a pay-after-performance work experience position.

Here are some examples:

1. Example:

A family initially began receiving ABC 08/01/1997. The ABC case was closed 06/30/1998. The family applied for and received ABC benefits while the time limit was forty-eight (48) months. The family used eleven (11) months of time limited ABC benefits. The family reapplies for benefits 11/01/1999. The family can receive up to thirty-seven (37) more cumulative months of ABC benefits in the time-limited program.

2. Example:

A family began to receive ABC time limited benefits 12/01/1998. This family can receive ABC benefits in the time-limited program for up to forty-eight (48) cumulative months.

3. Example:

A family had not received ABC benefits prior to 10/01/1999. The family applies for and it opened in ABC 12/01/1999. The family can only receive ABC benefits for up to twenty-four (24) cumulative months and only if:

- the employable adult is working at least twenty hours per week; or
- by participating in a pay-after-performance work experience position; and
- the family still has countable income that is below the need standard.

3002.4 Periodic Alerts to Families Regarding Time Remaining Before the Family Reaches the Time Limit

The Division will track the time remaining before a family's time limits expire and alert the family. The Division will notify families on a quarterly basis of the time they have remaining before the time limits expire.

3002.5 Assessment Prior to Termination of Benefits

At least 90 days prior to the end of the 24 or 48 cumulative month period in which a family has received assistance (through cash assistance and participation in pay-after-performance), the Division will complete another assessment of employability. If the Division determines that the adult caretaker is not employable, the Division will continue benefits under the Children's Program as described in DSSM 3003. If the Division determines that the adult caretaker is employable, ABC benefits will end to the family as of the last day of the 24 or 48 cumulative months.

3002.6 Noticing Prior to Termination of Benefits

At least two months prior to the end of the 24 or 48 cumulative months in which a family has received assistance, the Division will remind the family that assistance will end and notify the family of the right to apply for an extension.

3002.7 Extensions

The Division will limit extensions to those families who can demonstrate that:

- the agency substantially failed to provide the services specified in the individual's Contract of Mutual Responsibility (see DSSM 3009 for Contract); the related extension will correspond to the time period for which services were not provided; or
- despite their best efforts to find and keep employment, no suitable unsubsidized employment was available in the local economy to the employable adult caretaker; the maximum extension under such circumstances will be in 12 cumulative month periods. A family may request extensions until; the family has reached sixty (60) cumulative months in the time-limited program. See "SUITABLE EMPLOYMENT" definition.

The Division Director or the Director's designee will make decisions on granting extensions within 45 days of the request. Fair hearing provisions set forth in DSSM 5000 apply. Benefits will not continue beyond the time limit.

The Division will not grant extensions if:

- the adult caretaker received and rejected offers of employment, quit a job without good cause, or was fired for cause;
- the adult caretaker did not make a good faith effort

to comply with the terms of the CONTRACT OF MUTUAL RESPONSIBILITY.

The responsibility rests with the adult caretaker to demonstrate substantiality. It is not enough for the adult caretaker to simply make a claim that the agency failed in its effort to provide the services specified under the Contract of Mutual Responsibility. The adult caretaker must present the reasons for the claim and show how the agency failed to provide these services.

3002.8 Re-Application after the Time Limit

Assistance will be denied to employable caretakers reapplying for benefits after the 24 or 48 cumulative month time limit, unless the caretaker proves that grounds exist for an extension.

- ~~the family has not received assistance for 96 consecutive months~~

Benefits will be provided to these families only in the pay-after-performance component, for up to 12 month periods for a maximum of sixty (60) cumulative months in the time-limited program. DSS will conduct an assessment and notice the family prior to termination of benefits (See DSSM 3002).

Families headed by unemployable caretakers can receive assistance under the Children's Program.

3031 WORK FOR YOUR WELFARE

All two-parent households, who are without employment, must enter a Work For Your Welfare activity to qualify for benefits. Single adult recipients, who reach their 22nd month of benefit and are without employment, and all eligible applicants after 10/1/99, must enter a Work For Your Welfare activity to qualify for benefits. Work for Your Welfare is defined as a work experience program in which participants work to earn their benefits. In addition, DSS requires each participant to complete 10 hours of job search activity per week. The failure to complete job search as required will result in a progressive 1/3 sanction. For two parent households, one parent must participate in the work for your welfare program in order to earn benefits. The second parent, unless exempt, must also participate in required employment related activities as defined by DSS and the DSS contractor.

Currently DSS operates the work for your welfare program under contract with a work for your welfare services provider. The provider assumes responsibility for the assessment, placement and monitoring of all work for your welfare participants in unsalaried work assignments. The work assignments are with public or nonprofit organizations. In return for their services, participants earn

the amount of the benefit they are eligible to receive.

Work for your welfare is not preferable to participants obtaining unsubsidized employment. Though the work for your welfare assignment should be a safe assignment, it should not be more attractive than unsubsidized employment.

DSS is to ensure that no participants placed in work for welfare activities displace regular paid employees of any of the organizations providing the placements.

Since placements are not voluntary, DSS expects participants to accept assignments unless the assignment represents an unreasonable health and safety risk (e.g., the participant has a health condition, which would be aggravated by the assignment).

Participants cannot appeal their assignments to work for your welfare work sites.

3031.3 INITIATING WORK FOR YOUR WELFARE - ONE PARENT FAMILIES

3031.3.1 Families That Have A Forty-Eight (48) Month Time Limit:

DSS will alert single adult families to report to the work for your welfare contractor in the 22nd month of their receipt of benefits. The contractor will schedule participants for an interview for assessment and placement in a work for welfare activity. Participants' failure to keep their scheduled interview with the contractor will result in the progressive 1/3 penalty for an employment and training activity.

Participants whose cases are closed can only have benefits restored once they have agreed to and have cooperated for two weeks with their work for your welfare assignment. If a participant fails to cooperate by not completing any portion of this two weeks of his/her work for your welfare placement, DSS will not restore benefits.

Participants are to begin their work for your welfare assignment on the 12th of the 23rd month of benefit receipt. Participants will have until the 11th of their 24th month to complete their work for your welfare monthly assignment in order to receive a benefit for their 25th month. Otherwise, DSS will reduce benefits for the 25th month based on any hours not worked.

FOR EXAMPLE: Mary Jones is a single parent with one child receiving benefits. September 1998 is her 22nd month of ABC benefit receipt. On Post Adverse Action day in August, Mary's October benefit as well as her work for your welfare requirement is calculated. A letter is generated to Mary informing her that she must participate in work for your welfare beginning in October. The letter also informs her of the required hours per day she must complete, and that she will have from October 12th until November 11th to complete her assignment if she is to get benefits in

December. If Mary does not complete any of her work for your welfare hours, she receives no benefit for December and her case closes. In order for her to start receiving benefits again, Mary would have to agree to go to her assigned work for your welfare work site, and cooperate by completing her assigned hours for up to two weeks. If she fails to do this, her case remains closed.

3031.3.2 Families That Have A Twenty-Four (24) Month Time Limit:

DSS will alert single adult families to report to the work for your welfare contractor immediately after they are approved to receive benefits. Participants will be required to participate in the Work For Your Welfare program activities to receive benefits for the month following initial approval. The contractor will schedule participants for an interview for assessment and placement in a work for welfare activity. Participants' failure to keep their scheduled interview with the contractor will result in the progressive 1/3 penalty for an employment and training activity.

Participants whose cases are closed can only have benefits restored once they have agreed to and have cooperated for two weeks with their work for your welfare assignment. If a participant fails to cooperate by not completing any portion of this two weeks of his/her work for your welfare placement, DSS will not restore benefits.

FOR EXAMPLE: Sammy Smith is a single parent who applied for and was approved to receive ABC on December 2, 1999. A letter is generated to Sammy informing him that he must participate in work for your welfare beginning the following month. The letter also informs him of the required hours per day he must complete, and that he will have from January 12th until February 11th to complete his assignment if he is to get benefits in March.

3031.4 INITIATING WORK FOR YOUWELFARE - TWO PARENT FAMILIES

For two parent families, only one parent will have to complete a work for your welfare assignment. DSS will inform the family of their work for your welfare obligation once the family is eligible for benefits, usually within 30 days of the intake interview. In addition, the other parent in the family, unless exempt, must also participate in employment and training activities. Again DSS will send a letter to the family instructing them that one parent must report to a work for your welfare assignment and the other parent must participate with the work for your welfare contractor in a component other than work for your welfare. The family must decide which parent will complete the work for your welfare assignment and which parent will participate in employment and training activities with the work for your welfare contractor. The failure to report to the contractor will result in a progressive 1/3 penalty for an

employment and training activity. In addition, the parent who participates in the work for your welfare assignment must also complete 10 hours of job search per week.

The month after DSS determines eligibility is the first required month for which participation hours are calculated. DSS will calculate hours the same as it does for single parent families. That is, the parent in the two parent family must report by the 12th of the month and will have until the 11th of the following month to complete his/her work for your welfare hours.

FOR EXAMPLE: Mary and Tom Jones apply for cash assistance in August. By September DSS determines them eligible. The family decides that Tom will complete the work for your welfare hours. Having calculated the hours Tom must complete, DSS sends them a letter instructing Tom that he has from October 12th until November 11th to complete his hours if the family is to receive benefits in December.

The following month is the first required month for which participation hours are calculated. DSS will calculate hours the same as it does for single parent families. That is, the parent in the two parent family must report by the 12th of the month and will have until the 11th of the following month to complete his/her work for your welfare hours.

FOR EXAMPLE: Janet and Jim Roberts apply for cash assistance in October. By November DSS determines them eligible. The family decides that Jim will complete the work for your welfare hours. Having calculated the hours Jim must complete, DSS sends them a letter instructing Jim that he has from November 12th until December 11th to complete his hours if the family is to receive benefits in January. In addition, the letter instructs Janet that she is to report to the work for your welfare contractor to participate in a component other than work for your welfare.

3031.5 ENDING A WORK FOR WELFARE PLACEMENT

Work for welfare placements will end when any of the following circumstances occur:

- The participant secures a full-time, non-subsidized job or a part-time, non-subsidized job of 20 hours or more.
- The participant becomes exempt. Exemptions, however, can only occur if DSS declares participants unemployable, using the standard ABC definition for unemployable. In this case, DSS will transfer the participants to the Children's Program under ABC.
- The participant requests an end to benefits payments.
- When the 24 or 48 month time limit has been reached.

Note: Participants in either one parent or two parent households are exempt from work for your welfare participation if a parent is working 20 or more hours per week in a non-subsidized job.

3032 Diversion Assistance

Diversion Assistance is intended to help a family through a financial problem which jeopardizes employment and which, if not solved, could result in the family needing regular ongoing assistance. When the primary case worker and the client agree that the one-time payment will alleviate the crisis, Diversion Assistance will be explored. The Diversion Assistance payment will not exceed \$1,500 or the financial need resulting from the crisis, whichever is less.

Diversion Assistance is not a supplement to regular assistance but is in place of it. Diversion Assistance is available to both applicant and recipient families.

3032.1.1 Eligibility for Diversion Assistance

The eligibility requirements for Diversion Assistance are as follows:

1. The parent must be living with his/her natural or adopted child(ren).
2. The family has not received a Diversion Assistance payment in the past 12 months.
3. The Diversion Assistance amount will alleviate the crisis.
4. The parent (a) is currently employed but having a problem which jeopardizes the employment; or (b) has been promised a job but needs help in order to accept the job.
5. The family's income would qualify the family for ABC as a recipient household. (NOTE: When calculating eligibility for Diversion Assistance the family is given the "\$30 plus 1/3" disregard, if applicable and the family's net income is compared to the Standard of Need.)
6. The family's resources would qualify the family for ABC

3032.1.2 Verification requirements

A. The following items will be verified:

- The identity of the parent making application for Diversion Assistance.
- Alien status
- The family's income.
- The employment or offer of employment.
- The cost of services for eliminating the barrier to employment.

B. The following items will be accepted by declaration:

- The Social Security numbers of the family members.
- The date of birth of family members.

- The relationship of family members.
- The family's resources.
- Delaware residency.
- Citizenship
- Child care expenses.

3032.1.3 Items/services covered

The Diversion Assistance payment may be used for items and/or services such as but not limited to:

- Transportation (such as vehicle repairs, tires, insurance, driver's license fee, gas, etc.).
- Clothing such as uniforms or other specialized clothing and footwear or other employment-related apparel.
- Tools and equipment.
- Medical expenses not covered by Medicaid. (for example, eye glasses).
- Union dues, special fees, licenses or certificates.
- Up-front costs of employment such as agency fees and testing fees.
- Unpaid child care expenses which, if they remain unpaid, preclude the provision of future child care.
- Relocation expenses for verified employment in another county or state. These expenses may include:
- Moving equipment rental, gas, and lodging for the days of the move.
- First month's rent, rental and utility deposit.

3032.1.4 Diversion Assistance Payments

Diversion Assistance payments will be made to a third party vendor, not the parent.

3032.1.5 Diversion Assistance and ABC cash assistance

When the parent receives Diversion Assistance (s)he agrees to forego ABC cash assistance as follows:

- \$0 through \$500.99 for 1 month.
- \$501 through \$1,000.99 for 2 months.
- \$1,001 through \$1,500 for 3 months.

3032.1.6 Good Cause

The once a year limitation on Diversion Assistance and the period of ineligibility can be eliminated when good cause exists. Good cause exists when circumstances beyond the client's control make re-application for Diversion Assistance or ABC necessary. Examples of good cause are the employer lays off the parent or a serious illness forces the parent to stop working.

3032.2 Eligibility for Other Programs

A. Medicaid Eligibility

The family is eligible for ABC related Medicaid in the month in which the Diversion Assistance payment is

made. The family would remain eligible for Section 1931 Medicaid (ABC-related Medicaid) until the family's income exceeds the standard of need. If the family's income exceeds the standard of need because of increase earnings or loss of the "\$30 plus 1/3" disregard and the parent is working, the family may be eligible for Transitional Medicaid.

B. Child Care

Diversion Assistance does not count as income in the child care programs.

C. Child Support

The family will not have to assign child support to the state. Child support received by the parent or the Division of Child Support Enforcement (DSCE) will belong to the family. DCSE will not use child support to offset or reimburse the Diversion Assistance.

DIVISION OF SOCIAL SERVICES

Statutory Authority: 31 Delaware Code,
Section 505 (31 **Del.C.** 505)

PUBLIC NOTICE

Medicaid / Medical Assistance Program

In compliance with the State's Administrative Procedures Act (APA - Title 29, Chapter 101 of the Delaware Code) and with 42CFR §447.205, and under the authority of Title 31 of the Delaware Code, Chapter 5, Section 505, the Delaware Department of Health and Social Services (DHSS) / Division of Social Services / Medicaid Program is amending its eligibility manual.

Any person who wishes to make written suggestions, compilations of data, testimony, briefs or other written materials concerning the proposed new regulations must submit same to the Director, Medical Assistance Programs, Division of Social Services, P.O. Box 906, New Castle, DE 19720 by April 30, 1999.

NEW MATERIAL BEING ADDED:

Division of Social Services Eligibility Manual

14950 Guaranteed Eligibility

Section 1902(e)(2) of the Social Security Act, as amended by the Balanced Budget Act of 1997, permits up to six months of guaranteed eligibility for individuals if they are enrolled in a managed care organization. Delaware has selected this option with the earliest effective date of July 1, 1999.

The six-month period of guaranteed eligibility is available to Medicaid recipients enrolled in the Diamond State Health Plan.

The rules in this section set forth the eligibility requirements, conditions and limitations, and medical coverage benefits for the six-month period of guaranteed eligibility.

14950.1 Six Month Period of Guaranteed Eligibility

A six-month period of guaranteed eligibility is defined as a six-month period of continuous enrollment in a managed care organization under the Diamond State Health Plan (DSHP). The following individuals may be found eligible for a six-month period of guaranteed eligibility:

1. a first-time Medicaid recipient
2. an individual who becomes eligible for Medicaid again following a period of at least one month of ineligibility for Medicaid.

The guaranteed eligibility period begins with the first of the month in which the individual enrolls in the DSHP and continues for six consecutive months. The individual who is enrolled in DSHP retains eligibility for Medicaid services, even if the individual otherwise loses Medicaid eligibility.

The guaranteed eligibility period begins with the first of the month in which the individual enrolls in the DSHP and continues for six consecutive months. The individual who is enrolled in DSHP retains eligibility for Medicaid services, even if the individual otherwise loses Medicaid eligibility.

14950.2 Limitations on Guaranteed Eligibility

Individuals who have been continuously enrolled in the Diamond State Health Plan for a period of six months or more are not eligible for guaranteed eligibility as of:

- a) the effective date of this policy
- b) the effective date of managed care enrollment following a Diamond State Health Plan open enrollment period.

Individuals who have been continuously enrolled in the Diamond State Health Plan for a period of six months or more are not eligible for guaranteed eligibility as of:

14950.3 Individuals Who Become Eligible for Medicaid Following at Least One Month of Ineligibility

Individuals who are disenrolled from the DSHP and are subsequently reenrolled because they become eligible for Medicaid again, may receive a new six-month period of guaranteed eligibility. This includes individuals who have already had a six-month period of guaranteed eligibility. There must be at least a one-month lapse in Medicaid eligibility in order to receive a new guaranteed eligibility period.

These individuals will be reenrolled in the same managed care organization in which they were a member prior to the month of ineligibility for Medicaid unless it has been more than one year since the loss of eligibility. If it has been more than one year since the individual's eligibility for Medicaid, the individual may choose a new managed care organization.

14950.4 Individuals Who Become Exempt from Enrollment in the DSHP

For individuals who become exempt from enrollment in the DSHP during the six-month period of guaranteed eligibility but are still Medicaid eligible, the remaining portion of the six-month guaranteed eligibility period will

accrue to the individual. If the individual loses his or her exempt status and must reenroll, the remaining portion of the guaranteed eligibility period will be granted to the individual.

14950.5 Individuals Who Transfer Between DSHP Managed Care Organizations

For individuals who transfer from one DSHP managed care organization to another DSHP managed care organization prior to the end of the six-month period of guaranteed eligibility, the remaining portion of the guaranteed period will follow the individual to the new managed care organization.

14950.6 Termination of Guaranteed Eligibility

The six-month period of eligibility terminates the earliest of:

the last day of the sixth month following the effective date of enrollment in the DSHP or the last day of the month in which the individual:

- a) dies
- b) moves out-of-state or is no longer a Delaware resident
- c) becomes an inmate of a public institution
- d) requests termination of Medicaid eligibility and/or managed care enrollment
- e) fails to complete the final determination as a presumptively eligible pregnant woman
- f) becomes eligible for long term care Medicaid
- g) becomes eligible for or entitled to Medicare
- h) becomes eligible for CHAMPUS
- i) becomes eligible for another comprehensive medical managed care program administered by the Delaware Medical Assistance Program
- j) is otherwise ineligible for the DSHP.

14950.7 Coverage Under the DSHP Benefits Package

The service package and wrap around services are described in the General Policy Section of the Delaware Medical Assistance Program Provider Services Manual.

DIVISION OF SOCIAL SERVICES

Statutory Authority: 31 Delaware Code,
Section 505 (31 Del.C. 505)

PUBLIC NOTICE

Medicaid / Medical Assistance Program

In compliance with the State's Administrative Procedures Act (APA - Title 29, Chapter 101 of the Delaware Code) and with 42CFR §447.205, and under the authority of Title 31 of the Delaware Code, Chapter 5,

Section 505, the Delaware Department of Health and Social Services (DHSS) / Division of Social Services / Medicaid Program is amending its general policy manual.

Any person who wishes to make written suggestions, compilations of data, testimony, briefs or other written materials concerning the proposed new regulations must submit same to the Director, Medical Assistance Programs, Division of Social Services, P.O. Box 906, New Castle, DE 19720 by April 30, 1999.

REVISION:

Prescribed Pediatric Extended Care

~~In circumstances where a child is exempt from managed care coverage the following policy will be applied.~~

Qualified Medicare Beneficiaries (QMB)

~~For all other groups, Inpatient psychiatric hospital/facility services for individuals age 21-65 are not covered by Medicaid even if Medicare makes a payment.~~

Additional Services Are Covered Under the Medical Assistance Program

The second insurance card will be a DHCP card that will be used for services not covered by the MCO but are reimbursed by Medicaid. These services are often referred to as "wrap around services".

Wrap Around Services that are Covered by Medicaid for DHCP Eligible Recipients

- Prescription drugs - with the same limitations as the Title XIX program;
- Over-the-counter medications - limited to drug categories where the over-the-counter product may be less toxic, have fewer side effects, and be less costly than an equivalent legend product;
- ~~Inpatient mental health or substance abuse services for up to 31 days per calendar year (including outpatient residential and any other treatment modality). Children who need inpatient services beyond this will convert to Medicaid Long Term Care;~~
- ~~Outpatient mental health services - additional days (up to 31), see coverage as described above (Inpatient mental health services).~~
- Inpatient and outpatient mental health and substance abuse services are limited to 31 days per calendar year as authorized by the Department of Services to Children, Youth and Their Families (DSCYF) or the Division of Alcoholism, Drug

Abuse and Mental Health (DADAMH).

Authorized Access To Information

Information concerning any DMAP recipient must be kept strictly confidential from non-DMAP authorities. At a minimum, the information which must be safe-guarded is:

- Names and addresses.
- Medical services provided.
- Social and economic conditions or circumstances.
- Agency evaluation of personal information.
- Medical data, including diagnosis and past history of disease or disability.

The DMAP and its authorized representatives have the right to access any information directly related to the administration of the Delaware Medical Assistance Program. This is a contractual obligation of the provider. Also, at the time of application, clients sign the following statement:

~~"I authorize the Department of Health and Social Services, or its representatives, to have access to all medical records that are related to payment of medical services by Medicaid."~~

I agree to allow the Department of Health and Social Services, directly or through its agents or the Diamond State Health Plan or the Delaware Healthy Children program, to have access to all medical and school-based health and related services records of every member of my household who is eligible for Medical Assistance I order to administer the Medical Assistance Program., coordinate care, determine medical necessity, and evaluate or pay for pending or incurred medical services.

Other Standards

A child must:

- be a citizen of the United States or must have legally resided in the US for at least 5 years if their date of entrance into the US is 8/22/96; or
- meet the Personal Responsibility and Work Opportunity Reconciliation Act of 1997 § 6 (PRWORA) definition of qualified alien who is not subject to the 5 year bar; AND
- be ineligible for enrollment in any public health plan.

**DEPARTMENT OF NATURAL
RESOURCES AND
ENVIRONMENTAL CONTROL****DIVISION OF AIR AND WASTE MANAGEMENT
HAZARDOUS WASTE MANAGEMENT SECTION**

Statutory Authority: 7 Delaware Code,
Chapters 60 & 63 (7 Del.C. Chp. 60, 63)

REGISTER NOTICE**1. TITLE OF THE REGULATIONS:**

Delaware Regulations Governing Hazardous Waste (DRGHW).

2. BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE AND ISSUES:

The State of Delaware is authorized by the U. S. Environmental Protection Agency to administer its own hazardous waste management program. To maintain this authorization, the State must remain equivalent to and no less stringent than the federal program. To accomplish this, the State regularly amends the DRGHW by adopting regulations previously promulgated by EPA.

**3. POSSIBLE TERMS OF THE AGENCY ACTION:
NONE****4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:**

Amendments to DRGHW are proposed and amended in accordance with the provisions found at 7 Delaware Code, Chapters 60 & 63.

5. OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL:

NONE

6. NOTICE OF PUBLIC COMMENT:

The public hearing on the proposed amendments to DRGHW will be held on Wednesday, May 12, 1999, beginning at 7:00 p.m. in the Richardson and Robbins Auditorium, 89 Kings Highway, Dover, DE. In addition, those affected by the proposed amendments are invited to attend one of two workshops conducted on April 13th and 15th, 1999.

7. PREPARED BY: Donald Short (302) 739-3689

**1999 AMENDMENTS TO DELAWARE
REGULATIONS GOVERNING HAZARDOUS
WASTE**

SUMMARY

This summary presents a brief description of the 1999 amendments to Delaware Regulations Governing Hazardous Waste (DRGHW), and a list of those sections generally affected by the amendments. This summary is being provided solely for the convenience of the reader.

These changes incorporate certain Federal RCRA amendments into Delaware's hazardous waste management program. The State is required to adopt these amendments in order to maintain its RCRA program delegation and remain current with the Federal hazardous waste program.

The State is also making certain technical changes for the purpose of correcting errors and to add consistency or clarification to the existing regulations. Some amendments are being made to the existing regulations in order to improve or enhance the performance of the hazardous waste management program.

The regulatory amendments in this package are listed below and organized by the promulgating Federal Register notice. For additional information please contact the Hazardous Waste Management Branch at (302) 739-3689.

1. Title: Clarification of Standards for Hazardous Waste LDR Treatment Variances

Federal Register Reference:62 FR 64504-64509
Federal Promulgation Date:December 5, 1997

Summary: In this rule EPA finalizes clarifying amendments to the rule authorizing treatment variances from the national LDR treatment standards, adopting EPA's interpretation that a treatment variance may be granted when treatment of any given waste to the level or by the method specified in the regulations is not appropriate, under either technical or environmental circumstances. (NOTE: 40 CFR 268.44(a) - (g) are not delegable to the states because the variance addressed by these provisions may have a national impact. However, EPA strongly encourages the states to adopt these provisions in order to provide as much information to the regulated community as possible.)

Sections or portions of DRGHW affected by these changes include but are not limited to: 268.44.

2. Title: Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers; Clarification and Technical Amendment

Federal Register Reference:62 FR 64636-64671
Federal Promulgation Date:December 8, 1997

Summary: In this federal register EPA makes clarifying amendments to the subpart CC standards and provides clarification of certain preamble language that was contained

in previous documents for this rulemaking.

Sections or portions of DRGHW affected by these changes include but are not limited to: 264.15, 265.73, 264.1030, 264.1031, 264.1033, 264.1050, 264.1060, 264.1062, 264.1064, 264.1080, 264.1082 - 264.1087, 264.1089, 265.15, 265.73, 264.1030, 265.1033, 265.1050, 265.1060, 265.1062, 265.1064, 265.1080 - 265.1088, 265.1090, 265 Appendix VI, and 122.14.

3. Title: Organobromine Production Wastes; Identification and Listing of Hazardous Waste; Land Disposal Restrictions; Listing of CERCLA Hazardous Substances, Reportable Quantities

Federal Register Reference:63 FR 24596-24628
Federal Promulgation Date:May 4, 1998

Summary: This rule adds K140 and U408 hazardous waste codes to the current lists found in part 261, as well as modifies the land disposal treatment standards for hazardous waste in part 268 to include these new wastes. The effect of listing these wastes will be to subject them to stringent management and treatment standards, as well as to emergency notification requirements for releases of hazardous substances to the environment (CERCLA and EPCRA). Additionally, EPA has made a final determination not to list as hazardous ten waste streams from the production of bromochloromethane, ethyl bromide, tetrabromobisphenol A, 2,4,6-tribromophenol wastewaters, octabromodiphenyl oxide, and decabromodiphenyl oxide.

Sections or portions of DRGHW affected by these changes include but are not limited to: 261.32, 261.33, 261 Appendix VII, 261 Appendix VIII, 268.33, 268.40, and 268.48.

4. Title: Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Recycled Used Oil Management Standards

Federal Register Reference:63 FR 24963-24969
Federal Promulgation Date:May 6, 1998

Summary: This rule clarifies: 1) when used oil contaminated with PCBs is regulated under the used oil management standards and when it is not, 2) that the requirements applicable to releases of used oil apply in States that are not authorized for the RCRA base program, 3) that mixtures of CESQG wastes and used oil are subject to the used oil management standards irrespective of how that mixture is to be recycled, and 4) that the initial marketer of used oil that meets the used oil fuel specification need only keep a record of a shipment of used oil to the facility to which the initial marketer delivers the used oil. This rule

also amends incorrect references to the pre-1992 used oil specifications in the provisions which address hazardous waste fuel produced from, or reclaimed from, oil bearing hazardous wastes from petroleum refining operations.

Sections or portions of DRGHW affected by these changes include but are not limited to: 261.5, 261.6, 279.10, 279.22, 279.45, 279.54, 279.64, and 279.74.

5. Title: Land Disposal Restrictions Phase IV: Final Rule Promulgating Treatment Standards for Metal Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils, and Exclusion of Recycled Wood Preserving Wastewaters; Final Rule

Federal Register Reference:63 FR 28556-28753

Federal Purgation Date:May 26, 1998

Summary: This rule addresses five interrelated areas associated with the land disposal restrictions. First, new land disposal restrictions treatment standards are promulgated for wastes identified as hazardous because they exhibit the toxicity characteristic for metals. The universal treatment standards for -12 metal constituents are also revised. Second, this rule establishes a land disposal prohibition and treatment standards for a group of newly identified hazardous wastes/mineral processing wastes that exhibit a characteristic of hazardous waste. This group includes not only those mineral processing wastes exhibiting the toxicity characteristic but also mineral processing wastes exhibiting the characteristics of ignitability (D001), corrosivity (D002) or reactivity (D003). Third, this rule amends the provisions defining when secondary materials from mineral processing which are recycled within the industry sector are solid waste. Secondary materials from mineral processing which are generated and reclaimed within that industry are not solid wastes (and therefore not hazardous waste) unless they are managed in land disposal units before being reclaimed. This rule also addresses issues related to whether materials are within the scope of the Bevill exclusion and allows secondary materials from mineral processing to be co-processed with normal raw materials in beneficiation operations which generate Bevill exempt wastes, without changing the exempt status of the resulting Bevill wastes, provided certain requirements are met. Fourth, this rule includes alternative treatment standards for soil that contains a listed hazardous waste or which exhibits a characteristic of hazardous waste. Finally, this rule clarifies certain portions of the land disposal restrictions as well as corrects typographical errors.

In addition to the changes to the land disposal restrictions, this rule clarifies that a previously promulgated exclusion from hazardous waste regulation for recycled

shredded circuit boards also applies to whole circuit boards under certain conditions. An exclusion from RCRA jurisdiction is provided for certain wood preserving wastewaters and spent wood preserving solutions when recycled.

Sections or portions of DRGHW affected by these changes include but are not limited to: 261.2 - 261.4, 268.2, 268.3, 268.7, 268.34, 268.40, 268.44, 268.45, 268.48, 268.49, 268 Appendix VII, and 268 Appendix VIII.

6. Title: Hazardous Waste Combustors; Revised Standards; Final Rule Part 1: RCRA Comparable Fuel Exclusion; Permit Modifications for Hazardous Waste Combustion Units; Notification of Intent To Comply; Waste Minimization and Pollution Prevention Criteria for Compliance Extensions

Federal Register Reference:63 FR 33782-33829

Federal Promulgation Date:June 19, 1998

Summary: DNREC is excluding, from the regulatory definition of solid waste, fuels produced from a hazardous waste which are comparable to some currently used fossil fuels. DNREC is also adding a new permit modification provision intended to make it easier for facilities to make changes to their existing hazardous waste permits. Facilities with certain hazardous waste combustion units can use this permit modification provision when adding air pollution control equipment, making other changes in equipment or making changes in operation needed to comply with upcoming air emission standards. DNREC is also adding notification requirements for sources which intend to comply with this rule. Finally, DNREC is adding allowances for extensions to the compliance period to promote the installation of cost effective pollution prevention technologies.

Sections or portions of DRGHW affected by these changes include but are not limited to: 261.4, 261.38, and 122.42.

7. Title: Petroleum Refining Process Wastes

Federal Register Reference:63 FR 42110-42189

Federal Promulgation Date:August 6, 1998

Summary: DNREC is listing four petroleum refining process wastes as hazardous (K169-K172). The wastes will be subject to stringent management and treatment standards and emergency notification requirements. The rule excludes certain recycled secondary materials from the definition of solid waste. The materials include both oil-bearing residuals from petroleum refineries and oil from associated petrochemical facilities, when they are inserted into the

refining process; and spent caustic from liquid treating operations when used as a feedstock to make certain chemical products. The rule clarifies an existing exclusion for recovered oil from certain petroleum industry sources. Finally, this rule applies the universal treatment standards to the petroleum refining wastes.

Sections or portions of DRGHW affected by these changes include but are not limited to: 261.3, 261.4, 261.6, 261.31, 261.32, 261 Appendix VII, 266.100, 268.35, and 268.40.

8. Title: Emergency Revision of the Land Disposal Restrictions (LDR) Treatment Standards for Listed Hazardous Wastes from Carbamate Production

Federal Register Reference:63 FR 47409-47418
Federal Promulgation Date:August 26, 1998

Summary: This rule revises the waste treatment standards applicable to 40 waste constituents associated with the production of carbamate wastes. First, the rule establishes revised treatment standards for seven specific carbamate waste constituents (A2213; bendiocarb phenol; diethylene glycol, dicarbamate; dimetilan; formparanate; isolan; and tirpate) for which there are no available analytical reference standards. The revised treatment standards for the seven hazardous waste constituents are in effect at the federal level; they extend indefinitely the temporary alternative treatment standards previously in effect, that expired federally on August 26, 1998. This rule also deletes the treatment standard for one additional constituent (o-phenylenediamine) for which available analytical methods do not achieve reliable measurements.

Secondly, this rule deletes the eight affected carbamate waste constituents as underlying hazardous constituents.

Thirdly, the rule extends for an additional six months (until March 4, 1999), the temporary alternative treatment standards for 32 carbamate waste constituents that expired federally on August 26, 1998.

Sections or portions of DRGHW affected by these changes include but are not limited to: 268.40, and 268.48.

9. Title: Land Disposal Restrictions Phase IV Extension of Compliance Date for Characteristic Slags

Federal Register Reference:63 FR 48124-48127
Federal Promulgation Date:September 9, 1998

Summary: This rule extends the compliance date until November 26, 1998 for a limited portion of the Phase IV Final Rule (63 FR 28556). The Phase IV Final Rule amended the Land Disposal Restriction treatment standards

for metal-bearing hazardous wastes exhibiting the toxicity characteristic. This action extends the date for treatment standards only for secondary lead slags exhibiting the toxicity characteristic for one or more metals that are generated from thermal recovery of lead-bearing wastes (principally batteries). This action is being taken because of potential short term logistical difficulties that may result in a temporary shortage of available treatment capacity for these particular wastes.

Sections or portions of DRGHW affected by these changes include but are not limited to: 268.34.

10. Title: Land Disposal Restrictions B Treatment Standards for Spent Potliners from Primary Aluminum Reduction (K088); Final Rule

Federal Register Reference:63 FR 51254-51267.
Federal Promulgation Date:September 24, 1998

Summary:DNREC is adopting EPA's interim replacement standards for spent potliners from primary aluminum reduction (EPA hazardous waste K088) under its Land Disposal Restrictions program. Spent potliners will now be prohibited from land disposal unless the wastes have been treated in compliance with the numerical standards contained within this rule. The newly promulgated treatment standards will be in place until EPA has fully reviewed all information on all treatment processes which may serve as a basis for a more permanent revised standard.

Sections or portions of DRGHW affected by these changes include but are not limited to: 268.40.

11. Title:Post-Closure Requirements and Closure Process

Federal Register Reference:63 FR 56710-56735
Federal Promulgation Date:October 22, 1998

Summary: With this rule, DNREC is modifying the requirement for a post-closure permit, to allow for the use of a variety of authorities to impose requirements on non-permitted land disposal units requiring post-closure care. As a result, DNREC will have the flexibility to use alternate mechanisms under a variety of authorities to address post-closure care requirements, based on the particular needs at the facility. The rule also amends the regulations governing closure of land-based units that have released hazardous constituents, to allow certain units to be addressed through the corrective action program. This will allow regulators the discretion to use corrective action requirements, rather than closure requirements, to address the closure of regulated units. Finally, the rule specifies the Part B information submission requirements for facilities that receive post-closure permits.

Sections or portions of DRGHW affected by these

changes include but are not limited to: 264.90, 264.110, 264.112, 264.118, 264.140, 265.90, 265.110, 265.112, 265.118, 265.121, 265.140, 122.1, 122.14, and 122.28.

12. Title: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers

Federal Register Reference: 64 FR 3381-3391

Federal Promulgation Date: January 21, 1999

Summary: The changes contained in this Federal Register revise the definitions for "equipment", "open-ended valve or line", and adds a definition for "sampling connection system". In addition, clarification is being made regarding an exemption from subpart CC requirements for waste management units used solely for on-site treatment or storage of hazardous waste that was placed in the unit as a result of implementing Federally required remedial activities. Changes are also being made that affect the requirements for when an owner or operator must make a determination of the volatile organic concentration of the waste stream. Tank standards in paragraph (h)(3) in 264.1084 and 265.1085 is being amended to allow owners or operators who elect to use a pressure tank, to control air emissions under subpart CC, to purge the inert materials from the tank as is required by normal operation for that type of tank system. Finally, transfer requirements are being added to the Level 3 container standards. These standards were inadvertently left out of the November 1996 EPA rule.

Sections or portions of DRGHW affected by these changes include but are not limited to: 262.34, 264.1031, 264.1080, 264.1083, 264.1084, 264.1086, 265.1080, 265.1084, 265.1085, and 265.1087.

13. Technical Amendments: Technical changes will be made to the *Delaware Regulations Governing Hazardous Waste* to correct errors and inconsistencies in the regulations. In some cases, changes will be made to enhance the performance of the State's hazardous waste management program. NOTE: The State is currently in the process of identifying the changes it needs to make under the Technical Amendments. When that list is complete the areas effected will be identified in the final version of this summary.

Sections or portions of DRGHW affected by these changes include but are not limited to: 260.1, 261.6, 262.23, 264.18, 264.19, 264.91, 264.145, 264.221, 265.145.

PUBLIC SERVICE COMMISSION

Statutory Authority: 26 Delaware Code,
Section 209(a) (26 Del.C. 209(a))

BEFORE THE PUBLIC SERVICE COMMISSION OF
THE STATE OF DELAWARE

**IN THE MATTER
OF THE REGULATION
ESTABLISHING THE
MINIMUM FILING
REQUIREMENTS FOR
ALL REGULATED
COMPANIES SUBJECT
TO THE JURISDICTION
OF THE PUBLIC SERVICE
COMMISSION**

PSC REGULATION
DOCKET NO. 4

ORDER NO. 5051

AND NOW, this 23rd day of March, 1999;

WHEREAS, the Public Service Commission ("Commission") has previously adopted "Minimum Filing Requirements for All Regulated Companies" ("Minimum Filing Requirements") to ensure uniform content in many of the submissions made to the Commission, including applications for rate adjustments; and

WHEREAS, by memorandum dated May 22, 1998, the Commission's Staff sought changes and additions to the Minimum Filing Requirements for the stated purposes of increasing the procedural and practical efficiency of its oversight of the ratemaking process, and to lessen the administrative burdens of the same; and

WHEREAS, by its Order No. 4805 herein, the Commission provided for re-examination of the affected Parts of the Minimum Filing Requirements, along with the required public notice, and the solicitation of comment concerning the efficacy, reasonableness, and propriety of Staff's proposals; and

WHEREAS, Staff now advises that as a result of public comments regarding its original proposals, it has determined to abandon the same, and sponsor in their place new proposals; and

WHEREAS, under 29 Del. C. § 10118(c), it is incumbent on the Commission to determine whether Staff's latest proposals (as modified) reflect substantive changes from its original proposals; and

WHEREAS, the Commission is persuaded that Staff's latest proposals do reflect substantive changes from its original proposals; and

WHEREAS, for the reasons stated in its Order No. 4805 herein, the Commission continues to believe that those Parts of the Minimum Filing Requirements to which Staff's

PROPOSED REGULATIONS

proposals are directed should be re-examined and, if appropriate, amended; and

WHEREAS, the Commission desires to give public notice, pursuant to 29 Del. C. §§ 1133, 10115, and 10118(a) and (c), of its intention to re-examine the subject Parts of the Minimum Filing Requirements, in light of Staff's latest proposals, and to solicit comment concerning the efficacy, reasonableness, and propriety of the same;

NOW, THEREFORE, IT IS ORDERED:

1. The Commission finds that Staff's latest proposed revisions to the Minimum Filing Requirements, as set forth in the notice attached hereto as Exhibit "A", reflect substantive changes from its earlier proposals, and so constitute new proposals within the meaning of 29 Del. C. §10118(c).

2. The Secretary of the Commission shall transmit to the Registrar of Regulations for publication in the Delaware Register the notice attached hereto as Exhibit "A." Such notice shall be accompanied by a copy of the proposed and existing Minimum Filing Requirements.

3. The Secretary of the Commission shall cause the notice attached hereto as Exhibit "B" to be published in *The News Journal* and *Delaware State News* newspapers on or before April 1, 1999.

4. The Secretary shall cause the notice attached hereto as Exhibit "B" to be sent by U.S. mail to all public utilities who currently file rate applications under Parts A and B of the Minimum Filing Requirements for All Regulated Companies Subject to the Jurisdiction of the Commission and all persons who have made timely written requests for advance notice of the Commission's regulation-making proceedings.

5. G. Arthur Padmore is continued as the Hearing Examiner for this matter pursuant to 26 Del. C. §502 and 29 Del. C. ch. 101, and is authorized to organize, classify, and summarize all materials, evidence, and testimony filed in this docket, to conduct the public hearing contemplated under the attached notice, and to make proposed findings and recommendations to the Commission concerning Staff's proposed amendments on the basis of the materials, evidence, and testimony submitted. Hearing Examiner Padmore is specifically authorized, in his discretion, to solicit additional comment and to conduct, on due notice, such public hearings as may be required to develop further materials and evidence concerning any later-submitted proposed amendments. John S. Spadaro, Esquire, is designated as Staff Counsel for this matter.

6. The public utilities regulated by the Commission are notified that they may be charged for the cost of this proceeding under 21 Del. C. § 114.

7. The Commission reserves the jurisdiction and authority to enter such further Orders in this matter as may be deemed necessary or proper.

BY ORDER OF THE COMMISSION:

Robert J. McMahon, Chairman
Vice Chairman
Arnetta McRae, Commissioner
John R. McClelland, Commissioner

ATTEST:

Karen J. Nickerson, Secretary

EXHIBIT "A"

BEFORE THE PUBLIC SERVICE COMMISSION OF
THE STATE OF DELAWARE

IN THE MATTER	
OF THE REGULATION	
ESTABLISHING THE	
MINIMUM FILING	
REQUIREMENTS FOR	
ALL REGULATED	PSC REGULATION
COMPANIES SUBJECT	DOCKET NO. 4
TO THE JURISDICTION	
OF THE PUBLIC SERVICE	
COMMISSION	

NOTICE OF COMMENT PERIOD ON PROPOSED
CHANGES AND AMENDMENTS TO MINIMUM
FILING REQUIREMENTS

In 1981, the Delaware Public Service Commission (the "Commission" or "PSC") adopted "Minimum Filing Requirements for general rate increase applications. These requirements, which were last modified in 1984, govern the filing and content of rate increase applications made by utilities under the Commission's jurisdiction. They are reproduced in their present form as attached.

Rate increase applications submitted to the Commission are reviewed and evaluated by the Commission's Staff for the justness and reasonableness of the rates proposed. The Commission is informed by Staff that the frequency and number of such applications has, in recent years, increased significantly, resulting in a corresponding increase in the administrative burdens associated with Staff's review. Staff has also identified certain practices that (it contends) tend to add significantly and unreasonably to these administrative burdens. According to Staff, these practices typically involve changes made by the utility to data on which the application relies, including changes to the test year (as that term is used in the Minimum Filing Requirements) and changes in rate base items, expenses, or revenues. Staff contends that the burden occasioned by such practices is most severe where multiple and material changes are made at different points in time during the pendency of a single application. Staff further contends that, where such changes

are sought, they are often of a type that is avoidable through the applicant's exercise of ordinary diligence in preparing its rate increase application.

Staff now seeks certain changes and additions to the Minimum Filing Requirements that are designed, it says, to curtail the offending practices. In this way, Staff explains, the efficiency of the rate review process will be increased, and its administrative burdens reduced.

The text of the proposed Minimum Filing Requirements, as modified by Staff's changes and additions, is attached. These proposed changes and additions may be described as follows:

1. Part "A", Section I(B)(1) of the Minimum Filing Requirements provides a definition of the "test year," and specifies the time period to be reflected by the test year.¹ The last two sentences of this section now read: "In addition, the twelve-month period must end no more than seven months prior to the filing of the application for increased rates. For example, if the actual results of the operations for the 12-months ending March 31, xxxx, are used for the purpose of the test year, the application must be filed no later than October 31, xxxx." Staff proposes that these two sentences be changed to read:

In addition, the twelve-month period must end no more than seven months prior to the filing of the application, but no sooner than one month after the final closing of the company's books for the last month of the test year (post reversal of accrual entries), so that actual expenditures are reflected in the books of account. For example, if the actual results of operations for the twelve months ending March 31, xxxx, are used for purposes of the test year, the application must be filed no sooner than April 30, xxxx, but no later than October 31, xxxx.

2. Part "A", Section I(C) of the Minimum Filing Requirements governs the filing of direct testimony and supporting exhibits, as well as the modification of test period data. It now reads: "Prepared direct testimony and supporting exhibits must be filed coincident with the filing of the applications for rate relief. This filing requirement shall not prohibit the utility from subsequently submitting further testimony and exhibits in a timely fashion as necessary or proper to address issues raised during investigation of the filing; nor shall it (or B.2., above) prohibit the utility from proffering an exhibit or exhibits in the form of a fully projected test period, provided (1) such

1. Part "A" of the Minimum Filing Requirements governs the filing of rate increase applications by major utilities. Part "B" governs filings by small utilities.

period shall consist of twelve consecutive months ending not later than the end of the first year during which the proposed rates are to become effective; (2) it is supported by relevant testimony establishing a verifiable link between the test period defined in Section B.2. and the projected test period; and (3) it is in format consistent with such test period. Modifications in test period data occasioned by reasonably known and measurable changes in current or future rate base items, expenses (i.e., labor costs, tax expenses, insurance, etc.) or revenues may be offered in evidence by the utility up until the time the utility fields its rebuttal testimony." Staff proposes that the phrase "investigation of the filing," as it appears in the second sentence of this section, be changed to read "investigation of the application." Staff next proposes that the word "also" be inserted immediately before the word "proffering" in that sentence, and that the following parenthetical language be added immediately before the word "provided" in the same sentence: "(in addition to the test period described in I.B.2. above)." Staff further proposes that the last sentence of this section be changed to read:

Modifications in test period data occasioned by reasonably known and measurable changes in current or future rate base items, expenses (i.e., labor costs, tax expenses, insurance, etc.) or revenues may be offered in evidence by the utility at any time prior to its introduction of rebuttal evidence; provided, however, that if any party makes timely objection to the proffered modifications, such objections shall be promptly presented to the Hearing Examiner for a decision on due consideration of the parties' respective positions. For purposes of this Section I(C), an objection shall be timely if made within five (5) business days of the utility's proffer of modifications.

3. Part "A", Section I(E) of the Minimum Filing Requirements addresses Staff's review of rate increase applications for compliance with the Minimum Filing Requirements, and the penalties for noncompliance. This section now reads: "The Commission Staff will review all filings for compliance with the format and instructions furnished herein and notify the utility within 30 days after the date of filing of any defects in compliance. The utility after such notification by the Commission Staff will then have 30 days to correct these defects. If such defects are not corrected, the Commission may reject a utility's rate application for non-compliance with the Minimum Filing Requirements." Staff recommends that the first sentence's reference to "filings" and "filing" be changed to "applications" and "application." Staff further recommends that the following language be added to the end of this section:

Notwithstanding anything to the contrary in this Section

I(E), if such defects are, in Staff's discretion, so numerous or serious as to materially impair Staff's timely review of the application, Staff may reject the same thereby rendering it a nullity for all purposes (including without limitation the purposes contemplated under 26 Del. C. § 306), provided, however, that any such rejection by Staff may be challenged by the utility upon timely request for reconsideration to the Commission. For purposes of this Section I(E), a request for reconsideration shall be timely if presented in writing to the Commission within five (5) business days of Staff's rejection of the application to which it relates. In the event a utility's challenge to Staff's rejection of an application under this Section I(E) is successful, the application shall be reinstated *ab initio*. Nothing in this Section I(E) shall prevent a utility from filing an application in draft form for Staff's informal review and approval without prejudice, such informal review and approval not to be unreasonably withheld by Staff. The requirements of this Section shall be in addition to, and not in place of, the requirements of Rule 6.2 of the Rules of Practice and Procedure of the Delaware Public Service Commission.

4. Part "A", Schedule No. 2-B is titled "Intangible Assets Claimed in Rate Base." It includes a column heading titled "Revenue Included Test Year." Staff recommends that this column heading be deleted.

5. Part "B", Section 1(B) of the Minimum Filing Requirements provides a definition of the "test year," and specifies the time period to be reflected by the test year. Staff recommends that the language of this section be replaced in its entirety by the language it proposes for the corresponding section within Part "A" of the Minimum Filing Requirements (including the language of the existing Sections I(B)(2)(a) and (b) of Part "A", which remain unchanged under Staff's proposals).

6. Part "B", Section I(E) of the Minimum Filing Requirements addresses Staff's review of applications for compliance with the Minimum Filing Requirements, and the penalties for noncompliance. Staff recommends identical changes to the ones it proposes for the corresponding section within Part "A" of the Minimum Filing Requirements.

7. The Minimum Filing Requirements are accompanied by an explanatory memorandum titled "Minimum Filing Requirements - General Information." The General Information document includes a brief explanation of the applicability of Part "A" of the Minimum Filing Requirements, under the heading "Part A - Rate Increase Applications -Major Utilities." The first sentence under this heading now reads: "Part A applies to utilities or divisions thereof with annual gross intra-State revenues of \$1 million or more." Staff proposes to add the following parenthetical language at the end of the sentence: "(at the time of filing)." The second paragraph under this heading now reads:

Based on 1978 intra-State revenue levels, the following Delaware utilities would be subject to Part A at the present time:

- Artesian Water Company
- Chesapeake Utilities Corporation
- Delmarva Power & Light Company (Electric Division)
- Delmarva Power & Light Company (Gas Division)
- Rollins Cablvue, Inc.
- The Diamond State Telephone Company
- Wilmington Suburban Water Corporation

Staff proposes to delete this paragraph. Finally, the General Information document includes a corresponding explanation of the applicability of Part "E" of the Minimum Filing Requirements, titled "Part E - Quarterly Reporting Requirements - Major Utilities." The first sentence under this heading now reads: "All major utilities subject to the jurisdiction of the Commission (those with annual gross intra-state revenues of \$1 million dollars or more shown in Part A of these instructions) are required to file quarterly information in accordance with the instructions contained in Part E." Staff proposes to revise this sentence to read: "All major utilities, except Bell Atlantic-Delaware, Inc., subject to the jurisdiction of the Commission (those with annual gross intra-state revenues of \$1 million dollars or more shown in Part A of these instructions) are required to file quarterly information in accordance with the instructions in Part E."

The Commission has authority to issue such rules, and to effect the proposed changes and additions, under 26 Del. C. § 209(a).

The Commission hereby solicits written comments, suggestions, compilations of data, briefs, or other written materials concerning Staff's proposed changes and additions to the Minimum Filing Requirements. Ten (10) copies of such materials shall be filed with the Commission at its office located at 861 Silver Lake Boulevard, Cannon Building, Suite 100, Dover, Delaware 19904. *All such materials shall be filed on or before May 1, 1999.*

In addition, the Commission's duly appointed Hearing Examiner will conduct a public hearing concerning Staff's proposed changes and additions on a date to be determined, and after receipt of written comments. Notice of such public hearing will be published at a later date in the Delaware Register of Regulations and in two newspapers of general circulation. Interested persons may present comments, evidence, testimony, and other materials at that public hearing.

The Minimum Filing Requirements, Staff's proposed changes and additions to the same, and the materials submitted in connection therewith will be available for public inspection and copying at the Commission's Dover office during normal business hours. The fee for copying is

\$0.25 per page.

Any individual with disabilities who wishes to participate in these proceedings should contact the Commission to discuss any auxiliary aids or services needed to facilitate such review or participation. Such contact may be in person, by writing, telephonically, by use of the Telecommunications Relay Service, or otherwise. The Commission's toll-free telephone number in Delaware is (800) 282-8574. Persons with questions concerning this application may contact the Commission's Secretary, Karen J. Nickerson, by either Text Telephone ("TT") or by regular telephone at (302) 739-4333 or by e-mail at knickerson@state.de.us.

EXHIBIT "B"

BEFORE THE PUBLIC SERVICE COMMISSION OF
THE STATE OF DELAWARE

IN THE MATTER	
OF THE REGULATION	
ESTABLISHING THE	
MINIMUM FILING	
REQUIREMENTS FOR	
ALL REGULATED	PSC REGULATION
COMPANIES SUBJECT	DOCKET NO. 4
TO THE JURISDICTION	
OF THE PUBLIC SERVICE	
COMMISSION	

NOTICE OF COMMENT PERIOD ON PROPOSED
CHANGES AND AMENDMENTS TO MINIMUM
FILING REQUIREMENTS

In 1981, the Delaware Public Service Commission (the "Commission" or "PSC") adopted its Minimum Filing Requirements for general rate increase applications. These requirements, which were last modified in 1984, govern the filing and content of rate increase applications made by utilities under the Commission's jurisdiction.

In May 1998, the Commission's Technical Staff ("Staff") sought changes and additions to the Minimum Filing Requirements for the stated purposes of increasing the procedural and practical efficiency of Staff's oversight of the ratemaking process and reducing administrative burdens. On May 26, 1998, the Commission initiated proceedings to give public notice of Staff's proposals and solicit comment concerning their efficacy, reasonableness, and propriety.

Based on the comments received by Staff in the course of the proceedings, Staff has abandoned its original proposals in favor of new proposed revisions. Staff is proposing to: (1) clarify the definition of "test year;" (2) clarify when and how a utility can submit modifications to its filing during the proceeding; (3) address the review of an

initial rate application for compliance to the Rules and penalties for non-compliance; and (4) make other textual changes. The Minimum Filing Requirements, Staff's newly proposed changes and additions to the same, and the materials submitted in connection therewith will be available for public inspection and copying at the Commission's office during normal business hours.

The Commission hereby solicits written comments, suggestions, compilations of data, briefs, or other written materials concerning Staff's proposed changes and additions to the Minimum Filing Requirements. Ten (10) copies of such materials shall be filed with the Commission at its Dover office. All such materials shall be filed on or before May 1, 1999.

In addition, the Commission's duly appointed Hearing Examiner will conduct a public hearing concerning Staff's proposed changes and additions on a date to be determined, and after receipt of written comments. Notice of such public hearing will be published at a later date in the Delaware Register of Regulations and in two newspapers of general circulation. Interested persons may present comments, evidence, testimony, and other materials at that public hearing.

Any individual with disabilities who wishes to participate in these proceedings should contact the Commission to discuss any auxiliary aids or services needed to facilitate such review or participation. Such contact may be in person, by writing, telephonically, by use of the Telecommunications Relay Service, or otherwise. The Commission's toll-free telephone number in Delaware is (800) 282-8574. Persons with questions concerning this application may contact the Commission's Secretary, Karen J. Nickerson, by either Text Telephone ("TT") or by regular telephone at (302) 739-4333 or by e-mail at knickerson@state.de.us.

BEFORE THE PUBLIC SERVICE COMMISSION OF
THE STATE OF DELAWARE

IN THE MATTER	
OF THE REGULATION	
ESTABLISHING THE	
MINIMUM FILING	
REQUIREMENTS FOR	
ALL REGULATED	PSC REGULATION
COMPANIES SUBJECT	DOCKET NO. 4
TO THE JURISDICTION	
OF THE PUBLIC SERVICE	
COMMISSION	

NOTICE OF COMMENT PERIOD AND PUBLIC
HEARING ON PROPOSED CHANGES AND
AMENDMENTS TO MINIMUM FILING
REQUIREMENTS

In 1981, the Delaware Public Service Commission (the "Commission" or "PSC") adopted its Minimum Filing Requirements for general rate increase applications. These requirements, which were last modified in 1984, govern the filing and content of rate increase applications made by utilities under the Commission's jurisdiction. They are reproduced in their present form as Exhibit 1.

Rate increase applications submitted to the Commission are reviewed and evaluated by the Commission's Staff for the justness and reasonableness of the rates proposed. The Commission is informed by Staff that the frequency and number of such applications has, in recent years, increased significantly, resulting in a corresponding increase in the administrative burdens associated with Staff's review. Staff has also identified certain practices that (it contends) tend to add significantly and unreasonably to these administrative burdens. According to Staff, these practices typically involve changes made by the utility to data on which the application relies, including changes to the test year (as that term is used in the Minimum Filing Requirements) and changes in rate base items, expenses or revenues. Staff contends that the burden occasioned by such practices is most severe where multiple and material changes are made at different points in time during the pendency of a single application. Staff further contends that, where such changes are sought, they are often of a type that is avoidable through the applicant's exercise of ordinary diligence in preparing its rate increase application.

Staff now seeks certain changes and additions to the Minimum Filing Requirements that are designed, it says, to curtail the offending practices. In this way, Staff explains, the efficiency of the rate review process will be increased, and its administrative burdens reduced.

The text of the proposed Minimum Filing Requirements, as modified by Staff's changes and additions, is attached as Exhibit 2. These proposed changes and additions may be described as follows:

1. Part "A", Section I(B)(1) of the Minimum Filing Requirements provides a definition of the "test year", and specifies the time period to be reflected by the test year.¹ The last two sentences of this section now read: "In addition, the twelve month period must end no more than seven months prior to the filing of the application for increased rates. For example, if the actual results of the operations for the 12-months ending March 31, 19xx, are used for the purpose of the test year, the application must be filed no later than October 31, 19xx." Staff proposes that these two sentences be changed to read:

1. Part "A" of the Minimum Filing Requirements governs the filing of rate increase applications by major utilities. Part "B" governs filings by small utilities.

In addition, the twelve-month period must end no later than seven months prior to the filing of the application, but no sooner than one month after the final closing of the company's books for the last month of the test year (post reversal of accrual entries), so that actual expenditures are reflected in the books of account. For example, if the actual results of operations for the twelve months ending March 30, 19xx are used for purposes of the test year, the application must be filed no sooner than April 30, 19xx, but no later than October 31, 19xx.

2. Part "A", Section I(C) of the Minimum Filing Requirements governs the filing of direct testimony and supporting exhibits, as well as the modification of test period data. It now reads: "Prepared direct testimony and supporting exhibits must be filed coincident with the filing of the applications for rate relief. This filing requirement shall not prohibit the utility from subsequently submitting further testimony and exhibits in a timely fashion as necessary or proper to address issues raised during investigation of the filing; nor shall it (or B.2., above) prohibit the utility from proffering an exhibit or exhibits in the form of a fully projected test period, provided (1) such period shall consist of twelve consecutive months ending not later than the end of the first year during which the proposed rates are to become effective; (2) it is supported by relevant testimony establishing a verifiable link between the test period defined in Section B.2. and the projected test period; and (3) it is in format consistent with such test period. Modifications in test period data occasioned by reasonably known and measurable changes in current or future rate base items, expenses (i.e., labor costs, tax expenses, insurance, etc.) or revenues may be offered in evidence by the utility up until the time the utility fields its rebuttal testimony." Staff proposes that the phrase "investigation of the filing", as it appears in the second sentence of this section, be changed to read "investigation of the application". Staff next proposes that the word "also" be inserted immediately before the word "proffering" in that sentence, and that the following parenthetical language be added immediately before the word "provided" in the same sentence: "(in addition to the test period described in I.B.2. above)". Staff further proposes that the last sentence of this section be changed to read:

Modifications in test period data occasioned by reasonably known and measurable changes in current or future rate base items, expenses (i.e., labor costs, tax expenses, insurance, etc.) or revenues may be offered in evidence by the utility at any time prior to its introduction of rebuttal evidence; provided, however, that if any party makes timely objection to the proffered modifications, such objections shall be promptly presented to the Hearing Examiner for a decision on due consideration of the parties' respective positions. For purposes of this Section I(C), an objection shall be timely if made within five (5) business

days of the utility's proffer of modifications.

3. Part "A", Section I(E) of the Minimum Filing Requirements addresses Staff's review of rate increase applications for compliance with the Minimum Filing Requirements, and the penalties for noncompliance. This section now reads: "The Commission Staff will review all filings for compliance with the format and instructions furnished herein and notify the utility within 30 days after the date of filing of any defects in compliance. The utility after such notification by the Commission Staff will then have 30 days to correct these defects. If such defects are not corrected, the Commission may reject a utility's rate application for non-compliance with the Minimum Filing Requirements." Staff recommends that the first sentence's reference to "filings" and "filing" be changed to "applications" and "application". Staff further recommends that the following language be added to the end of this section:

Notwithstanding anything to the contrary in this Section I(E), if such defects are, in Staff's discretion, so numerous or serious as to materially impair Staff's timely review of the application, Staff may reject the same, thereby rendering it a nullity for all purposes (including without limitation the purposes contemplated under 26 Del. C. § 306); provided, however, that any such rejection by Staff may be challenged by the utility upon timely request for reconsideration to the Commission. For purposes of this Section I(E), a request for reconsideration shall be timely if presented in writing to the Commission within five (5) business days of Staff's rejection of the application to which it relates. In the event a utility's challenge to Staff's rejection of an application under this Section I(E) is successful, the application shall be reinstated *ab initio*. Nothing in this Section I(E) shall prevent a utility from filing an application in draft form for Staff's informal review and approval without prejudice, such informal review and approval not to be unreasonably withheld by Staff. The requirements of this Section shall be in addition to, and not in place of, the requirements of Rule 6.2 of the Rules of Practice and Procedure of the Delaware Public Service Commission.

4. Part "A", Schedule No. 2-B is titled "Intangible Assets Claimed in Rate Base". It includes a column heading titled "Revenue Included Test Year". Staff recommends that this column heading be deleted.

5. Part "B", Section I(B) of the Minimum Filing Requirements provides a definition of the "test year", and specifies the time period to be reflected by the test year. Staff recommends that the language of this section be replaced in its entirety by the language it proposes for the corresponding section within Part "A" of the Minimum Filing Requirements (including the language of the existing Sections I(B)(2)(a) and (b) of Part "A", which remain unchanged under Staff's proposals).

6. Part "B", Section I(E) of the Minimum Filing

Requirements addresses Staff's review of applications for compliance with the Minimum Filing Requirements, and the penalties for noncompliance. Staff recommends identical changes to the ones it proposes for the corresponding section within Part "A" of the Minimum Filing Requirements.

7. The Minimum Filing Requirements are accompanied by an explanatory memorandum titled "Minimum Filing Requirements - General Information." The General Information document includes a brief explanation of the applicability of Part "A" of the Minimum Filing Requirements, under the heading "Part A - Rate Increase Applications -Major Utilities." The first sentence under this heading now reads: "Part A applies to utilities or divisions thereof with annual gross intra-State revenues of \$1 million or more." Staff proposes to add the following parenthetical language at the end of the sentence: "(at the time of filing)." The second paragraph under this heading now reads:

Based on 1978 intra-State revenue levels, the following Delaware utilities would be subject to Part A at the present time: Artesian Water Company
Chesapeake Utilities Corporation
Delmarva Power & Light Company (Electric Division)
Delmarva Power & Light Company (Gas Division)
Rollins Cablevue, Inc.
The Diamond State Telephone Company
Wilmington Suburban Water Corporation

Staff proposes to delete this paragraph. Finally, the General Information document includes a corresponding explanation of the applicability of Part "E" of the Minimum Filing Requirements, titled "Part E - Quarterly Reporting Requirements -Major Utilities." The first sentence under this heading now reads: "All major utilities subject to the jurisdiction of the Commission (those with annual gross intra-state revenues of \$1 million dollars or more shown in Part A of these instructions) are required to file quarterly information in accordance with the instructions contained in Part E." Staff proposes to revise this sentence to read: "All major utilities, except Bell Atlantic - Delaware, Inc., subject to the jurisdiction of the Commission (those with annual gross intra-state revenues of \$1 million dollars or more shown in Part A of these instructions) are required to file quarterly information in accordance with the instructions in Part E."

The Commission has authority to issue such rules, and to effect the proposed changes and additions, under 26 Del. C. §209(a).

The Commission hereby solicits written comments, suggestions, compilations of data, briefs or other written materials concerning Staff's proposed changes and additions to the Minimum Filing Requirements. Ten (10) copies of such materials shall be filed with the Commission at its

office located at 1560 S. DuPont Highway, Dover, Delaware 19901. All such materials shall be filed on or before May 1, 1999.

In addition, the Commission's duly appointed Hearing Examiner will conduct a public hearing concerning Staff's proposed changes and additions on a date to be determined. Interested persons may present comments, evidence, testimony and other materials at that public hearing.

The Minimum Filing Requirements, Staff's proposed changes and additions to the same, and the materials submitted in connection therewith will be available for public inspection and copying at the Commission's Dover office during normal business hours. The fee for copying is \$0.25 per page.

Any individual with disabilities who wishes to participate in these proceedings should contact the Commission to discuss any auxiliary aids or services needed to facilitate such review or participation. Such contact may be in person, by writing, telephonically, by use of the Telecommunications Relay Service, or otherwise. The Commission's toll-free telephone number is (800) 282-8574. Persons with questions concerning this application may contact the Commission's Acting Secretary, Karen J. Nickerson, by either Text Telephone ("TT") or by regular telephone at (302) 739-4333 or by e-mail at knickerson@state.de.us.

STATE OF DELAWARE
PUBLIC SERVICE COMMISSION

Minimum Filing Requirements For All Regulated Companies Subject to The Jurisdiction of the Commission

Minimum Filing Requirements
General Information

Background

Over the course of the past few years the number of applications filed with the Commission for an increase in utility rates, changes in cost adjustment clauses, and security certificates have increased dramatically. Heretofore utilities coming before the Commission filed varying amounts of data, primarily financial data, in support of its application and is seldom, if ever, in a uniform format. Frequently it is necessary for the Commission Staff to request substantial amounts of additional data through the interrogatory process in order to evaluate applications and/or an inordinate amount of technical hearing time is required to adduce needed data.

Furthermore, the Commission intends to more closely monitor the financial performance of Delaware utilities on a continuing basis and also is required to report certain information annually to Federal agencies and others which frequently requires surveys and/or telephone calls to the utilities to obtain such data.

Purpose of Minimum Filing Requirements

The Commission believes that the adoption of minimum filing requirements for all utilities is in the public interest. The primary purpose of prescribing minimum filing requirements is to expedite action on the many applications of utilities in the State. Action will be expedited if most of the basic supporting information is furnished at the time of the filing of an application rather than being supplied in response to interrogatories or otherwise brought out on a piecemeal basis in time-consuming technical hearings. Furthermore, the Commission believes it is desirable to standardize to the greatest extent possible the format for the presentation of financial and operating data to the Commission for ease of understanding and comprehension by all parties involved.

Compliance With Minimum Filing Requirements

It is intended that the required information be furnished in accordance with the format and instructions furnished herein. If exceptions are requested or proposed, they should be fully explained and justified. Exceptions may be granted if good cause is shown by the utility. The Commission Staff will review all filings for compliance with the format and instructions furnished herein and notify the utility within 30 days after the date of filing of any defects in compliance. The utility after such notification by the Commission Staff will then have 30 days to correct these defects.

General Rate Increase Defined – For the purpose of compliance with the Minimum Filing Requirements a general rate increase is generally defined as an application by a regulated company for an increase in rates which meets one or more of the following guidelines:

1. Any increase in base rates for the basic service rendered (other than cost adjustment clauses – Part C).
2. Any rate change which would increase jurisdictional operating revenues by more than 1%.
3. Any tariff change which would impact more than 1% of the existing customers but may have no overall revenue effect.

The following generally would not meet the criteria set forth above:

1. A tariff filing reflecting a change in text without a change in rate.
2. A tariff filing to establish a rate for a new service.
3. A tariff filing to change or increase a single non-recurring charge.
4. Any changes in rates for non-jurisdictional services.

Following is a brief description of the various sections of the Minimum Filing Requirements:

Part A – Rate Increase Applications – Major Utilities

Part A applies to utilities or divisions thereof with

annual gross intra-State revenues of \$1 million or more at the time of filing. When an application is made for a general rate increase, utilities with less than \$1 million of annual intra-State revenues but which would exceed \$1 million if the proposed rates were to become effective are subject to Part A of these regulations.

~~Based on 1978 intra-State revenue levels, the following Delaware utilities would be subject to Part A at the present time:~~

~~Artesian Water Company
Chesapeake Utilities Corporation
Delmarva Power & Light Company (Electric Division)
Delmarva Power & Light Company (Gas Division)
Rollins Cablevue, Inc.
The Diamond State Telephone Company
Wilmington Suburban Water Corporation~~

Part B – Rate Increase Applications – Small Utilities

Utilities with less than \$1 million of annual gross intra-State revenues are subject to Part B when an application is made for a general rate increase.

Part C – Cost Adjustment Clauses – All Utilities

Utilities which have or propose to include cost adjustment clauses in their tariff (such as the fuel adjustment clause) are subject to Part C. When an application is made to change the monthly adjustment charge or to include or delete such a clause from their tariff, no size criteria applies to the requirements of Part C.

Part D – Issuance of Securities – All Utilities

All utilities which are required to obtain Commission approval for the issuance of securities, such as common stock, preferred stock, or long-term debt, are required to comply with the requirements of Part D at the time application is made for issuance of securities.

Part E – Quarterly Reporting Requirements – Major Utilities

All major utilities, except Bell Atlantic-Delaware, Inc., subject to the jurisdiction of the Commission (those with annual gross intra-state revenues of \$1 million or more shown in Part A of these instructions) are required to file quarterly information in accordance with the instructions contained in Part E. Such utilities should file the required financial data relative to the twelve months ended each calendar quarter not later than 60 days following the reporting quarter. No quarterly reporting is required for any utility whose annual gross intra-state revenues are less than \$1 million.

Part F – Annual Reporting Requirements – Small Utilities

All small utilities subject to the jurisdiction of the Commission are required to file annually in accordance with the applicable section of part F. Such utilities are required to

file the required financial data relative to each calendar year not later than March 31 of the year following the reporting year.

STATE OF DELAWARE
PUBLIC SERVICE COMMISSION

MINIMUM FILING REQUIREMENTS - PART A

RATE INCREASE APPLICATION - MAJOR UTILITIES

I. Instructions

A. Prefiling Announcement

In order for the Commission to schedule its future workload in an efficient manner, every public utility shall file with the Commission a Notice of Intent to file a general rate increase application not less than two (2) months prior to filing its application or notice of increase. This notice must include, in addition to the statement of intent to file, the dates of proposed test year and test period. If a regulated company cancels, changes or delays a proposed general rate increase application previously reported to the Commission, an amended report must be filed promptly reflecting such change of plans.

B. Test Year and Test Periods

1. Test Year Defined. The test year is the actual historical period of time for which financial and operating data will be required. The test year data must include the actual “Per Books” results of operation for a 12-month period at the end of a reporting quarter. In addition, the twelve month period must end no ~~later more~~ later more than seven months prior to the filing of the application, but no sooner than one month after the final closing of the company’s books for the last month of the test year (post reversal of accrual entries), so that actual expenditures are reflected in the books of account. for increased rates. For example, if the actual results of operations for the 12-months ending March 31, 19xx, are used for the purpose of the test year, the application must be filed no sooner than April 30, 19xx but no later than October 31, 19xx.

2. Test Period Defined.

a. The test period consists of twelve consecutive months ending at the end of a reporting quarter utilized by the utility to support its request for relief. The test period may be the same as the test year or may include some of the months included in the test year and some months projected, such as six months “actual” and six months “projected”, but may not include more than nine months “projected”.

Updating Projected Test Periods.

b. If the filed test period is other than the test year (historic period), three additional months of projected total company data as filed shall be updated to actual total company data and provided to Staff and all parties within

sixty days after the close of the quarter, unless a later date for submitting this additional data is otherwise ordered by the Hearing Examiner.

C. Testimony and Exhibits.

Prepared direct testimony and supporting exhibits must be filed coincident with the filing of the applications for rate relief. This filing requirement shall not prohibit the utility from subsequently submitting further testimony and exhibits in a timely fashion as necessary or proper to address issues raised during investigation of the application filing; nor shall it (or B.2., above) prohibit the utility from also proffering an exhibit or exhibits in the form of a fully projected test period, (in addition to the test period described in I.B.2. above) provided (1) such period shall consist of twelve consecutive months ending not later than the end of the first year during which the proposed rates are to become effective; (2) it is supported by relevant testimony establishing a verifiable link between the test period defined in section B.2. and the projected test period; and (3) it is in format consistent with such test period.

Modifications in test period data occasioned by reasonably known and measurable changes in current or future rate base items, expenses (i.e., labor costs, tax expenses, insurance, etc.) or revenues may be offered in evidence by the utility at any time prior to its introduction of rebuttal evidence; provided, however, that if any party makes timely objection to the proffered modifications, such objections shall be promptly presented to the Hearing Examiner for a decision on due consideration of the parties' respective positions. For purposes of this Section I.C., an objection shall be timely if made within five (5) business days of the utility's proffer of modifications, up until the time the utility files its rebuttal testimony.

D. Due Date

The information required in subsequent sections of Part A is to be filed with the Commission at the time of the utility's application for an increase in rates.

E. Penalty for Non-Compliance

The Commission Staff will review all applications filings for compliance with the format and instructions furnished herein and notify the utility within 30 days after the date of filing of any deficiencies in compliance. The utility after such notification by the Commission Staff will then have 30 days to correct these deficiencies. If such deficiencies are not corrected, the Commission may reject a utility's rate filing for non-compliance with the Minimum Filing Requirements. Notwithstanding anything to the contrary in this Section I.E., if such defects are, in Staff's discretion, so numerous or serious as to materially impair Staff's timely review of the application, Staff may reject the same, thereby rendering it a nullity for all purposes (including without limitation the purposes contemplated under 26 Del. C. § 306); provided, however, that any such rejection by Staff may be challenged by the utility upon

timely request for reconsideration to the Commission. For purposes of this Section I.E., a request for reconsideration shall be timely if presented in writing to the Commission within five (5) business days of Staff's rejection of the application to which it relates. In the event a utility's challenge to Staff's rejection of an application under this Section I.E. is successful, the application shall be reinstated ab initio. Nothing in this Section I.E. shall prevent a utility from filing an application in draft form for Staff's informal review and approval without prejudice, such informal review and approval not to be unreasonably withheld by Staff. The requirements of this Section shall be in addition to, and not in place of, the requirements of Rules 6 and 8 of the Rules of Practice and Procedure of the Delaware Public Service Commission.

F. General Guidelines

1. Schedules shown are for illustrative purposes and may be modified to fit the individual company as long as the data intent is complied with. The burden of proof remains by Statute on the utility; therefore, if applicant utility believes that additional information is necessary to support its case or is proposing a position which requires a departure from the basic schedules, the utility should supplement the standard filing requirements as required to support its position.

2. The Commission may require utilities to supply information to supplement these minimum requirements during the course of the staff investigation of a specific case. The utility will be required to provide a duplicate copy of any such information requested by Staff to all intervenors to the proceeding as directed by the Commission. It is, however, the intent of the Commission in establishing minimum filing requirements to minimize the subsequent interrogatories and data requests.

3. All schedules submitted to the Commission shall be typed and shall contain the name of the planned witness who will testify to the accuracy of the data.

4. Supportive work papers must be made available for Staff inspection upon request subsequent to the filing.

5. If required data has been previously filed, it may be incorporated by reference.

6. All data, statements and exhibits filed pursuant to these minimum filing requirements shall be identified by paragraph designation for which they are submitted.

7. Trade secrets, proprietary or otherwise privileged information of the utility shall be made available pursuant the these Rules only upon a showing of good cause and pursuant to a protective order of the Commission.

8. The Commission will require 10 copies of the application for rate relief and the accompanying prepared testimony and supporting exhibits.

9. All test year data, test period and data offered for any other time period will be presented in a format

consistent with the uniform System of Accounts unless otherwise ordered by the Commission.

II. General Information

A. Description of Company - If Presently Not On File With Commission

1. Provide a corporate history including dates of incorporation, subsequent acquisitions and /or mergers.

2. Describe completely all relationships between applicant utility and its parent, subsidiaries and affiliates. Furnish a chart or charts which depict(s) the inter-company relationships.

3. Provide a system map indicating all cities and counties and other government subdivisions to which service is provided.

4. Provide a statement of reasons for the proposed increase including an explanation of the major factors which gave rise to the decision to seek a rate adjustment. Also include an estimate of the dollars associated with each such major factor such as "Wage Increase \$50,000" or "Increase in Chemical Expense \$100,000". A detailed reconciliation of each and every item is not required, just the principal items and an estimate of the dollar impact, to the extent possible.

5. Provide a statement identifying any significant element of the application which to the applicant's knowledge represents a departure from prior decisions of the Commission and the associated revenue requirement. This would include proposed accounting changes or accounting changes that have occurred since the last rate Order.

B. Plant Capacity and Service

1. Electric Utilities: Provide an explanation of the system's operation and state plans for any future expansion or modification. Provide schedules relating to generating capacity as follows:

a. A schedule showing latest projections of capacity additions and retirements for the next ten years by unit of generation.

b. A schedule showing reserve capacity at the time of the projected daily system peak for the next ten years and indicate growth rate incorporated in arriving at such peak load projections.

2. Gas Utilities: Provide an explanation of the system's operation, and state plans for any future expansion or modification of facilities. Describe how respondent obtains gas supply as follows:

a. Explain how respondent stores or manufactures gas.

b. Describe the potential for emergency purchases of gas.

c. Provide the amount of gas in MCF supplied by each of various suppliers in the test year.

d. Provide plans for future gas supply.

e. Indicate any existing or anticipated curtailments and explain reasons for same.

3. Telephone: State all major current service objectives and indicate any areas where present service does not meet current internal service objectives. Provide schedules as follows:

a. Provide a schedule showing each central office, the type of equipment, i.e., SXS, ESS, etc., installed capacity in lines, equivalent lines in use, and estimated date of replacement.

4. Water: Provide a description of all major utility property including an explanation of the system's operation and all plans for any major future expansions or modifications of facilities in the next five years. Provide a system map showing pumping stations, purification, and/or filter plants, reservoirs, wells, springs, booster stations, standpipes, distribution mains and transmission mains. A description of the present and projected supply of water should also be provided.

5. Cable Television: Provide a description of all major system property. Provide a system map showing the location of antennas, headend, earth station and major cable distribution plant. State plans for future system expansion including miles of cable to be added, number of homes passed, expected saturation levels (including basic and premium services) for the next five years.

C. Amount and Percent of Increases

1. A schedule showing the dollar amount of the increase by category of service, customer class, or type of service rendered as appropriate and also showing the percent increase over present revenues in the same categories.

III. Financial Results of Operations

A. Financial Summary

1. An overall financial summary must be furnished on Schedule No. 1. The "rate base" calculation for the purposes of the test year should reflect book figures. The extent additional "calculated" amounts are referenced, e.g., Cash Working Capital, these amounts should be consistent with the methodology employed for the test period rate base calculation.

2. Jurisdictional versus Total Company Results. In the event the total company results are different from the results applicable to the Delaware jurisdiction, then two schedules shall be submitted and designated as schedule 1A, covering the entire company, and Schedule 1B, covering the Delaware jurisdictional results.

B. Supporting Documents

1. The following documents must be filed with the application if presently not on file with the Commission:

a. Annual Report to Stockholders for applicant, its subsidiaries and its parent for last five years.

b. Annual Reports to Federal Regulatory jurisdictions, such as FERC, REA, FCC, etc., as applicable.

c. SEC 10K Reports for last five years and most recent SEC 10Q Report for applicant or parent. If both

applicant and parent have public stockholders, submit for both.

d. Most recent proxy statement for applicant or parent. If both applicant and parent have public stockholders, then submit for both.

e. All securities prospectuses for applicant and parent for most recent five year period.

IV. Rate Base

A. Rate Base Defined

1. 26 Del. C. ' 102(3) defines Rate Base as follows:

“(3) “Rate base” means:

a. The original cost of all used and useful utility plant and intangible assets either to the first person who committed said plant or assets to public use or, at the option of the Commission, the first recorded book cost of said plant or assets; less;

b. Related accumulated depreciation and amortization; less;

c. The actual amount received and unrefunded as customer advances or contributions in aid of construction of utility plant, and less;

d. Any accumulated deferred and unamortized income taxes and investment credits related to plant included in paragraph a. above, plus;

e. Accumulated depreciation of customer advances and contributions in and of construction related to plant included in paragraph a. above and plus;

f. Materials and supplies necessary to the conduct of the business and investor supplied cash working capital, and plus;

g. Any other element of property which, in the judgment of the Commission, is necessary to the effective operation of utility.”

B. Jurisdictional Rate Base Summary

1. Submit a jurisdictional rate base summary on Schedule 2.

2. Indicate on schedule 2 in the column titled “26 Del. C. ' 102(3) Letter Ref.” the appropriate letter reference designating the Section of the Code upon which the applicant relies for the inclusion of each item in Rate Base as set forth in IV A. 1. above.

C. Used and Useful Utility Plant

1. Submit schedules showing plant in service by major plant categories for total company, as allocated to this jurisdiction with adjustments, if any are proposed. This data shall be submitted as Schedule 2A.

2. Where rate base is computed using a twelve-month average, this data will be needed for the end of each month included in the calculation.

3. Where rate base is allocated among jurisdictions, indicate the basis for the allocation factors

used.

4. Adjustments proposed must be fully explained.

D. Intangible Assets

1. If intangible assets are claimed in rate base, complete Schedule No. 2B.

2. Provide a statement of the specific reasons for inclusion in rate base.

E. Accumulated Depreciation and Amortization

1. Submit schedules showing accumulated reserve for depreciation by major plant categories on Schedule No. 2C if records permit.

2. When rate base is computed using a twelve-month average, this data will be needed for the end of each month included in the calculation.

3. When rate base is allocated among jurisdictions, indicate the basis for the allocation factors used.

4. Adjustments proposed must be fully explained.

F. Unrefunded Customer Advances and/or Contributions in Aid of Construction

1. Provide a schedule showing the actual amounts at the beginning and end of the test year and test period.

2. If estimated amounts are included, explain the basis of such estimate.

G. Accumulated Deferred Income Taxes and Unamortized Investment Credit

1. Provide a complete analysis of all deferred income taxes on Schedule No. 2D. Provide one schedule each for Federal Income Taxes and an additional schedule for State Income Taxes.

2. The specific deferred income taxes shown on Schedule 2D lists some but not necessarily all deferred income taxes that may be applicable to a particular utility, hence the accounts shown should be modified as appropriate.

3. Provide a statement which fully explains the utility’s deferred tax accounting practices, i.e., the basis upon which annual tax deferrals are determined and the basis upon which deferred tax reserves are charged or credited to current period.

4. Provide the amount of amortization of Investment Tax Credit and/or Job Development Credit included as a reduction of Income Tax Expense in the test year.

5. Provide the amount of ITC or JDC available but not utilized as of the end of the test year.

H. Accumulated Depreciation of Customer Advances and Contributions in Aid of Construction

1. Provide a statement which describes the accounting procedures used to segregate depreciation reserves between investor provided and contributed property.

2. Provide a Schedule showing the actual amounts at the beginning and end of the test year and test period.

3. If estimated amounts are included, explain the basis of such estimates.

I. Material and Supplies

1. If a claim is made for Material and Supplies, provide a Schedule showing the balance in each of the major groupings of material and supplies for each of the twelve months preceding the test year, for the test year and for the test period.

2. If estimated balances are included, explain the basis for such estimates.

3. Explain any unusual fluctuation for the period of time for which monthly balances are included.

J. Investor Supplied Cash Working Capital

1. Complete Schedule 2E showing the components of investor supplied cash working capital included in the rate base claim.

2. Other items. If any other items are included in the working capital claim, provide a full and complete explanation in support thereof including the calculation which demonstrates the amounts so included as investor-provided funds with reference to 26 Del. C. ' 102(3).

K. Other Element of Property

1. Schedule 2F shall be completed to provide the amount, description and justification for inclusion in rate base.

2. Provide a statement of the specific reasons for inclusion in rate base with reference to 26 Del. C. ' 102(3).

3. If a rate base claim is made for property under construction but not used and useful in whole or in part during the test period, provide a schedule showing each major project and indicate whether or not the project will add capacity or replace existing capacity or both. If major units of capacity are being added, show in calculation the additional revenue expected to be realized. If major units of capacity are being retired, indicate the type of property, its original cost, accumulated reserves for depreciation and the expected date of retirement from service.

V. Net Operating Income

A. Jurisdictional Summary of Net Operating Income

1. Submit a jurisdictional summary of net operating income on Schedule No. 3 for the test year on an actual basis and for the test period.

B. Revenues

1. Submit a schedule showing operating revenues by major revenue category, including other operating revenues and uncollectible operating revenues, for the test year, and for the test period. This data shall be submitted on Schedule 3A.

2. Electric, Gas and Water Utilities. For each tariff rate, submit a schedule showing the volume of tariff unit sales for two years preceding the test year, the test year, and the test period. For the purpose of this section, the volume of tariff unit sales means:

Electric - KWH sold

Gas - MCF sold

Water - Gallons sold and hydrant fees.

3. Provide a schedule showing the dollar revenues associated with the unit volume shown in Section V.B.2. Electric and gas utilities should show Fuel and Gas Adjustment revenues separately by customer class.

4. Telephone and Cable Television Companies. For each tariff rate revision, submit a schedule showing the number of units in service consistent with the test year and/or the test period. Opposite the units in service show the present and proposed rates for service and the present and proposed revenues.

5. If test period volumes of sales or tariff units are based on an estimate or forecast, provide a full and complete explanation of the basis and assumptions underlying such forecast, including weather assumptions and any price elasticity effects.

6. Adjustments to test period revenues should be fully detailed and explained including all mathematical calculations related thereto. This information should follow Schedule 3A with appropriate adjustments referenced to the amounts shown on Schedule 3A.

C. Operating Expenses

1. Submit a schedule showing operating expenses, by major expense category for the test year and for the test period. This data shall be submitted on Schedule 3B.

2. Adjustments to test period operating expenses should be fully detailed and explained including all mathematical calculations related thereto. This information should follow Schedule 3B with appropriate adjustments referenced to the adjustment amounts shown on Schedule 3B.

3. Copies of invoices should be attached for raw materials purchased at prices higher than those experienced during the test year and an adjustment is made where a future test period is not used.

4. Submit a Schedule 3C showing test year and test period payroll and employee benefit experience. The expense portion of the total payroll costs should equal the payroll and benefit expense included in the various categories of Schedule 3B.

5. Complete Schedule 3D for the five highest paid executives showing the most recently approved base salary

and the value of other benefits on an annual basis using the most recent actual data available.

6. Provide a statement of procedures used for determining depreciation rates utilized to compute the depreciation expense claim (Schedule 3B), including a statement of the depreciation rates either approved by or implicit in the rate determination made by the Commission in the last rate proceeding. Provide a schedule showing the calculation of claimed depreciation expense by major plant categories (if not provided in the detailed supporting adjustments in Item C(2)) if available.

7. Provide a copy of the most recent depreciation study that is relied on to support the depreciation rates used for the purpose of Schedule 3B if a change in depreciation rates is proposed.

8. Electric utilities only shall submit the following for the most recent actual twelve month period preceding the test year and for the test year and test period.

a. A schedule showing the KWH generated by generation unit along with the applicable fuel, other and maintenance expenses.

b. A detailed analysis of power purchased from others including KWH purchased and cost.

c. A detailed analysis of interchange power transactions setting forth separately purchased power and power sold and the dollars associated with each.

d. A schedule showing the details of any temporary capacity sales or purchases.

e. If deferred fuel cost policy is followed, describe the procedure and state manner in which amount of deferred fuel cost on balance sheet at end of most recent twelve month period reported was determined and state in which month such fuel expense was incurred. Provide amount included in test year expense which is derived from deferred fuel cost.

f. Submit a schedule showing fuel cost in excess of base compared with fuel cost recovery by months for the most recent twelve month period and for the test year.

g. Provide a reconciliation of total KWH generated, purchased or required through interchange with total KWH sold for resale, retail, interchange, interdepartment use, system losses, etc.

9. Furnish test year summary of sales promotion, advertising and miscellaneous sales expenses on Schedule 3E. Classify advertising expense by purpose, i.e., product or service promotion, service aids, personnel and institutional.

10. Furnish a schedule of all test year contributions for educational or other charitable purposes which are included in the operating expense totals which applicant seeks to recover from rate payers on Schedule 3F.

11. Submit a statement showing amounts spent in test year and test period on influencing legislation both at the state and national levels which applicant seeks to recover from ratepayer. Where this activity is less than full time,

furnish the basis for allocations of payroll and related costs.

12. Furnish a listing of all test year and test period dues paid or to be paid by the company for social and service clubs which applicant seeks to recover from ratepayer. Include costs paid directly by company for any executive or employee recreational or "conference" facilities. Complete Schedule 3G.

13. Provide an analysis of actual and project rate case expenses on Schedule 3H.

14. Provide a schedule by major expense category of all the amounts charged or credited from each affiliated company for the test year and the test period. Provide the basis of allocation or basis of charging. State whether there has been a change in allocation method or pricing formula since the last general rate case and, finally, describe the services or products provided in Delaware and the benefits of such arrangements.

15. Operating Taxes.

a. Complete Schedule 3I to agree with the amount shown on Schedule 3, line 12, for the test year and for the test period.

b. Complete Schedules 3J and 3K in support of the amount of current and deferred state and federal income tax claimed by the utility for ratemaking purposes as reflected in total on Schedule 3I.

c. Provide a statement of the utility's income tax accounting practice with respect to timing differences related to liberalized depreciation, the Asset Depreciation Range System, accelerated amortization and cost of removal and all other timing differences such as employee benefits and taxes capitalized.

d. Provide a statement of the utility's accounting practice with respect to Investment Tax Credits (ITC) and Job Development Credits (JDC) including a copy of all elections filed with the Internal Revenue Service related thereto.

e. Utilities which "normalize" all or any portion of ITC or JDC must complete Schedule 3L.

f. If the utility is part of an affiliated group of companies and its federal income tax return is filed as part of a consolidated federal income tax return, please provide a statement of the procedure used to allocate the consolidated federal income tax liability, the benefits of the consolidated return, and how those benefits are reflected on the utility's books.

g. Complete Schedule 3M for all other Federal, State and local taxes for the test year and for the test period.

D. Allowance for Funds Used During Construction (AFUDC)

1. Provide a schedule showing the following:

a. The AFUDC rate employed by the Commission in the last rate Decision.

b. The AFUDC rate used in each month from

the end of the test period in the last case through the end of the test year and test period.

2. Provide a statement which describes the methodology employed to complete the AFUDC rates for all periods of time specified in Item 1. above.

3. Provide a statement which fully describes how the AFUDC is applied in the accounting procedures.

E. Other Income

1. Provide a schedule which describes the nature and amount of each item of other income for the test year and test period.

VI. Rate of Return

A. Summary of Claimed Rate of Return

1. A summary report of the proposed fair rate of return shall be supplied on Schedule 4 which contains a weighted cost of capital analysis.

2. The Company's actual and estimated capital structure shall be submitted on Schedule 4A for the end of the test year and test period. A capital structure which is based on a time period beyond the test year should be accompanied by a statement of projected new issues and retirements.

B. Embedded Cost of Debt

1. Describe how short-term debt is allocated between rate base and non-rate base CWIP. Describe compensating balance requirements of credit line banks and supply documentation in support of such requirements. If the compensating balance requirements exceed the cash and float included in working capital claim, give a statement explaining the excess.

2. Complete Schedules 4B and 4C to show the composition of the embedded cost of long-term debt or provide the information in some other manner as the Company would normally develop such costs. Use the debt costs most appropriate to the capital structure adopted, e.g., if a test year end capital structure is used, use a test year end embedded cost analysis.

3. Describe long-term debt reacquisitions by company and parent company, if applicable, as follows: reacquisitions by issue by year; total gain by acquisitions by year; accounting of gain for income tax and book purposes.

4. In the event that applicant believes the true or economic cost of debt exceeds the nominal costs shown in Schedule 4C because of convertible features, sale with warrants or for any other reason, a full statement of the basis for this claim should be provided.

C. Embedded Cost of Preferred Stock

1. Complete Schedules 4D & E to show the cost of preferred stock. Use the preferred stock cost rates most appropriate to the capital structure adopted for cost of capital computations, i.e., if a test year end capital structure is used, use a test year end embedded cost analysis.

2. Describe preferred stock reacquisitions by company and by parent company, if applicable, as follows: reacquisitions by issue by year; total gain by acquisitions by year; accounting for gain for income tax and book for financial reporting purposes.

3. In the event that applicant claims a true or economic cost higher than the nominal rate shown in Schedule 4E due to convertibility or for any other reason, a full statement of the basis for this claim shall be furnished.

D. Common Equity Cost Rates

1. Provide data on all common equity public stock offerings (including registered secondary offerings) for the current year and for the previous five calendar years. Use Schedule form 4F.

2. Provide a summary statement of all stock dividends, splits or par value changes in last five years.

3. Provide comparative financial data on Schedules 4G and 4H for the test period without rate increase for the test year, for the most recent calendar year and for the next most recent calendar year.

4. Provide complete analysis and support of claimed common equity return rate.

5. State what coverage requirements or capital structure ratios are required in the most restrictive of applicable indentures and how these measures are to be computed.

E. Parent-Subsidiary Relationship

1. Where applicant is a subsidiary of a parent corporation, the data provided for in Schedules 4A, B, C and D shall be provided for the parent company or on a consolidated basis as well as for applicant.

2. If applicant proposes to utilize the capital structure or capital costs of the parent company, or provide such data on a consolidated basis, the reasons for this claim must be fully stated and supported.

VII. Gross Revenue Conversion Factor

A. Provide a calculation on Schedule 5 to show how many dollars of gross revenue increase are required to realize \$1.00 of net return increase.

VIII. Rates and Tariffs

A. Provide a copy of proposed Tariff Schedules.

B. By appropriate marginal designation, in the proposed Tariff Schedules, classify proposed changes in accordance with code shown below:

C Changed Regulation

D Discontinued Rate or Regulation

I Increased Rate

N New Rate or Regulation

R Reduced Rate

S Reissued Matter

T Change in text without change in rate or regulation

C. Provide rationale for proposed tariff changes (other than across the board percentage increases).

D. Provide a cost of service study, showing rates of return by customer class or type of service rendered for the test year and for the test period, if available, at present and proposed rates.

E. For test period only, provide schedule, by customer classification or category of service, showing present revenues, pro forma adjustments, proposed increases and percent of increase.

F. Provide detailed calculation substantiating the adjustment for additional revenues from annualizing changes in customers and growth in use per customer during test year if applicable.

Minimum Filing Requirements

Part A

Rate Increase Applications - Major Utilities

Example Schedules to be Completed

(The example applications are not reproduced here. For copies of the example please contact the Public Service Commission or the Registrar of Regulations.)

STATE OF DELAWARE

PUBLIC SERVICE COMMISSION

MINIMUM FILING REQUIREMENTS - PART B

RATE INCREASE APPLICATION - SMALL UTILITIES

I. Instructions

A. Prefiling Announcement

In order for the Commission to schedule its future workload in an efficient manner, every public utility shall file with the Commission a Notice of Intent to file a general rate increase application not less than two (2) months prior to filing its application or notice of increase. If a regulated company cancels, changes or delays a proposed general rate increase application previously reported to the Commission, an amended report must be filed promptly reflecting such change of plans.

B. Test Year and Test Periods

1. Test Year Defined. The test year is the actual historical period of time for which operating and financial data will be required. The test year must include the actual "Per Books" results of operation for a 12-twelve month period at the end of a reporting quarter ending no more than four months prior to the filing of the application for increased rates. In addition, the twelve month period must end no later than seven months prior to the filing of the

application, but no sooner than one month after the final closing of the company's books for the last month of the test year (post reversal of accrual entries), so that actual expenditures are reflected in the books of account. For example, if the actual results of operation for the 12-twelve months ending March ~~December~~ 31, 19xx, are used for the purpose of the test year, the application must be filed no sooner than April 30, 19xx but no later than April ~~April~~ October ~~30, 19xx of the following year.~~

2. Test Period Defined.

a. The test period consists of twelve consecutive months ending at the end of a reporting quarter utilized by the utility to support is request for relief. The test period may be the same as the test year or may include some of the months included in the test year and some months projected, such as six months "actual" and six months "projected", but may not include more than nine months "projected".

Updating Projected Test Periods.

b. If the filed test period is other than the test year (historic period), three additional months of projected total company data as filed shall be updated to actual total company data and proved to Staff and all parties within sixty days after the close of the quarter, unless a later data for submitting this additional data is otherwise ordered by the Hearing Examiner. ~~It is suggested but not required that the test year selected correspond with the company's financial year.~~

3. ~~The test year may be adjusted to reflect changes that are known and measurable at the time of the filing.~~

C. Due Date

The information required in subsequent sections of Part B is to be filed with the Commission at the time of the utility's application for an increase in rates.

D. Testimony and Exhibits

If the utility plans to submit prepared testimony and exhibits, they must be filed coincident with the filing of the application for rate relief.

E. Penalty for Non-Compliance

The Commission Staff will review all applications filings for compliance with the format and instructions furnished herein and notify the utility within 30 days after the date of application filing of any deficiencies in compliance. The utility, after such notification by the Commission Staff, will then have 30 days to correct these deficiencies. If such deficiencies are not corrected, the Commission may reject a utility's rate filing for non-compliance with the Minimum Filing Requirements. Notwithstanding anything to the contrary in this Section I.E., if such defects are, in Staff's discretion, so number or serious as to materially impair Staff's timely review of the application, Staff may reject the same, thereby rendering it a nullity for all purposes (including without limitation the

purposes contemplated under 26 Del. C. § 306); provided, however, that any such rejection by Staff may be challenged by the utility upon timely request for reconsideration to the Commission. For purposes of this Section I.E., a request for reconsideration shall be timely if presented in writing to the Commission within five (5) business days of Staff's rejection of the application to which it relates. In the event a utility's challenge to Staff's rejection of an application under this Section I.E. is successful, the application shall be reinstated ab initio. Nothing in this Section I.E. shall prevent a utility from filing an application in draft form for Staff's informal review and approval without prejudice, such informal review and approval not to be unreasonably withheld by Staff. The requirements of this Section shall be in addition to, and not in place of, the requirements of Rules 6 and 8 of the Rules of Practice and Procedure of the Delaware Public Service Commission.

F. General Guidelines

1. Schedules shown are for illustrative purposes and may be modified to fit the individual company as long as the data intent is complied with. The burden of proof remains by Statute on the utility; therefore, if applicant utility believes that additional information is necessary to support its case or is proposing a position which requires a departure from the basic schedules, the utility should supplement the standard filing requirements as required to support its position.

2. The Commission may require utilities to supply information to supplement these minimum requirements during the course of the Staff investigation of a specific case. The utility will be required to provide a duplicate copy of any such information requested by Staff to all intervenors to the proceeding as directed by the Commission. It is, however, the intent of the Commission in establishing minimum filing requirements to minimize the subsequent interrogatories and data requests.

3. All schedules submitted to the Commission shall be typed and shall contain the name of the person responsible for the preparation of the data.

4. Supportive work papers must be made available for Staff inspection upon request subsequent to the filing.

5. If required data has been previously filed, it may be incorporated by reference.

6. All data, statements and exhibits filed pursuant to these minimum filing requirements shall be identified by paragraph designation for which they are submitted.

II. General Information

A. Description of Company (If presently not on file with Commission or if it has been submitted in a prior proceeding, it can be incorporated by reference and only include updates)

1. Provide a corporate history including dates of incorporation, subsequent acquisitions and/or mergers.

2. Describe completely the ownership of the utility and all relationships between applicant utility and its parent, subsidiaries, and affiliates. Furnish a chart or charts which depict(s) the intercompany relationships.

3. Provide a system map indicating all cities and counties and other government subdivisions to which service is provided.

4. Provide a statement of reasons for the proposed increase including an explanation of the major factors which gave rise to the decision to seek a rate adjustment. Also include an estimate of the dollars associated with each such major factor.

III. Financial Results of Operations

A. An overall financial summary must be provided on Schedule 1. The information needed to complete Schedule 1 is obtained from subsequent Schedules.

B. Supporting Documents - Submit internally prepared financial statements or those prepared by an outside accountant or CPA for the most recent twelve month period available to correspond with the historical test year selected by the utility.

IV. Rate Base

A. Rate Base Defined

1. 26 Del. C. ' 102 (3) defines Rate Base as follows:

“(3) “Rate base” means:

a. The original cost of all used and useful utility plant and intangible assets either to the first person who committed said plant or assets to public use or, at the option of the Commission, the first recorded book cost of said plant or assets; less;

b. Related accumulated depreciation and amortization; less;

c. The actual amount received and unrefunded as customer advances or contributions in aid of construction or utility plant, and less;

d. Any accumulated deferred and unamortized income taxes and investment credits related to plant included in paragraph a. above, plus;

e. Accumulated depreciation of customer advances and contributions in and of construction related to plant included in paragraph a. above, and plus;

f. Materials and supplies necessary to the conduct of the business and investor supplied cash working capital, and plus;

g. Any other element of property which, in the judgment of the Commission, is necessary to the effective operation of utility.”

B. Rate Base Summary

1. A Rate Base Summary must be provided on Schedule 2. The rate base elements set forth on Schedule 2 correspond with the definition of Rate Base set forth on IV

above. Utilities are not required to use all of these elements or may wish to include others not shown under the category of "Other Elements of Property" (line 10).

2. Indicate on Schedule 2 in the column titled "26 Del. C. ' 102 (3) Letter Ref." the appropriate letter reference designating the Section of the Code upon which the applicant relies for the inclusion of each item in Rate Base as set forth in Item IV. B. 1. above.

3. The column on Schedule 2 "Actual at Test Year End" means "per books" with the exception of Investor Supplied Cash Working Capital, line 8. For "Actual Test Year End" Investor Supplied Cash Working Capital, use the same procedures used for developing "claimed rate base" but applied to test year actual results of operations.

4. Proposed adjustments to or computations of rate base elements (i.e., Investor Supplied Cash Working Capital) must be fully explained on Schedule 2A.

5. Detailed description of Utility Plant in Service and related depreciation reserves must be provided on Schedule 2B. The totals must agree with the column titled "Actual Test Year End" on Schedule 2.

C. Please provide a narrative statement covering the following points for monopoly services not subject to competition:

1. Please explain any physical deficiencies in the present property and an estimate of the cost to correct such deficiencies. If plans are underway, disclose the nature of such plans.

2. Provide an estimate of customer or usage growth for two years following the end of the test year and how the utility plans to meet such growth and provide the estimated cost of providing additional facilities to meet expected growth.

3. Gas and water utilities must provide a narrative description of their respective sources of supply.

V. Net Operating Income Summary

A. A summary of net operating income must be provided on Schedule 3.

1. The "Actual for Test Year" column means actual "per books" revenue and expense for the historical test year selected without exception.

2. Operating revenues and expenses should be set forth by type of service or customer class and operating expenses by type. Supplemental schedules may be used for this purpose so long as they conform to the format of Schedule 3.

3. Proposed adjustments to test year operating revenues or expense must be fully explained on schedule 3A. Supporting documentation should be provided when available such as formal wage agreements, copies of invoices reflecting higher prices for materials purchased, tax notices, etc.

4. A calculation of Federal and State Income

Taxes must be submitted on Schedule 3B.

5. Provide a narrative explanation of any Schedule "M" items (items included in determining Federal and State Income Taxes not included in Income Available for Return e.g. capitalized portion of Social Security taxes and relief and pensions (line 8), depreciation on IDC, S/S taxes and R/P capitalized (line 6), also any surplus items affecting taxable income not included in line 1) and if deferred taxes are provided on the utility's books, explain the nature of the deferred taxes and the amounts related to the test year periods as set forth on Schedule 3B.

6. Provide a calculation of present annual revenues based on test year volume of sales at present tariff rates and also showing the revenues expected to be derived from proposed rates on Schedule 3C. Utilities which have "block" rates are to base this calculation on a bill analysis for the test year selected.

B. Provide a narrative statement covering cost increases expected to be incurred over a two-year period following the end of the test year, but not included in the operating expense claim for monopoly services not subject to competition.

VI. Cost of Capital Summary

A. A Cost of Capital Summary must be provided on Schedule 4 based on actual test year data and on the basis of the utility's fair rate of return claim.

1. If the fair rate of return claim is based on a capital structure different from test year actual, explain the reasons for such differences. If the difference is related to planned new financings or refinancing, please provide the detail with respect to such planned financing including the amount, cost rate, terms, etc.

2. Provide an explanation, with supporting calculations, of the methodology used to arrive at the cost rate for common equity. If a rate of return study was performed, provide a copy of such study.

3. Provide a detailed calculation of the claimed cost of debt and preferred stock on Schedules 4A and 4B, respectively.

Minimum Filing Requirements

Part B

Rate Increase Applications - Small Utilities

Example Schedules to be Completed

(The example applications are not reproduced here. For copies of the example applications please contact the Public Service Commission or the Registrar of Regulations.)

Symbol Key

Roman type indicates the text existing prior to the regulation being promulgated. Underlined text indicates new text added at the time of the proposed action. Language which is ~~stricken~~ through indicates text being deleted. [**Bracketed Bold language**] indicates text added at the time the final order was issued. [~~Bracketed stricken through~~] indicates language deleted at the time the final order was issued.

Final Regulations

The opportunity for public comment shall be held open for a minimum of 30 days after the proposal is published in the Register of Regulations. At the conclusion of all hearings and after receipt within the time allowed of all written materials, upon all the testimonial and written evidence and information submitted, together with summaries of the evidence and information by subordinates, the agency shall determine whether a regulation should be adopted, amended or repealed and shall issue its conclusion in an order which shall include: (1) A brief summary of the evidence and information submitted; (2) A brief summary of its findings of fact with respect to the evidence and information, except where a rule of procedure is being adopted or amended; (3) A decision to adopt, amend or repeal a regulation or to take no action and the decision shall be supported by its findings on the evidence and information received; (4) The exact text and citation of such regulation adopted, amended or repealed; (5) The effective date of the order; (6) Any other findings or conclusions required by the law under which the agency has authority to act; and (7) The signature of at least a quorum of the agency members.

The effective date of an order which adopts, amends or repeals a regulation shall be not less than 10 days from the date the order adopting, amending or repealing a regulation has been published in its final form in the Register of Regulations, unless such adoption, amendment or repeal qualifies as an emergency under §10119.

**DEPARTMENT OF
ADMINISTRATIVE SERVICES
DIVISION OF PROFESSIONAL REGULATION
BOARD OF PLUMBING EXAMINERS**
Statutory Authority: 24 Delaware Code
Section 1805(2) (24 **Del.C.** 1805(2))

**THE BOARD OF PLUMBING EXAMINERS
OF THE STATE OF DELAWARE**

ORDER ADOPTING RULES AND REGULATIONS

AND NOW, this 2nd day of March, 1999, in accordance with 29 Del.C. § 10118 and for the reasons stated hereinafter, the Board of Plumbing Examiners of the State of Delaware (hereinafter "the Board") enters this Order adopting Rules and Regulations.

Nature of the Proceedings

The Board, as presently organized,¹ was created in July 1997. See 24 *Del.C.* Chapter 18. Pursuant to its authority under 24 *Del.C.* §1805(2), the Board has proposed to adopt comprehensive rules and regulations addressing its

1. The Board was previously organized under the Department of Health and Social Services.

organization, operations and rules of procedure, the process and requirements for licensure, and certain standards of conduct applicable to licensed plumbers. The public hearing on the Board's proposal was scheduled for February 2, 1999. Notice of the hearing was published in the Delaware Register of Regulations at 2:7 *Del.R.* 1065-1068 (January 1, 1999) and in two Delaware newspapers of general circulation, all in accordance with 29 *Del. C.* § 10115. The public hearing was held as noticed on February 2, 1999.

Evidence and Information Submitted at Public Hearing

The Board received no written comments in response to the notice of its intention to adopt Rules and Regulations. The only comment received at the public hearing was from Ed Hallock, of the Division of Public Health of the State of Delaware, complimenting the Board on its work in preparing the proposed rules. Other than Mr. Hallock, no member of the public attended the February 2, 1999 public hearing."

Findings of Fact and Conclusions

As outlined in the preceding section, the public was given the required notice of the Board's intention to adopt regulations and was offered an adequate opportunity to provide the Board with comments on the proposed rules. The Board further concludes that its consideration of the proposed Rules and Regulations is within the Board's general authority to promulgate regulations under 24 *Del.C.* §

1805(2). Additional, specific statutory authority for each regulation is cited in the rule itself.

The Board finds that Section 1, "General Provisions," and Section 2, "Practices and Procedure," of the proposed rules adequately and accurately describe the Board's organization, operation and general rules of procedure.¹ As proposed, Sections I and 2 put the public, and anyone appearing before the Board, on general notice of how the Board does business.

In Section 3, "Pre-Examination Requirements for Licensure," the Board has proposed definitions of the statutory terms "supervision" and "performed plumbing services."² The Board finds that these definitions provide guidance, to both licensees and applicants for licensure, about the appropriate way to acquire experience in the plumbing trade. In addition, Section 3 outlines the application process and the requirements for taking the plumbing examination. The Board concludes that these provisions will allow the Board to efficiently process applications consistent with the statutory standards for licensure and without unduly burdening applicants.

Proposed Section 4, "Examination and Licensure," designates the examination required for licensure in Delaware, establishes the passing score for the examination, and addresses when the examination will be offered and how it may be retaken. The Board notes that the selected test, the "NAI-BLOCK Plumbing Examination," is prepared and administered by a national testing agency used by several other state licensing authorities, and has been developed in consultation with the Board. The passing score is consistent with that used by other licensing boards and, together with the provisions for retesting, advances the goals of practitioner competency and fairness to applicants.

In Section 5, "Licensure by Reciprocity," the Board proposes procedures for applicants seeking reciprocity consideration and establishes the standards for determining whether another State's licensing requirements are "equivalent" to those of Delaware.³ The Board concludes that the application process for reciprocity candidates is comparable to that imposed on applicants for direct licensure in Section 4. In addition, the equivalency standards developed in Section 5.4 will help assure consistency and fairness in assessing reciprocity applications.

Section 6, "Disciplinary Proceedings," confirms that disciplinary hearings will be conducted according to the Delaware *Administrative Procedures Act* and establishes

1. The Board notes that these proposed Sections were likely exempt from the public comment process. See 29 *Del. C.* § 10113(b)(1) and (2). The Board makes specific findings with respect to them in the interest of completeness

2. See 24 *Del. C.* § 1806.

3. See 24 *Del. C.* § 1807.

pre-hearing procedures for continuances and consent agreements. This Section also provides several examples of conduct that the Board considers illegal, incompetent or negligent. The Board concludes that the proposed rule, while not establishing a complete code of conduct, does alert licensees and the public to the *types* of behavior that are likely to result in disciplinary action. As a consequence, Section 6 both educates consumers and helps licensees conform their conduct to the listed standards.

In summary, the Board finds that the proposed Rules and Regulations are necessary for the enforcement of 24 *Del. C.* Chapter 18, and for the full and effective performance of the Board's duties under that Chapter. The Board also finds that adopting the regulations as proposed is in the best interest of the citizens of the State of Delaware and is necessary to protect the general public, particularly those people using plumbing services. The Board, therefore, adopts the proposed Rules and Regulations in their entirety, as set forth in Exhibit "A" attached hereto.

ORDER

NOW, THEREFORE, by unanimous vote of a quorum of the Board of Plumbing Examiners, IT IS HEREBY ORDERED THAT:

1. Proposed Rules and Regulations, Sections I through 6, are *approved and adopted* in the exact text attached hereto as Exhibit "A".
2. The effective date of this Order is ten (10) days from the date of its publication in the Delaware *Register of Regulations*, pursuant to 29 *Del. C.* §10118(e).
3. The Board reserves the jurisdiction and authority to issue such other and further orders in this matter as may be necessary or proper.

BY ORDER OF THE BOARD OF PLUMBING
EXAMINERS

(as authenticated by a quorum of the Board):

Bruce F. Collins, Chairperson
Robert R. Frederick, Jr., Vice-Chairperson
Lawrence R. Carson, Secretary
Willa Gaines, Public Member
Lynn Mangene, Public Member
Richard B. Millar, Jr., Professional Member
Wayne R. Reed, Professional Member
Carey G. Saddler, III, Professional Member
Dean Sherman, Professional Member

***Please note that no changes were made to the regulation as originally proposed and published in the January 1999 issue of the Register at page 1065 (2:7 Del.R. 1065). Therefore, the final regulation is not being republished.**

Please refer to the January 1999 issue of the Register or contact the Division of Professional Services, Board of Plumbing Examiners.

**DIVISION OF PROFESSIONAL REGULATION
DELAWARE GAMING CONTROL BOARD**
Statutory Authority: 28 Delaware Code,
Section 1122 (28 Del.C. 1122)

**BEFORE THE DELAWARE GAMING CONTROL
BOARD**

IN RE: PROPOSED RULES AND REGULATIONS

ORDER

Pursuant to 29 Del.C. section 10118, the Delaware Gaming Control Board ("Board") hereby issues this Order promulgating the proposed amendments to the Board's Bingo Regulations Section 1.04(7) and Charitable Gambling Regulations 3.12. Following notice and a public hearing held on March 3, 1999 on the proposed amendments, the Board makes the following findings and conclusions:

**SUMMARY OF EVIDENCE AND INFORMATION
SUBMITTED**

1. The Board posted public notice of the proposed rule amendments in the Register of Regulations and in the News-Journal and Delaware State News. The Board also sent copies of the proposed rules to all bingo licensees.

2. The Board received no written comments from the public. The Board did receive a public comment at the public hearing from a representative of Bowers Beach Fire Company which favored the proposed bingo rule amendment.

FINDINGS OF FACT

3. The public was given notice and an opportunity to provide the Board with comments in writing and by oral testimony on the proposed amendments to the Board's Rules. The Board received no written comments in response to the proposed rules. The oral testimony received at the public hearing is described in paragraph #2.

4. The Board's proposed revision to the Charitable Gambling Regulations Section 3.12 would require that after-occasion reports be filed with the Board within fifteen days of the event. This regulation is consistent with the Board's enabling legislation in 28 Del.C. 1140.

5. The Board's proposed Regulation to section 1.04(7)

of the Bingo Regulations would provide a limit on the number of cookie-jar bingo pots accruing at any one time. The Regulation provides that a licensee must hold a special coverall or "black out" game in the event the organization has two pots at the \$500 limit and has been unable to give away the first cookie jar prize. This regulatory change is necessary to give full effect to the recent amendment in House Bill 508, 71 Del. Laws 444 (1998). This amendment permitted cookie jar bingo as a permissible form of inducement for bingo licensees. The Board deemed the proposed bingo regulation as necessary to respond to the need for some procedure and control over the use of cookie jar bingo by licensees. The Board has received a number of complaints and questions about the limits on the number and amount of cookie jar prizes that a licensee can hold at any one time. The proposed regulation contains a fair and equitable method for use of cookie jar bingo as an inducement while still placing reasonable controls over the use of the game.

CONCLUSIONS

6. The proposed Regulation for Bingo and Charitable Gambling were promulgated by the Board in accord with its statutory duties and authority as set forth in 28 Del.C. 1138.

7. The Board deems the proposed amendments necessary for the effective enforcement of 28 Del.C. chapter 11 and for the full and efficient performance of its duties thereunder.

8. The Board concludes that the adoption of the proposed regulations would be in the best interests of the citizens of the State of Delaware and necessary to protect the public. The Board, therefore, adopts the proposed amendments to Bingo Regulation 1.04(7) and Charitable Gambling Regulation 3.12 which are attached as exhibit #1 to this Order. At the March 3, 1999 meeting, the Board unanimously voted to adopt these Regulations and authorized Board Member Roland Neeman to sign this Order on behalf of the Board.

9. The effective date of this Order shall be ten (10) days from the publication of this Order in the Register of Regulations on April 1, 1999.

IT IS SO ORDERED this 8th day of March, 1999.

Roland Neeman, Board Member
Gaming Control Board

Regulations Governing Charitable Gambling
Other than Raffles

3.12: Reports After the Function.

Within fifteen (15) days of the last day of the Function, the member-in-charge shall submit a report to the Board

stating the amount of Gross Receipts, the Net Proceeds and the list of expenses incurred. This report must indicate the specific charitable purposes for which the proceeds will be used.

Regulations Governing Bingo

1.04(7): Conduct of Bingo.

No prizes greater in an amount or value than \$250 shall be offered or given in any single game and the aggregate amount or value of all prizes offered or given in all games played on a single occasion shall not exceed \$1,000. All winners shall be determined and all prizes shall be awarded in any game played on any occasion within the same calendar day as that upon which the game is played. The value of any promotional giveaways, which shall be no more than \$500 per annum to be distributed at an organizational anniversary date and no more than three (3) holiday dates per year shall not be counted towards the dollar amounts described in this section. However, a licensee may offer inducements, including but not limited to cookie-jar bingo games that do not exceed \$500 per game per night, free refreshments, and free transportation of players to and from bingo events, to attract bingo players to the bingo event, provided that the fair market value of inducements is limited to 15% of the total amount of all other prizes offered or given during the bingo event.

Any amounts in any cookie-jar bingo games shall not be included in the limitations of this section or in any prize money limitations. A bingo licensee may not have more than two \$500 cookie jar bingo pots at any one time which are to be awarded to players. The licensee must award the first cookie jar bingo pot before it may start a third cookie jar bingo pot. In the event that a licensee has a first cookie jar bingo pot of \$500 and then accrues a second cookie jar bingo pot of \$500, the licensee must award the first cookie jar pot to a player on the occasion at which the second cookie jar pot reaches the \$500 limit. On such occasion, if the first cookie jar pot is not awarded by the end of the occasion, the licensee shall conduct a final special bingo game of "full card" or "black out" bingo using a separate, single card, and the first \$500 cookie jar shall be won by the player or players who first covers all spaces on their entire card.

**DIVISION OF PROFESSIONAL REGULATION
DELAWARE REAL ESTATE COMMISSION**
Statutory Authority: 24 Delaware Code,
Section 2905 (24 Del. C. Section 2905)

**BEFORE THE DELAWARE REAL ESTATE
COMMISSION**

IN RE: ADOPTION OF REGULATIONS

ORDER

WHEREAS, pursuant to 24 *Del.C.* § 2905, the Delaware Real Estate Commission (the "Commission") proposed to adopt amendments to its rules and regulations as more specifically set forth in the Hearing Notice which is attached hereto as Exhibit "A" and incorporated herein; and,

WHEREAS, pursuant to 29 *Del.C.* § 10115, notice was given to the public that a hearing would be held on March 18, 1999 at 1:30 p.m. in Dover, Delaware to consider the proposed amendments, and,

WHEREAS, the notice invited the public to submit comments orally or in writing regarding the proposed amendments; and,

WHEREAS, a hearing was held on March 18, 1999 at which a quorum of the Commission was present; and,

WHEREAS, the Commission heard oral comments at the hearing and received several written comments, documents and other submissions which were made part of the record;

WHEREAS, the Commission finds the proposed amendments serve to clarify its rules and regulations and to ensure that its rules and regulations are in compliance with 24 *Del.C.* Ch. 29;

NOW, THEREFORE, based on the Commission's authority to adopt and revise rules and regulations pursuant to 24 *Del.C.* § 2905, it is the decision of the Commission to adopt the proposed amendments to its rules and regulations, a copy of which are attached hereto as Exhibit "B" and incorporated herein. Such regulations shall be effective thirty (30) days from the date of this Order.

IT IS SO ORDERED this 18th day of March, 1999.

DELAWARE REAL ESTATE COMMISSION
James B. McGinnis, Chairman
Ann K. Baker, Member

Mary Catherine Biondi, Member
Taube R. Carpenter, Member
Herbert W. Dayton, Member
H. Hunter Lott, III, Member
H. James Kelleher, Jr., Member

***Please note that no changes were made to the regulation as originally proposed and published in the February 1999 issue of the Register at page 1343 (2:8 Del.R. 1343). Therefore, the final regulation is not being republished. Please refer to the February 1999 issue of the Register or contact the Division of Professional Services, Real Estate Commission.**

DEPARTMENT OF AGRICULTURE

HARNESS RACING COMMISSION

Statutory Authority: 3 Delaware Code,
Section 10027 (3 **Del.C.** 10027)

BEFORE THE DELAWARE HARNESS RACING COMMISSION

IN RE: PROPOSED RULES

ORDER

Pursuant to 29 Del.C. § 10118, the Delaware Harness Racing Commission ("Commission") hereby issues this Order adopting part of the proposed amendments to the Commission's Rules. Following notice as required by 29 Del. C. § 10115, the Commission makes the following findings and conclusions:

SUMMARY OF EVIDENCE AND INFORMATION SUBMITTED

1. The Commission posted public notice of the proposed rule amendments in the January 1, 1999 Register of Regulations. A copy of the proposed rule amendments is attached to this Order as exhibit #1. The Commission proposed amendments to the following rules: 1) Chapter III, Rule I-G on the appointment of officials; 2) Chapter VI, Rule 11-A-5 on the division of races; 3) Chapter VII, Rule I-(F) on preference dates; 4) Chapter IV, Rule III-M on weather allowance; and 5) Chapter VI, Rule III-c(15) on the racing of claimed horses.

2. On January 16, 1999, the Commission received written comments from Charles Lockhart, General Manager/Harness Racing-Dover Downs. Mr. Lockhart believed that

Chapter VI, Rule 11-A-5 should be revised to allow the racing secretary to divide more than two races per day. On Chapter VII, rule I-(F), Mr. Lockhart suggested revising the rule to provide that, when a horse is racing for the first time after May 1st, the date of the last qualifying race shall be its preference date. Finally, Mr. Lockhart objected to the proposed weather allowance rule in Chapter IV, rule 111-M as not containing sufficient guidelines.

3. On February 3, 1999, the Commission received a letter from Ellen Warren commenting on the proposed amendment on appointment of racing officials, chapter III, rule I-G, and the racing of claimed horses, chapter VI, rule III-c-(15).

FINDINGS OF FACT

4. The public was given notice and an opportunity to provide the Commission with comments in writing on the proposed amendments to the Commission's rules. The Commission has considered the comments elicited from the public in adopting the final draft of the rules. For the reasons set forth below, the Commission will only adopt a portion of the previously published rules.

5. On the proposed amendment #1 to Chapter 111, Rule I-G-3, the Commission finds that the proposed rule amendment tracks the language of the recent amendment to 3 Del. C. § 10007. The Commission is bound to enforce the provisions of the statute and the rule amendment is necessary for consistency with the law. The Commission will adopt the rule as proposed.

6. On the proposed amendment to Chapter IV, Rule III-M, the licensed track would be required to provide for a consistent method to calculate a weather allowance. While there may be some debate about the factors to be considered in calculating the proper weather allowance, the Commission believes the proposed rule sets forth guidelines that are fair to the tracks and the horsemen. The Commission finds that the proposed rule is necessary to the Commission's effective enforcement of 3 Del. C. chapter I 00 and is adopted in its proposed form.

7. On the proposed amendment to Chapter VI, Rule 111-c-(15), the rule would essentially require that a claimed horse race at the track where claimed for a period of forty-five days or the end of the meet. This rule is already in place at numerous tracks throughout the country and the Commission does not find that the rule would unduly burden owners who claim horses. The proposed amendment is necessary for the enforcement of the claiming rules and is adopted in its proposed form.

8. The Commission does not adopt the proposed amendment to Chapter VI, Rule II-A-5 on the division of races. The proposed rule should be revised to allow the racing secretary to divide races into three and not two divisions. The Commission also concludes that the proposed

amendment to Chapter VII, Rule I-(F) should not be adopted since further revisions are advisable. The Commission will issue a new proposal that more clearly and fairly provides for determination of preference dates.

CONCLUSIONS

9. The proposed rules were promulgated by the Commission in accord with its statutory duties and authority as set forth in 3 Del. C. § 10027. The Commission deems these rules as amended necessary for the effective enforcement of 3 Del. C. chapter 100 and for the full and efficient performance of its duties thereunder.

10. The Commission concludes that the adoption of the proposed rules would be in the best interests of the citizens of the State of Delaware and necessary to insure the integrity and security of the conduct of harness racing in the State of Delaware. A copy of the rules amendments adopted by the Commission is attached as exhibit #2 and incorporated as part of this Order. The Commission adopts amendments to the following rules:

- i. Amendment to Chapter III, Rule I-G.
- ii. Amendment to Chapter IV, Rule III-M.
- iii. Amendment to Chapter VI, Rule III-c-(15).

11. The Commission adopts these rules as amended pursuant to 3 Del.C. § 10027 and 29 Del.C. § 10113. The Commission has considered the comments and suggestions made by the witnesses at the public hearing.

12. These adopted rules replace in their entirety the former version of the Rules of the Delaware State Harness Racing Commission and any amendments.

13. The effective date of this Order shall be ten (10) days from the publication of this Order in the Register of Regulations on April 1, 1999.

14. Attached hereto and incorporated herein is the amended version of the Rules marked as exhibit #2 and executed simultaneously by this Commission this 15th day of March, 1999.

Anthony Flynn, Chairman

H. Terry Johnson, Commissioner

Beth Steele, Commissioner

Mary Ann Lambertson, Commissioner

Robert Kerr, Commissioner

1. Amend chapter III, rule I-G to now provide as follows:

G. Appointment

1. A person shall not be appointed to more than one racing official position at a meeting unless specifically approved by the Commission. No person shall be appointed to or hold any such office or position who holds any official

relation to any person, association, or corporation engaged in or conducting harness racing within this State. No Commissioner, racing official, steward, or judge whose duty is to insure that the rules and regulations of the Commission are complied with shall bet on the outcome of any race regulated by the Commission or have any financial or pecuniary interest in the outcome of any race regulated by the Commission. All employees appointed under 3 Del.C. section 10007 (a-c) shall serve at the pleasure of the Commission and are to be paid a reasonable compensation.

2. The Commission shall appoint or approve the State Steward and judges at each harness race meeting. The Commission may appoint such officials on an annual basis. In addition to any minimum qualifications promulgated by the Commission, all applicants for the position of Steward must be certified by a national organization approved by the Commission. An applicant for the position of steward or race judge must also have been previously employed as a steward, patrol judge, clerk of scales or other racing official at a harness racing meeting for a period of not less than forty-five days during three of the last five years, or have at least five years of experience as a licensed driver who has also served not less than one year as a licensed racing official at a harness racing meeting or have ten years of experience as a licensed harness racing trainer who has served not less than one year as a licensed racing official at a harness racing meeting.

3. The Commission may appoint such officers, clerks, stenographers, inspectors, racing officials, veterinarians, and such other employees as it deems necessary, consistent with the purposes of 3 Del.C. chapter 100.

~~{2. Amend chapter VI, rule II-A-5 to now provide as follows:~~

~~II. Overnight Events~~

~~A. General Provisions~~

~~5. Regularly scheduled races or substitute races may be divided where necessary to fill a program of racing, or may be divided and carried over to a subsequent racing program, subject to the following;~~

~~a) No such divisions shall be used in the place of regularly scheduled races which fill.~~

~~b) Where races are divided in order to fill a program, starters for each division must be determined by lot after preference has been applied, unless the conditions provide for divisions based upon age, performance, earnings or sex may be determined by the racing secretary.~~

~~c) However, where necessary to fill a card, not more than three one races per day may be divided into not more than two divisions after preference has been applied. The divisions may be selected by the racing secretary. For all other overnight races that are divided,~~

~~the division must be lot unless the conditions provide for a division based on performance, earnings or sex.~~

3. Amend chapter VII, rule I(F) to now provide as follows:

F. Preference Dates

~~Preference dates shall be given to horses in all overnight events at extended pari-mutuel tracks in accordance with the following:~~

~~1. The date of the horse's last previous start in a purse race during the current year is its preference date with the following exceptions:~~

~~a) The preference date on a horse that has drawn to race and has been scratched is the date of the race from which scratched.~~

~~b) When a horse is racing for the first time after February 1 in the current year ever, the date of its last qualifying race the first declaration into a purse race shall be considered its preference date.~~

~~c) Wherever horses have equal preference in a race, the actual preference of said horses in relation to one another shall be determined by lot.]~~

4. Amend chapter IV, rule III-M to add a new rule to now provide as follows:

III. FACILITIES AND EQUIPMENT

M. Weather Equipment

1. An association shall provide a consistent method whether by instrumentation or otherwise to obtain an appropriate means for measuring temperature. The Presiding Judge shall consult at least one member of the driver's committee by the third race to determine an allowance. The following guidelines shall be used in making this determination:

Temperature or Winchill:

32 degrees - 25 degrees (F) = 1 second allowance

24 degrees - 15 degrees (F) = 2 second allowance

14 degrees - 0 degrees (F) = 3 second allowance

Other relevant factors such as precipitation shall also be considered.

5. Amend chapter VI, rule III-c-(15) to now provide as follows:

15. A claimed horse shall not be eligible to start in any race in the name or interest of the owner of the horse at the time of entry for the race from which the horse was claimed for thirty (30) days, unless reclaimed out of another claiming race. Nor shall such horse remain in or be returned to the same stable or care or management of the first owner or out

of another claiming race. Further, such horse shall be required to continue to race at the track where claimed for a period of 45 days or the balance of the current racing meet, whichever comes first, unless released by the Racing Secretary.

DEPARTMENT OF EDUCATION

Statutory Authority: 14 Delaware Code,
Section 122 (14 Del.C. 122)

**BEFORE THE DEPARTMENT OF EDUCATION OF
THE STATE OF DELAWARE**

**REGULATORY IMPLEMENTING ORDER
SCHOOL CALENDAR AND REQUIRED DAYS AND
HOURS OF INSTRUCTION**

**I. SUMMARY OF THE EVIDENCE AND
INFORMATION SUBMITTED**

The Secretary seeks the consent of the State Board of Education to repeal the regulation School Calendar and Required Days and Hours of Instruction, I.,D.,2., page A-7 in the Handbook for K-12 Education. The repeal is necessary because the regulation is simply a repeat of Del. C., Section 1049, and does not need to be in regulation since it is already in the Del. C. Notice of the proposed repeal of the regulation was published in the News Journal and the Delaware State News on February 16, 1999, in the form hereto attached as Exhibit A. The notice invited written comments and none were received from the newspaper advertisements.

II. FINDINGS OF FACT

The Secretary finds that it is necessary to repeal this regulation because it is part of the 14 Del. C., Section 1049, and does not need to be regulated by the Department.

III. DECISION TO REPEAL THE REGULATION

For the foregoing reasons, the Secretary concludes that it is necessary to repeal the regulation. Therefore, pursuant to 14 Del. C., Section 122, the regulation attached hereto as Exhibit B is hereby repealed.

IV. TEXT AND CITATION

The text of the regulation repealed hereby shall be in the form attached hereto as Exhibit B, and said regulations shall be removed from the Handbook for K-12 Education.

V. EFFECTIVE DATE OF ORDER

The actions hereinabove referred to were taken by the Secretary pursuant to 14 Del. C., Section 122, in open session at the said Board's regularly scheduled meeting on March 18, 1999. The effective date of this Order shall be ten (10) days from the date this Order is published in the Delaware Register of Regulations.

IT IS SO ORDERED this 18th day of March, 1999.

DEPARTMENT OF EDUCATION
Dr. Iris T. Metts, Secretary of Education

Approved this 18th day of March, 1999.

STATE BOARD OF EDUCATION

Dr. James L. Spartz, President

Jean W. Allen, Vice President

Nancy A. Doorey

John W. Jardine, Jr.

Dr. Joseph A. Pika

Dennis J. Savage

Dr. Claibourne D. Smith

SCHOOL CALENDAR AND REQUIRED DAYS AND
HOURS OF INSTRUCTION

EXHIBIT B

FROM HANDBOOK FOR K-12 EDUCATION

~~2. SCHOOL CALENDAR AND REQUIRED DAYS
AND HOURS OF INSTRUCTION~~

~~Delaware Code, Title 14, Section 1049 as amended in January 1996 gives local school boards the following authority concerning the school calendar and hours of instruction:~~

~~a. Local school boards will determine the hours of daily school sessions, holidays when district schools will be closed and days on which teachers attend educational improvement activities.~~

~~b. District calendars shall be adopted by April 30 for the ensuing year and may only be amended following 30 days public notice.~~

~~e. Requirements Related to Calendar Days~~

~~(1) Grades 1-12 must attend at least 180 days of school.~~

~~(2) Kindergarten students must attend 176 days of school in either a morning or afternoon session or the equivalent.~~

~~(3) Up to 4 days per semester may be abbreviated for parent teacher conferences, curriculum development, semester examinations, or other school improvement activities.~~

~~(a) Except for the first and last day of the school year any such abbreviated day shall be at least 3 1/2 hours exclusive of lunch and shall not be scheduled on a school day preceding a scheduled holiday.~~

~~(b) Morning and afternoon sessions of kindergarten shall be alternated on such abbreviated days.~~

~~d. Requirements Related to Hours~~

~~(1) For grades 1-12 the length of the regular school day shall be at least six hours exclusive of lunch.~~

~~(a) A district may schedule days with fewer than six hours so long as the total scheduled hours of instruction do not fall below 1,060 hours.~~

~~(2) The actual hours of instruction may be less than 1,060 hours due to unplanned delays or early dismissals of not more than two hours in each instance which are caused by weather or other unforeseen emergency circumstances.~~

**REGULATORY IMPLEMENTING ORDER
TECHNOLOGY**

**I. SUMMARY OF THE EVIDENCE AND
INFORMATION SUBMITTED**

The Secretary seeks the consent of the State Board of Education to repeal the regulation on Technology, I.,L.,7., page A-39 in the Handbook for K-12 Education. The repeal is necessary because it is simply a technical assistance statement and does not regulate anything. Notice of the proposed regulation was published in the News Journal and the Delaware State News on February 16, 1999, in the form hereto attached as Exhibit A. The notice invited written comments and none were received from the newspaper advertisements.

II. FINDINGS OF FACT

The Secretary finds that it is necessary to repeal this

regulation because it is simply a technical assistance statement and not a regulation.

III. DECISION TO REPEAL THE REGULATION

For the foregoing reasons, the Secretary concludes that it is necessary to repeal the regulation. Therefore, pursuant to 14 Del. C., Section 122, the regulation attached hereto as Exhibit B is hereby repealed.

IV. TEXT AND CITATION

The text of the regulation repealed hereby shall be in the form attached hereto as Exhibit B, and said regulation shall be removed from the Handbook for K-12 Education.

V. EFFECTIVE DATE OF ORDER

The actions hereinabove referred to were taken by the Secretary pursuant to 14 Del. C., Section 122, in open session at the said Board's regularly scheduled meeting on March 18, 1999. The effective date of this Order shall be ten (10) days from the date this Order is published in the Delaware Register of Regulations.

IT IS SO ORDERED this 18th day of March, 1999.

DEPARTMENT OF EDUCATION
Dr. Iris T. Metts, Secretary of Education

Approved this 18th day of March, 1999.

STATE BOARD OF EDUCATION
Dr. James L. Spartz, President
Jean W. Allen, Vice President
Nancy A. Doorey
John W. Jardine, Jr.
Dr. Joseph A. Pika
Dennis J. Savage
Dr. Claibourne D. Smith

EXHIBIT B

TECHNOLOGY

FROM HANDBOOK FOR K-12 EDUCATION

7. ~~TECHNOLOGY~~

a. ~~Philosophy~~

~~Technological advancements have become a part of~~

~~our society affecting all segments of our lives. Educators recognize the potential of these advancements in supporting instruction, preparing students for a technological age and assisting with information management.~~

~~At all levels of education, educators are very interested in the effect technology has on instruction and have implemented various technologies to enhance instruction. The state recognizes the need to establish priorities for instructional technology, coordinate the use of technology, and promote training and staff development to assure full benefit of technology.~~

~~b. Specific information on the Technology issues can be found in the State Instructional Technology Plan.~~

~~(State Board Approved April 1990)~~

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH

OFFICE OF DRINKING WATER

Statutory Authority: 16 Delaware Code,
Section 122(3)(c) (16 **Del.C.** 122(3)(c))

IN THE MATTER OF:

**REVISION OF STATE OF DELAWARE
REGULATIONS GOVERNING PUBLIC
DRINKING WATER SYSTEMS**

NATURE OF THE PROCEEDINGS:

Delaware Health & Social Services ("DHSS") initiated proceedings to amend existing Regulations Governing Public Drinking Water Systems. The DHSS's proceedings to amend its regulations were initiated pursuant to 29 Delaware Code §10114 and its authority as prescribed by 16 Delaware Code §122 (3) (c).

On January 1, 1999, the DHSS published in the Delaware Register of Regulations Volume 2 Issue 7 (page 1095) its notice of proposed regulation changes, pursuant to 29 Delaware Code §10115. It requested that written materials and suggestions from the public concerning the proposed regulations be delivered to DHSS by February 2, 1999, or be presented at public hearings on January 27 or January 28, 1999, at which time the Department would review information, factual evidence and public comment to the said proposed changes to the regulations.

Oral and written comments were received and evaluated. The results of that evaluation are summarized in the accompanying "Hearing Officers Report."

FINDINGS OF FACT

The Department finds that the proposed changes, as set forth in the attached copy, should be made in the best interest of the general public of the State of Delaware.

THEREFORE, IT IS ORDERED, that the proposed Regulations Governing Public Drinking Water Systems are adopted and shall become effective ten days after publication of the final regulation in the Delaware Register on April 1, 1999.

3/5/99

Gregg C. Sylvester, Secretary

Summary of Evidence

Public Hearing to discuss proposed revision to the State of Delaware Regulations Governing Public Drinking Water Systems

Report

Public hearings were held on January 27, 1999, at 6:00 PM at the Artesian Water Company, Newark DE, and on January 28, 1999, at 1:15 PM at the Jesse Cooper Building, Dover, DE before the undersigned Hearing Officer to discuss the proposed "State of Delaware Regulations Governing Public Drinking Water Systems". Ed Hallock, Program manager, Office of Drinking Water, represented the Division of Public Health. The announcements regarding both hearings were advertised in the Delaware State News, The News Journal and the Delaware Register of Regulations in accordance with State Law. Verifying documents are attached to the record. These regulations have been approved by the Delaware Attorney General's Office.

State Presentation

Mr. Hallock presented the State's presentation as follows:

Hearing Exhibits:

1. A summary of changes to "State of Delaware Regulations Governing Public Drinking Water Systems".
2. Affidavit from the News Journal indicating publishing the publication of hearings' announcement in the legal section of the newspaper.

4. A copy of Delaware Register of Regulations dated January 1, 1999, Volume 2, Issue 7, Pages 1041-1302., indicating announcement of the hearings.

5. Memo from Ann Woolfolk, Deputy Attorney General, indicating approval of the regulation by the Attorney General's Office.

Mr. Hallock explained there are four major changes being made to the regulations: (1) definitions of public water supply; (2) revision of administrative penalty authority; (3) requirement for fluoridation; and (4) regulating secondary standards for water systems that serve 500 service connections. All of these changes came about as requirements from either the U.S. Environmental Protection Agency or by laws passed by the Delaware Legislature. Mr. Hallock presented an in-depth review of all the revisions. Each section was summarized with a question and answer period allowed throughout the presentation. Many questions were addressed.

Public Questions

Attendees were allowed and encouraged to discuss and ask questions regarding all sections of the regulations in order that they fully understood the intent of the various regulatory sections. Most questions regarded the clarification of various sections.

Public Comment

Oral comments were received during this presentation. The comment period was held open until the end of business February 2, 1999. Two written comments were received (see summary of comments). None of the oral or written comments required changes to the proposed regulations. There was no opposition to the regulations.

Recommendations

This hearing was in accordance with those requirements in 29 Del.C. It is this Hearing Officer's opinion that the regulations are acceptable to move to the adoption process.

John J. Beaman, Hearing Officer
February 23, 1999

SUMMARY OF COMMENTS

None of the oral comments were sufficient to require any regulatory changes or response.

Two written comments were received:

1. The Town of Bethany Beach requested an exemption from the fluoride requirement. This comment is not pertinent to the regulations.

2. Davis, Bowen and Friedel, Inc., an engineering firm, had the following comments:

a. "While we support the goal of secondary (aesthetic) standards for drinking water, we believe that by carte blanche regulation of all twenty national secondary drinking water standards you are potentially exposing a water service provider to a \$10,000 per day violation if they exceed low priority SMCLs for color or pH. The legislature apparently intended (in House Bill No. 427) that these stringent administrative penalties be applied to problems with chlorides, copper, iron, manganese, sulfate, and total dissolved solids. The Bill was motivated by specific problems but the regulation is now far more encompassing. Further, there is no MCL for the secondary standard of corrosivity and enforcement would be difficult for all parties. In light of the above, we recommend that the regulations list only the six parameters identified in House Bill No. 427 instead of referencing secondary drinking water standards."

b. "It is clear from my conversation from Mr. Hallock that the Department only intends to invoke administrative penalties if they receive customer complaints or the water supplier is not acting in good faith to produce acceptable water quality on an aesthetic basis. However, the wording of the regulations do not reflect this "softer" approach leaving all water providers potentially vulnerable to very stiff fines for violation of even low priority secondary standards. It is our opinion that violating a secondary standard should carry a lesser penalty than violating a primary standard. The Department could be forced to strictly enforce their regulations if pressured or sued by third parties. We suggest the regulation not reflect more stringent requirements than the Department feels are necessary to solve existing problems."

Response: The intent of House Bill No. 427 is to regulate all secondary contaminants. The law listed six contaminants, however it further stated, "and other standards as determined by the Secretary". The twenty standards to be adopted are EPA recommended standards. By adopting all of them, Delaware will be consistent with the federal Safe Drinking Water Act.

The level of the penalty that may be issued to a water supplier is determined by the Secretary of the Department of Health and Social Services and is based on its impact to public health. The law provides a penalty range that the Secretary works within. Fines can range from \$100 to

\$10,000 per day depending on the size of the system and the impact of the violation to public health. The final penalty is determined after an administrative hearing taking into consideration mitigating and aggravating circumstances.

**STATE OF DELAWARE
REGULATIONS GOVERNING
PUBLIC DRINKING WATER SYSTEMS**

*** Please Note: Due to space limitations the table of contents is not being reprinted. The table of contents is available from the Department of Health and Social Services.**

SECTION 22.1 DEFINITIONS

22.101 "Action Level" means the concentration of lead or copper in water specified in Section 22.607A1a & b which determines, in some cases, the treatment requirements contained in Section 22.607 that a water system is required to complete.

22.102 "Alpha Particle" means a particle identical with a helium nucleus, emitted from the nucleus of a radioactive element.

22.103 "Approved" means approved by the Division.

22.104 "Best Available Technology (BAT)" means the best technology, treatment techniques, or other means which the Division finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration). For the purposes of setting maximum contaminant levels for synthetic organic chemicals, any BAT must be at least as effective as granular activated carbon.

22.105 "Beta Particle" means a particle identical with an electron, emitted from the nucleus of a radioactive element.

22.106 "Coagulation" means a process using coagulant chemicals and mixing by which colloidal and suspended materials are de-stabilized and agglomerated into flocs.

22.107 "Coliform Group" means all organisms considered in the coliform group as set forth in the current edition of Standard Methods for the Examination of Water and Waste Water prepared and published jointly by the American Public Health Association, American Water Works

Association and Water Pollution Control Federation.

22.108 "Compliance Cycle" means the nine-year calendar year cycle during which public water systems must monitor. Each compliance cycle consists of three three-year compliance periods. The first calendar year cycle begins January 1, 1993 and ends December 31, 2001; the second begins January 1, 2002 and ends December 31, 2010, the third begins January 1, 2011 and ends December 31, 2019.

22.109 "Compliance Period" means a three-year calendar year period within a compliance cycle. Each compliance cycle has three three-year compliance periods. Within the first compliance cycle, the first compliance period runs from January 1, 1993 to December 31, 1995; the second from January 1, 1996 to December 31, 1998, and the third from January 1, 1999 to December 31, 2001.

22.110 "Confluent Growth" means a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion thereof, in which bacterial colonies are not discrete.

22.111 "Consecutive Water Supply" means a public water system that obtains all of its water from, but is not owned or operated by, a public water system to which such Regulations apply and alters the purchased water by some type of treatment, resells the purchased water to its customer, or furnishes water to an interstate carrier. The Division may opt to accept a consecutive supply as a single system for monitoring purposes.

22.112 "Contaminant" means any physical, chemical, biological or radiological substance or matter in water.

22.113 "Conventional Filtration Treatment" means a series of processes including coagulation, flocculation, sedimentation and filtration resulting in substantial particulate removal.

22.114 "Corrosion Inhibitor" means a substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

22.115 "CT or CTcalc" means the product of the residual disinfectant concentration (C) (22.161) in milligrams per liter (mg/L) determined before or at the first customer, and the corresponding disinfectant contact time (T) (22.120) in minutes, i.e. "C" X "T". If a public water system applies

disinfectants at more than one (1) point prior to the first customer, it must determine the CT of each disinfectant sequence before or at the first customer to determine the total percent inactivation or total inactivation ratio. In determining the total inactivation ratio, the public water system must determine the residual disinfectant concentration of each disinfection sequence and corresponding contact time before any subsequent disinfection application point(s). CT99.9 is the CT value required for 99.9 percent (3-log) inactivation of Giardia lamblia cysts. The inactivation ratio is the CTcalc divided by the CT99.9 and the total inactivation ratio is the sum of the inactivation ratios for each disinfection sequence. A total inactivation ratio equal to or greater than 1.0 is assumed to provide a 3-log inactivation of Giardia lamblia cysts.

22.116 "Diatomaceous Earth Filtration" means a process resulting in substantial particulate removal in which a precoat cake of diatomaceous earth filter media is deposited on a support membrane (septum), and while the water is filtered by passing through the cake on the septum, additional filter media known as body feed is continuously added to the feed water to maintain the permeability of the filter cake.

22.117 "Direct Filtration" means a series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal.

22.118 "Direct Responsible Charge" means accountability for and performance of active, daily, on-site operational duties.

22.119 "Disinfectant" means any oxidant, including but not limited to chlorine, chlorine dioxide, chloramines, and ozone added to water in any part of the treatment or distribution process, that is intended to kill or inactivate pathogens (disease causing organisms).

22.120 "Disinfectant Contact Time (T)" means the time in minutes that it takes for water to move from the point of disinfectant application or the previous point of disinfectant residual measurement to a point before or at the point where residual disinfectant concentration (C) is measured. Where only one (1) "C" is measured, "T" is the time in minutes that it takes for water to move from the point of disinfectant application to a point before or at where residual disinfectant concentration (C) is measured. Where more than one (1) "C" is measured, "T" is for the first measurement of "C", the time in minutes that it takes for water to move from the first or

only point of disinfectant application to a point before or at the point where the first "C" is measured and for subsequent measurements of "C", the time in minutes that it takes for water to move from the previous "C" measurement point to the "C" measurement point for which the particular "T" is being calculated. Disinfectant contact time in pipelines must be calculated based on plug flow by dividing the internal volume of the pipe by the maximum hourly flow rate through that pipe. Disinfectant contact time within mixing basins and storage reservoirs must be determined by tracer studies or an equivalent demonstration.

22.121 "Disinfection" means a process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

22.122 "Division" means the Division of Public Health of the Department of Health and Social Services established by Title 29, Section 7904 (a), Delaware Code.

22.123 "Domestic or Other Non-Distribution System Plumbing Problem" means a coliform contamination problem in a public water system with more than one (1) service connection that is limited to the specific service connection from which the coliform positive sample was taken.

22.124 "Dose Equivalent" means the product of the absorbed dose from ionizing radiation and such factors as account for differences and biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission on Radiological Units and Measurements.

22.125 "Dwelling Unit" means one or more rooms arranged for the use of one or more individuals as a single housekeeping unit with cooking, living, sanitary and sleeping facilities.

22.126 "Effective Corrosion Inhibitor Residual" means a concentration sufficient to form a passivating film on the interior walls of a pipe.

22.127 "Emergency Situation" means a condition in which the specific provisions of these Regulations cannot be met for a temporary period and which necessitates immediate action because of the potential danger to public health.

22.128 "Exemption" means an allowance to deviate from or to exceed a maximum contaminant level requirement or

treatment technique requirement for a specific period of time (see Section 22.203). In order for a system to qualify for an exemption, the system must be in operation on the date of adoption of any maximum contaminant level or treatment technique requirement.

22.129 "Filtration" means a process for removing particulate matter from water by passage through porous media.

22.130 "First Draw Sample" means a one (1) liter sample of tap water, collected in accordance with Section 22.607G2b, that has been standing in plumbing pipes at least six (6) hours and is collected without flushing the tap.

22.131 "Flocculation" means a process to enhance agglomeration or collection of smaller floc particles into larger, more easily settleable particles through gentle stirring by hydraulic or mechanical means.

22.132 "Gross Alpha Particle Activity" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

22.133 "Gross Beta Particle Activity" means the total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

22.134 "Ground Water Under the Direct Influence of Surface Water" means any water beneath the surface of the ground with significant occurrence of insects or other microorganisms, algae, or large diameter pathogens such as Giardia lamblia, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions. Direct influence must be determined for individual sources in accordance with criteria established by the Division. The Division determination of direct influence may be based on site specific measurements of water quality and/or documentation of well construction characteristics and geology with field evaluation.

22.135 "Halogen" means one of the chemical elements chlorine, bromine or iodine.

22.136 "Health Hazard" means any condition, device or practice in the water supply system or its operation which creates, or may create, a danger to the health and well-being of the water consumer.

- 22.137 "Initial Compliance Period" means the first full three-year compliance period which begins at least 18 months after promulgation, except for the following contaminants: Dichloromethane; 1,2,4-Trichlorobenzene; 1,1,2-Trichloroethane; Benzo[a]pyrene; Dalapon; Di(2-ethylhexyl adipate; Di(2-ethylhexyl) phthalate; Dinoseb; Diquat; Endothall; Endrin; Glyphosate; Hexachlorobenzene; Hexachlorocyclopentadiene; Oxamyl (Vydate); Picloram; Simazine; 2,3,7,8-TCDD (Dioxin); Antimony; Beryllium; Cyanide; Nickel; and Thallium, initial compliance period means the first full three-year compliance period after promulgation for systems with 150 or more service connections (January 1993 - December 1995) and first full three-year compliance period after the effective date of regulation (January 1996 - December 1998) for systems having fewer than 150 service connections.
- 22.138 "Large Water System" means a water system that serves more than 50,000 persons.
- 22.139 "Lead Service Line" means a service line made of lead which connects the watermain to the building inlet and any lead pigtail, gooseneck or other fitting which is connected to such lead line.
- 22.140 "Legionella" means a genus of bacteria, some species of which have caused a type of pneumonia called Legionnaires Disease.
- 22.141 "Man-Made Beta Particle and Photon Emitters" means all radionuclides emitting beta particles and/or photons listed in Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air or Water for Occupational Exposure, NBS Handbook 69, except the daughter products of thorium 232, uranium 235 and uranium 238.
- 22.142 "Maximum Contaminant Level (MCL)" means the maximum permissible level of a contaminant in water which is delivered to any user of a public water system.
- 22.143 "Maximum Total Trihalomethane Potential (MTP)" means the maximum concentrations of total trihalomethanes produced in a given water containing a disinfectant residual after seven days at a temperature of 25°C or above.
- 22.144 "Medium Size Water System" means a water system that serves greater than 3,300 and less than or equal to 50,000 persons.
- 22.145 "Minor Monitoring Violation" means the failure of a public water system to collect all required water samples or the failure to follow the prescribed sampling procedure within the prescribed time frame.
- 22.146 "Near the First Service Connection" means at one (1) of the twenty (20) percent of all service connections in the entire system that are nearest the water supply treatment facility, as measured by water transport time within the distribution system.
- 22.147 "Optimal Corrosion Control Treatment" means the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while insuring that the treatment does not cause the water system to violate any national primary drinking water regulations.
- 22.148 "Person" means any corporation, company, association, firm, municipally owned water utility, partnership, society and joint stock company, as well as any individual.
- 22.149 "Picocurie (pCi)" means the quantity of radioactive material producing 2.22 nuclear transformations per minute.
- 22.150 "Point of Disinfectant Application" means the point where the disinfectant is applied and water downstream of that point is not subject to recontamination by surface water runoff.
- 22.151 "Point of Entry Treatment Device" means a treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building.
- 22.152 "Point of Use Treatment Device" means a treatment device applied to a single tap used for the purpose of reducing contaminants in the drinking water at that one (1) tap.
- 22.153 "Pollution" means the presence of anything in water which tends to degrade its quality so as to constitute a health hazard or impair the usefulness of the water.
- 22.154 "Potable Water" means water which is in compliance with all of the required drinking water standards specified in these Regulations, and is acceptable for human consumption.

22.155 "Primary Maximum Contaminant Level (PMCL)" means an MCL which involves a biological, chemical or physical characteristic of drinking water that may adversely affect the health of the consumer. This includes the MCLs for: coliform bacteria (includes total coliform and *E.coli*; antimony; arsenic; asbestos; barium; beryllium; cadmium; chromium; cyanide; fluoride; lead; mercury; nickel; nitrates; nitrites; total nitrate/nitrite selenium; thallium; turbidity;alachlor; aldicarb; aldicarb sulfone; aldicarb sulfoxide; atrazine; benzo (a) pyrene; carbofuran; chlordane; dalapon; di(2-ethylhexyl) adipate; di(2-ethylhexyl) phthalate; dibromochloropropane; dinoseb; diquat; 2,4-D; endothall; endrin; ethylenedibromide (EDB); glyphosate; heptachlor; heptachlor epoxide; hexachlorobenzene; hexachlorocyclopentadiene; lindane; methoxychlor; oxamyl (vydate); pentachlorophenol; picloram; polychlorinated biphenyls (PCBs); simazine; 2,3,7,8-TCDD (Dioxin); toxaphene; 2,4,5-TP silvex; total trihalomethanes; benzene; carbon tetrachloride; o-dichlorobenzene; p-dichlorobenzene; 1,2-dichloroethane, 1,1-dichloroethylene; cis-1,2-dichloroethylene; trans-1,2-dichloroethylene; dichloromethane; 1,2-dichloropropane; ethylbenzene; monochlorobenzene; styrene; tetrachloroethylene; toluene; 1,2,4-trichlorobenzene; 1,1,1-trichloroethane; 1,1,2-trichloroethane; trichloroethylene; vinyl choride; total xylenes and radioactivity (see Section 22.9).

22.156 "Protection by Adequate Construction, Treatment and Supervision" means:

A. Works which are of adequate capacity to meet the maximum demands without creating health hazards and which are located, designed and constructed to eliminate or prevent pollution.

B. Any one or any combination of the controlled processes of coagulation, sedimentation, absorption, filtration, disinfection or other processes appropriate to the sources of supply, which produce a water consistently meeting the requirements of these Regulations.

C. Conscientious operation of a public water supply by an individual in direct responsible charge who is acceptable to the Division, and meets the certification requirements of the Division at such time as these requirements are established.

22.157 "Public Water System (PWS)" means a water supply system for the provision to the public of piped water for human consumption through pipes or other constructed conveyances either directly from the user's free flowing outlet or indirectly by the water being used to manufacture ice, foods and beverages or that supplies water for potable or

domestic purposes for consumption in more than three dwelling units, or furnishes water for potable or domestic purposes to employees, tenants, members, guests or the public at large in commercial offices, industrial areas, multiple dwellings or semi-public buildings including, but without limitation, rooming and boarding houses, motels, tourist cabins, mobile home parks, restaurants, hospitals and other institutions, or offers any water for sale for potable domestic purposes. ~~For the purpose of this definition, consecutive water supplies which do not adversely affect the chemical, physical or bacteriological quality of the water are excluded. Such terms includes (1) any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system.~~ Public water systems are classified as follows:

A. "Community Water System (CWS)" means a public water system which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents;

B. "Non-Transient Non-Community Water System (NTNCWS)" means a public water system that is not a community water system and that regularly serves at least twenty-five (25) of the same persons over six (6) months per year;

C. "Non-Community Water System (NCWS)" means a public water system which has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year;

D. "Miscellaneous Public Water System (MPWS)" means a public water system that is neither community, non-community nor non-transient non-community.

22.158 "Radioactivity" means the spontaneous, uncontrollable disintegration of the nucleus of an atom with the emission of particles and rays.

22.159 "Rem" means the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A millirem is one one-thousandth (1/1000) of a rem.

22.160 "Repeat Compliance Period" means any subsequent compliance period after the initial compliance period.

22.161 "Residual Disinfectant Concentration (C)" means

the concentration of disinfectant measured in mg/L in a representative sample of water.

22.162 "Sanitary Survey" means a review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of: evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing potable drinking water; or updating the inventory information. Sanitary surveys are classified as follows:

- A. Class 1 - on-site review.
- B. Class 2 - telephone review.

22.163 "Secondary Maximum Contaminant Level (SMCL)" means an MCL which involves a biological, chemical or physical characteristic of water that may adversely affect the taste, odor, color or appearance (aesthetics), which may thereby affect public confidence or acceptance of the drinking water. This includes the MCLs for aluminum, chloride, color, copper, corrosivity, foaming agents, iron, manganese, odor, pH, silver, sulfate, total dissolved solids and zinc.

22.164 ["Secretary, Delaware Health and Social Services" means the agency defined in Title 29, Section (b), Delaware Code.]

[22.165]"Sedimentation" means a process for removal of solids before filtration by gravity or separation.

~~[22.165]~~ [22.166]"Service Connection" means a water line to a dwelling unit or building.

~~[22.166]~~ [22.167]"Service Line Sample" means a one (1) liter sample of water collected in accordance with Section 22.607G2c that has been standing for at least six (6) hours in a service line.

~~[22.167]~~ [22.168]"Single Family Structure" means a building constructed as a single family residence that is currently used as either a residence or a place of business.

~~[22.168]~~ [22.169]"Slow Sand Filtration" means a process involving passage of raw water through a bed of sand at low velocity (generally less than 0.4 meters per hour) resulting in substantial particulate removal by physical and biological mechanisms.

~~[22.169]~~ [22.170]"Small Water System" means a water

system that served 3,300 persons or fewer.

~~[22.170]~~ [22.171]"Source" means the place from which a system obtains its water. This may be either from underground or from the surface. Surface water may include rivers, lakes, reservoirs, springs, impoundments or a body of water with a surface exposed to the atmosphere.

~~[22.171]~~ [22.172]"Standard Sample" means the sample size for bacteriological testing and shall consist of:

- A. For the fermentation tube test, five (5) standard portions of either twenty (20) milliliters (ml) or one hundred (100) mL.
- B. For the membrane filter technique, not less than one hundred (100) mL.

~~[22.172 "State Board of Health" means the agency defined in Title 29, Section (b), Delaware Code.]~~

22.173 "Supplier of Water" means any person who owns or operates a public water system.

22.174 "Surface Water" means all water which is open to the atmosphere and subject to surface runoff.

22.175 "System with a Single Service Connection" means a system which supplies drinking water to consumers via a single service line.

22.176 "Too Numerous to Count" means that the total number of bacterial colonies exceeds two hundred (200) on a forty-seven (47) millimeter (mm) diameter membrane filter used for coliform detection.

22.177 "Total Coliform-Positive Sample" means any Presence-Absence (P-A) Coliform Test with a result of present (P), any Minimal Medium ONPG-MUG (MMO-MUG) Test with a result of P, any Membrane Filter Technique test with a result of one (1) or more colonies per one hundred (100) ml, or any Multiple Tube Fermentation test with a result of one (1) or more positive tubes.

22.178 "Total Trihalomethanes (TTHMs)" means the sum of the concentration in milligrams per liter of trihalomethane compounds [trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform)] rounded to two significant figures.

22.179 "Treatment Technique Requirement" means a

requirement which specifies for a contaminant a specific treatment technique(s) demonstrated to the satisfaction of the Division to lead to a reduction in the level of such contamination sufficient to comply with these Regulations.

22.180 "Trihalomethanes (THMs)" means one of the family of organic compounds, named as derivatives of methane, wherein three (3) of the four (4) hydrogen atoms in methane are each substituted by a halogen atom in the molecular structure.

22.181 "Turbidity" means a measure of the clarity or cloudiness of water in Nephelometric Turbidity Units (NTUs).

22.182 "Variance" means an allowance to deviate from or to exceed an MCL requirement or treatment technique requirement when necessary treatment techniques are not available (see Section 22.202).

22.183 "Virus" means a virus of fecal origin which is infectious to humans by waterborne transmission.

22.184 "Vulnerable" means subject to contamination, a determination which shall be made by the Division based on previous monitoring results, the number of persons served by the public water system, the proximity of a smaller system to a larger system, the proximity to commercial or industrial use, disposal or storage of volatile synthetic organic compounds (VOCs), and the protection of the water source(s).

22.185 "Waterborne Disease Outbreak" means the significant occurrence of an acute infectious illness, epidemiologically associated with the ingestion of water from a public water system which is deficient in treatment, as determined by the Division.

22.186 "Water Distribution System" means the pumps, piping and storage facilities from the source(s)/treatment plant to the property line of the ultimate consumer.

22.187 "Water Supply System" means the structures, equipment and appurtenances for collection, treatment, storage and distribution of potable water from the source of supply to the free-flowing outlet of the ultimate consumer.

SECTION 22.2 GENERAL PROVISIONS

22.201 "Application": These regulations shall apply to all

public water systems in the State of Delaware.

22.202 "Variance:

A. The ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** may grant one or more variances to any PWS from:

1. Any requirement respecting a MCL of an applicable primary or secondary drinking water requirement upon finding that:

a. Because of characteristics of the raw water sources which are reasonably available to the system, the system cannot meet the requirements respecting the MCLs of such drinking water regulations despite application of the best technology, treatment techniques or other means, which the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** finds are generally available (taking costs into consideration) and;

b. The granting of a variance will not result in an unreasonable risk to the health of persons served by the PWS.

2. Any requirement of a specified treatment technique of an applicable primary or secondary drinking water requirement upon a finding that the PWS applying for the variance has demonstrated that such treatment technique is not necessary to protect the health of persons because of the nature of the raw water source of such system.

B. A supplier of water may request the granting of variance for a PWS by submitting a written request to the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]**. Suppliers of water may submit a joint request for variances when they seek similar variances under similar circumstances. Any written request for a variance or variances shall include the following information:

1. The nature and duration of the variance requested;

2. Relevant analytical results of water quality sampling of the system, including results of relevant tests conducted pursuant to the requirements of the PMCLs;

3. For any request made under this Section, the following is required:

a. Explanation in full and evidence of the best available treatment technology and techniques.

b. Economic and legal factors relevant to ability to comply.

c. Analytical results of raw water quality relevant to the variance requested.

d. A proposed compliance schedule, including the date each step toward compliance will be achieved. Such schedule shall include as a minimum the following dates:

1. Date by which arrangement for alternative raw water source or improvement of existing raw water source will be completed.

2. Date of initiation of the connection of the alternative raw water source or improvement of existing raw water source will be completed.

3. Date by which final compliance is to be achieved.

e. A plan for the provision of safe drinking water in the case of an excessive rise in the contaminant level for which the variance is requested.

f. A plan for interim control measures during the effective period of variance.

4. A statement that the water supplier will perform monitoring and other reasonable requirements prescribed by the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] as a condition to the variance.

5. Other information, if any, believed to be pertinent by the applicant, or such information as the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] may require.

C. The ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] shall notify the applicant in writing of the disposition of the variance request within ninety (90) days of receipt of request.

1. If the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] decides to deny the application for a variance, it shall notify the applicant of its intention to issue a denial. Such notice shall include a statement of reasons for the proposed denial, and shall offer the applicant an opportunity to present, within thirty (30) days of receipt of the notice, additional information or argument to the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services]. It shall make a final determination on the request within thirty (30) days after receiving any such additional information or argument. If no additional information or argument is submitted by the applicant, the application shall be denied.

2. If the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] proposes to grant a variance request submitted pursuant to this Section, it shall notify the applicant of its decision in writing. Such notice shall identify the variance, the facility covered and conditions of the variance and shall specify the period of time for which the variance will be effective.

D. No variances from the requirements of Section 22.51 (Microbiological requirements) shall be permitted.

E. No variances from the requirements of Section 22.10 (Surface Water Treatment Rule) shall be permitted.

22.203 "Exemption"

A. The ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] may exempt any PWS from:

1. Any requirement respecting an MCL or any treatment technique requirement or from both, of an applicable primary drinking water regulation upon finding that:

a. Due to compelling factors (which may include economic factors) the PWS is unable to comply with such contaminant level or treatment technique requirement;

b. The PWS was in operation on the effective date of such contaminant level or treatment technique requirement and;

c. The granting of the exemption will not result in an unreasonable risk to health.

B. A supplier of water may request the granting of any exemption by submitting a request in writing to the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services]. Suppliers of water may submit a joint request for exemptions when they seek similar exemptions under similar circumstances. Any written request for an exemption or exemptions shall include the following information:

1. The nature and duration of the exemption requested.

2. Relevant analytical results of water quality sampling of the system, including result of relevant tests conducted pursuant to the requirements of the Regulations.

3. Explanation of the compelling factors such as time or economic factors which prevent such system from achieving compliance.

4. A proposed compliance schedule, including the date when each step toward compliance will be achieved.

5. Other information, if any, believed to be pertinent by the applicant or such information as the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] may require.

C. The ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] shall notify the applicant in writing of the disposition of the exemption request within ninety (90) days of receipt of request.

1. If the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services] decides to deny the application for exemption, it shall notify the applicant of its intention to issue a denial. Such notice shall include a statement of reasons for the proposed denial, and shall offer the applicant an opportunity to present within thirty (30) days of receipt of the notice additional information or argument to the ~~{State Board of Health}~~ [Secretary, Delaware Health and Social Services]. It shall make a

final determination on the request within thirty (30) days after receiving any such additional information or argument. If no additional information or argument is submitted by the applicant, the application shall be denied.

2. If the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** grants an exemption request submitted pursuant to this Section, it shall notify the applicant of its decision in writing. Such notice shall provide that the exemption will be terminated when the system comes into compliance with the applicable regulations, and may be terminated upon a finding by the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** that the system has failed to comply with any requirements of a final schedule.

a. The ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** shall propose a schedule for:

1. Compliance (including increments of progress) by the public water system with each contaminant level requirement and treatment technique requirement covered by the exemption and;

2. Implementation by the public water system of such control measures as the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** may require for each contaminant covered by the exemption.

b. The schedule shall be prescribed by the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** within one (1) year after the granting of the exemption subsequent to provision of opportunity for hearing pursuant to Section 22.205. An exemption from a MCL or a treatment technique requirement if granted to a PWS is done so for a specific period of time. If any of the MCLs or treatment technique requirements are revised, then all exemptions from these revised standards shall terminate seven (7) years from the effective date of revision for single PWSs and nine (9) years for regional PWSs.

D. No exemptions from the requirements of Section 22.51 (Microbiological requirements) shall be permitted.

E. No exemptions from the requirements of Section 22.10 (Surface Water Treatment Rule) shall be permitted.

22.204 Variances and Exemptions from MCLs for VOCs

A. The Division hereby identifies the following as the best technology, treatment techniques, or other means available for achieving compliance with the MCLs for VOCs: removal using packed tower aeration; removal using granular activated carbon (except for Vinyl Chloride), removal using oxidation or other method(s) approved by the Division. See Section 22.63 for a listing of the best available technologies.

B. The Division shall require CWSs and NTNCWSs to install and/or use any of the treatment methods identified in paragraph A of this Section as a condition for granting a variance or exemption except as provided in paragraph C of this Section. If, after the system's installation of the treatment method, the system cannot meet the MCL, the system shall be eligible for a variance or exemption under the provisions of Section 22.202 or 22.203 respectively.

C. If a system can demonstrate through comprehensive engineering assessments, which may include pilot plant studies, that the treatment methods identified in paragraph A of this Section would only achieve a minimal reduction in the contaminants, the Division may issue a schedule of compliance that requires the system being granted the variance or exemption to examine other treatment methods as a condition of obtaining the variance or exemption.

D. If the Division determines that a treatment method identified in paragraph C of this Section is technically feasible, the Division may require the system to install and/or use that treatment method in connection with a compliance schedule issued under the provisions of Section 22.202 or 22.203. The Division's determination shall be based on studies by the system and other relevant information.

22.205 Public Hearing: Before a variance or exemption granted pursuant to Sections 22.202 and 22.203 may take effect, the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** shall provide notice and opportunity for public hearing on the variance or exemption. A notice given pursuant to the preceding sentence may cover the granting of more than one variance or exemption and hearing held pursuant to such notice shall include each of the variances and exemptions covered by the notice. Public notice of an opportunity for hearing on a variance or exemption shall be circulated in a manner designed to inform interested and potentially interested persons of the proposed variance or exemption. Notification shall include posting of a notice in the principal post office of each municipality or area served by the PWS and publishing of a notice in a newspaper or newspapers or general circulation in the area served by the PWS. Such notice shall include a summary of the proposed variance or exemption and shall inform interested persons that they may request a public hearing on the proposed variance or exemption. Requests must be submitted in writing to the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** within thirty (30) days after issuance of the public notices. Information needed in the formal hearing request will be listed on the public notice. Upon receipt of one or more

formal hearings requests, the ~~{State Board of Health}~~**[Secretary, Delaware Health and Social Services]** will give notice as set forth in this Section, of any hearings to be held. Notice shall also be sent to the person or persons requesting the hearing. Notice shall include pertinent information on the subject to be covered along with dates, times and telephone numbers of agencies and people involved. The disposition of the variance or exemption shall become effective thirty (30) days after notice of opportunity for hearing is given, if no request for hearing submitted and the ~~{State Board of Health}~~**[Secretary, Delaware Health and Social Services]** does not determine to hold a public hearing on its own motion.

22.206 Right of Entry: The Director of the Division or his/her designee shall have the right of entry, during reasonable hours and in a reasonable manner and without fee or hindrance, for the purpose of conducting a sanitary survey and/or sampling of any public water supply and all water furnished by any public water supplier, whether or not the Division has evidence that the system is in violation of an applicable legal requirement.

22.207 Prohibiting Water Usage: The Division may prohibit the use of sources of water which after treatment do not provide water conforming to the standards established by these Regulations or which for any reason may pose a threat to the public's health.

22.208 Separability: If any provision of these Regulations is held invalid, such invalidity shall not affect other provisions which can be given effect without the invalid provision.

22.209 Enforcement of Regulations: All PWSs must be operated in compliance with the requirements as set forth in these Regulations.

A. Notice: Whenever the Director of the Division, or his/her appointed representative, has reason to believe that a violation of any of these Regulations has occurred or is occurring, the Division shall notify the alleged violator. Such notice shall be in writing, may be sent by Certified Mail, or hand delivered, shall cite the Regulation or Regulations that are allegedly being violated, and shall state the facts which form the basis for believing that the violation has occurred or is occurring.

B. Orders: Notice of a violation may be accompanied by an order that requires that certain corrective action be taken. The order shall be signed by the Director or his/her designee or any of his/her appointed representatives and may

require:

1. The immediate cessation or correction of the violation.
2. The acquisition or use of additional equipment, supplies or personnel to insure that the violation does not recur.
3. The submission of a plan to prevent future violations to the Division for review and approval.
4. The submission of an application for a variance or exemption.
5. Any other corrective action deemed necessary for proper compliance with the Regulations including interim remedies pending correction of violations.

C. Hearing Request: Any supplier of water who receives an order from the Division may submit a request for a hearing to the ~~{State Board of Health}~~**[Secretary, Delaware Health and Social Services]** to contest the order.

D. Compliance with Effective Orders: Should any public water supplier fail to comply with any of these Regulations, the ~~{State Board of Health}~~**[Secretary, Delaware Health and Social Services]** may apply to an appropriate court for an injunction or other legal process to prevent or stop any practice which is in violation of these regulations.

E. Penalties: ~~Any person who neglects or fails to comply with these Regulations shall be subject to provisions under 16 Del. C. §107. [The Secretary~~ **The Secretary, Delaware Health and Social Services]** shall have the authority to impose an administrative penalty upon any public water system that violates water quality standards pursuant to Title 16, Chapter 1, § 122(3)(C). The administrative penalty shall be as follows:

1. For systems serving a population of more than 10,000 people, not less than \$1,000 nor more than \$10,000 per day per violation; and
2. For any other system, the administrative penalty shall be not less than \$100 nor more than \$10,000 per day per violation.

22.210 Emergency Orders: The Director of the Division or his/her appointed representative may issue emergency orders in any case where there is an imminent danger to the health of the public resulting from the operation of any waterworks or the source of a water supply. An emergency order may be communicated by the best practical notice under the circumstances, and is effective immediately upon receipt. The order may state any requirements necessary to remove the danger to the health of the public, including the immediate cessation of the operation of the PWS. Emergency orders shall be effective for a period not

exceeding sixty (60) days at the determination of the Director of the Division or his/her representative. Should any public water supplier fail to comply with an emergency order, the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** may apply to an appropriate court for an injunction or other legal process to prevent or stop any practice which is in violation of these Regulations.

22.211 Plans and Specifications: No person shall construct a new PWS or alter an existing PWS until two (2) copies of plans and specifications have been submitted to and approved by the Division. Whenever it is discovered that either of the above are occurring without such approval, the Director of the Division may order the owner, supplier of water or contractor to immediately stop the work and submit plans and specifications to the Division. After the submittal, any part of the system that has already been installed and is not in compliance shall be removed, altered or replaced in order to achieve compliance. Plans and specifications shall be on paper no larger than 30" x 42". Within thirty (30) days of receipt of plans and specifications, the Division shall notify the person who submitted the plans and specifications if they have been approved or disapproved. Such notice shall specify any conditions of approval or any reasons for disapproval. Approvals are valid for one (1) year and construction shall begin within that time. All construction shall be in accordance with the approved plans and all conditions listed in the Certificate of Approval.

22.212 Siting Requirements: Before any person may enter into a financial commitment for or initiate construction of a new PWS or increase the capacity of an existing PWS, he shall notify the Division and, to the extent practicable, avoid locating part or all of the new or expanded facility at a site which:

A. Is subject to a significant risk from earthquakes, floods, fires or other disasters which could cause a breakdown of the PWS or a portion thereof or;

B. Except for intake structures, is within the floodplain of a one hundred (100) year flood or is lower than any recorded high tide where appropriate records exist.

22.213 Approved Laboratory: For the purpose of determining compliance with Sections 22.5, 22.6, 22.7 and 22.9, samples may be considered only if they have been analyzed by the Division, EPA, or an approved laboratory, except that measurements for turbidity, free chlorine residual, temperature and pH may be performed by any person acceptable to the Division.

22.214 Quality: Drinking water shall not contain impurities in concentrations which may be hazardous to the health of the consumers. Substances used in its treatment shall not remain in the water in concentrations greater than required by good practice. Substances which may have deleterious physiological effects, or for which physiological effects are not known, shall not be introduced into the system in a manner which would permit them to reach the consumer.

22.215 Required Sampling, Monitoring or Analyses: In any case where the Division does not perform sampling, monitoring or analyses required by these Regulations, the supplier of water shall be responsible for performing this sampling, monitoring or analyses.

22.216 Date of Effect: These Regulations shall become effective on December 10, 1993.

SECTION 22.3 SOURCE AND PROTECTION

22.301 Water Source Desirability: Drinking water shall be obtained from the most desirable source which is feasible, and efforts must be made to prevent or control pollution of the source. If the source fails to meet the bacteriological standards of Section 22.5 and is not already disinfecting pursuant to Section 22.802, it may be required to do so in order to meet the bacteriological standards.

22.302 Sanitary Surveys: Sanitary surveys shall be made by the Division in order to locate and identify health hazards which might exist in the water supply system. The manner and frequency of making these surveys, and the rate at which discovered health hazards are to be removed, shall be in accordance with a program approved by the Division.

22.303 Approval of Water Supplies: Approval of water supplies shall be dependent in part upon:

A. Enforcement of rules and regulations to prevent development of health hazards;

B. Adequate protection of the water quality throughout all parts of the system, as demonstrated by sanitary surveys;

C. Proper operation of the water supply system under the responsible charge of personnel whose qualifications meet the certification requirements of the Division at such time as these requirements are established;

D. Adequate capacity to meet anticipated peak demands while maintaining not less than twenty-five (25) pounds per square inch (psi) and not more than one hundred (100) psi at ground level at all points in the water distribution system and;

E. Records of laboratory examinations showing consistent compliance with the water quality requirements of these Regulations.

22.304 Protection of Water: Water delivered to every consumer by any public water supplier shall be so protected by natural means, by proper constructions or by treatment so as to consistently equal or exceed the requirements herein established.

22.305 Monitoring Water Quality: Quality of water delivered by any public water supplier shall be continuously and/or periodically monitored in accordance with requirements herein established or in accordance with such monitoring water system of equal or greater effect as may be proposed by a public water supplier for its own use, subject to Division approval.

22.306 Responsibility: For the purpose of application of these Regulations, the supplier of water shall be responsible for the water quality at the user's free flowing outlet except for turbidity and VOCs, which are measured at a representative entry point(s) to the water distribution system.

SECTION 22.4 REPORTING, PUBLIC NOTIFICATION AND RECORD MAINTENANCE

22.40 Reporting

22.401 Results of Test, Measurement or Analysis: Except where a shorter period is specified in this part, the supplier of water shall report to the Division the results of any test, measurement or analysis required by this part within:

A. The first ten (10) days following the month in which the result is received, or

B. The first ten (10) days following the end of the required monitoring period as stipulated by the Division, whichever of these is shortest.

22.402 Failure to Comply with a PMCL: Unless otherwise stipulated, the supplier of water shall report to the Division within forty-eight (48) hours the failure to comply with any Primary Drinking Water Regulations (including failure to comply with monitoring requirements).

22.403 Analysis Performed by Division of Public Health Laboratory: The supplier of water is not required to report analytical results to the Division in cases where an approved laboratory performs the analyses and reports the results directly to the Division.

22.404 Reporting of Unregulated Contaminants: The owner or operator of a CWS or NTNCWS who is required to monitor under Section 22.621, shall send a copy of the results of such monitoring to the Division within thirty (30) days of receipt and any public notice issued under Section 22.416 to the Division.

22.405 Reporting by Surface Water Systems: A PWS that uses a surface water source or a ground water source under the direct influence of surface water and provides filtration treatment must report monthly to the Division the information specified in this paragraph, beginning June 29, 1993.

A. Turbidity measurements must be reported within ten (10) days after the end of each month the system serves water to the public. Information that must be reported includes:

1. The total number of filtered water turbidity measurements taken during the month.

2. The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to the turbidity limits for the filtration technology being used.

3. The date and value of any turbidity measurements taken during the month which exceed five (5) NTU.

B. Disinfection information must be reported to the Division within ten (10) days after the end of each month the system serves water to the public. Information that must be reported includes:

1. For each day, the lowest measurement of residual disinfectant concentration in mg/L in water entering the distribution system.

2. The date and duration of each period when the residual disinfectant concentration in water entering the distribution system fell below 0.3 mg/L and when the Division was notified of the occurrence.

3. The following information on the samples taken in the distribution system in conjunction with total coliform monitoring:

a. Number of instances where the residual disinfectant concentration is measured;

b. Number of instances where the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;

c. Number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

d. Number of instances where no residual disinfectant concentration is detected and where HPC is

greater than 500/ml;

e. Number of instances where the residual disinfectant concentration is not measured and HPC is greater than 500/ml;

f. For the current and previous month the system serves water to the public, the value of "V" in the following formula:

$$V = \frac{c + d + e}{a + b} \times 100$$

where: a = number of instances where the residual disinfectant concentration is measured;

n = number of instances where the residual disinfectant concentration is not measured but HPC is measured;

c = number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

d = number of instances where no residual disinfectant concentration is detected and where the HPC is >500/ml; and

e = number of instances where the residual disinfectant concentration is not measured and HPC is >500/ml.

g. If the Division determines, based on site-specific considerations, that a system has no means for having a sample transported and analyzed for HPC by an approved laboratory within the requisite time and temperature conditions, and that the system is providing adequate disinfection in the distribution system, the requirements of paragraph B.3.a-f of this Section do not apply.

4. A system need not report the data listed in paragraph B.1. of this Section if all the data listed in paragraphs B.1.-3. of this Section remain on file at the system and the Division determines that the system has submitted all the information required by paragraphs B.1.-3. of this Section for the last twelve (12) months.

C. Each system, upon discovering that a waterborne disease outbreak potentially attributable to that water system has occurred, must report that occurrence to the Division as soon as possible, but no later than by the end of the next business day. If at any time the turbidity exceeds five (5) NTU, the system must inform the Division as soon as possible, but no later than the end of the next business day. If at any time the residual falls below 0.3 mg/L in the water entering the distribution system, the system must notify the Division as soon as possible, but no later than by the end of the next business day. The system must also notify the

Division by the end of the next business day whether or not the residual was restored to at least 0.3 mg/L within four (4) hours.

22.406 Reporting of Chemical Overfeed Incidents or Unusual Events: It is the responsibility of the owner and/or the operator of a Public Water System to report to the Division, within 24 hours, any incidents of chemical overfeed and/or unusual events.

22.41 Public Notification

22.411 Circumstances for Public Notification: It shall be the duty and responsibility of a water supply owner to give public notification under any of the following circumstances:

- A. When any applicable PMCL has been exceeded.
- B. Violation of the PMCL for total coliforms, when fecal coliforms or E. coli are present in the water distribution system.
- C. Failure to comply with an established treatment technique.
- D. Failure to comply with the requirements of any schedule prescribed pursuant to a PMCL variance or exemption.
- E. The water supply has been granted or has in effect a variance or exemption from an applicable PMCL variance or exemption.
- F. Failure to comply with monitoring requirements.
- G. Failure to comply with an applicable testing procedure.
- H. Following notification by the Division of any violation of these Regulations which stipulates public notification.

22.412 Content of a Public Notice

- A. Public notice given pursuant to Section 22.411 shall be written in a manner reasonably designed to fully inform the users of the PWS of the reasons for the notice.
- B. The public notice shall:
 - 1. Be conspicuous.
 - 2. Disclose all material facts regarding the subject.
 - 3. Disclose the nature of the problem.
 - 4. When appropriate, provide a clear statement that a PMCL has been exceeded.
 - 5. When appropriate, describe any preventive measures that should be taken by the public.
 - 6. State any potential adverse health affects.
 - 7. State the population at risk.
 - 8. State the necessity for seeking alternate water

supplies, if any.

9. State preventive measures the consumer should take until the violation is corrected.

10. Include the phone number of the owner, operator, or designee of the public water system as a source of additional information concerning the notice.

11. Where appropriate, be multi-lingual.

C. The public notice shall not:

1. Use unduly technical language.

2. Use unduly small print.

3. Use any other methods which would frustrate the purpose of the notice.

D. The public notice may include:

1. A balanced explanation of the significance or seriousness to the public health of the subject of the notice.

2. A fair explanation of steps taken by the system to correct any problem.

3. The results of any additional sampling.

E. Mandatory Health Effects Language: When providing the information on potential adverse health effects required by B.6 of this Section in notices of violations of MCLs or treatment technique requirements, or notices of the granting or the continued existence of exemptions or variances, or notices of failure to comply with a variance or exemption schedule, the owner or operator of a PWS must include the following mandatory language specific to each contaminant:

1. Microbiological Contaminants: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that the presence of microbiological contaminants are a health concern at certain levels of exposure. If water is inadequately treated, microbiological contaminants in that water may cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set enforceable requirements for treating drinking water to reduce the risk of these adverse health effects. Treatment such as filtering and disinfecting the water removes or destroys microbiological contaminants. Drinking water which is treated to meet EPA requirements is associated with little to none of this risk and should be considered safe.

2. Total Coliforms: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that the presence of total coliforms is a possible health concern. Total coliforms are common in the environment and are generally not harmful

themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than 5.0 percent of the samples collected during the month can contain these bacteria, except that systems collecting fewer than forty (40) samples/month that have one (1) total coliform positive sample per month are not violating the standard. Drinking water which meets this standard is usually not associated with a health risk from disease-causing bacteria and should be considered safe.

3. Fecal Coliforms/E. coli: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that the presence of fecal coliforms or E. coli is a serious health concern. Fecal coliforms and E. coli are generally not harmful themselves, but their presence in drinking water is serious because they usually are associated with sewage or animal wastes. The presence of these bacteria in drinking water is generally a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for fecal coliforms and E. coli to reduce the risk of these adverse health effects. Under this standard, all of the drinking water samples must be free of these bacteria. Drinking water which meets this standard is associated with little or none of this risk and should be considered safe. State and local health authorities recommend that consumers take the following precautions: (To be inserted by the public water supplier upon direction of the Division).

4. Antimony: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that antimony is a health concern at certain levels of exposure. This inorganic chemical occurs naturally in soils, ground water and surface waters and is often used in the flame retardant industry. It is also used in ceramics,

glass, batteries, fireworks and explosives. It may get into drinking water through natural weathering of rock, industrial production, municipal waste disposal or manufacturing processes. This chemical has been shown to decrease longevity, and altered blood levels of cholesterol and glucose in laboratory animals such as rats exposed to high levels during their lifetimes. EPA has set the drinking water standard for antimony a 0.006 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to antimony.

5. **Asbestos:** The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that asbestos fibers greater than 10 micrometers in length are a health concern at certain levels of exposure. Asbestos is a naturally occurring mineral. Most asbestos fibers in drinking water are less than 10 micrometers in length and occur in drinking water from natural sources and from corroded asbestos-cement pipes in the distribution system. The major uses of asbestos were in the production of cements, floor tiles, paper products, paint, and caulking; in transportation-related applications; and in the production of textiles and plastics. Asbestos was once a popular insulating and fire retardant material. Inhalation studies have shown that various forms of asbestos have produced lung tumors in laboratory animals. The available information on the risk of developing gastrointestinal tract cancer associated with the ingestion of asbestos from drinking water is limited. Ingestion of intermediate-range chrysotile asbestos fibers greater than 10 micrometers in length is associated with causing benign tumors in male rats. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for asbestos at 7 million long fibers per liter to reduce the potential risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to asbestos.

6. **Barium:** The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that barium is health concern at certain levels of exposure. This inorganic chemical occurs naturally in some aquifers that serve as sources of ground water. It is also used in oil and gas drilling muds, automotive paints, bricks, tiles and jet fuels. It generally gets into drinking water after dissolving from naturally occurring minerals in the ground. This chemical may damage the heart and

cardiovascular system, and is associated with high blood pressure in laboratory animals such as rats exposed to high levels during their lifetimes. In humans, EPA believes that effects from barium on blood pressure should not occur below 2 parts per million (ppm) in drinking water. EPA has set the drinking water standard for barium at 2 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to barium.

7. **Beryllium:** The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that beryllium is a health concern at certain levels of exposure. This inorganic metal occurs naturally in soils, ground water and surface waters and is often used in electrical equipment and electrical components. It generally gets into water from runoff from mining operations, discharge from processing plants and improper waste disposal. Beryllium compounds have been associated with damage to the bones and lungs and induction of cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. There is limited evidence to suggest that beryllium may pose a cancer risk via drinking water exposure. Therefore, EPA based the health assessment on noncancer effects with an extra uncertainty factor to account for possible carcinogenicity. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for beryllium at 0.004 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to beryllium.

8. **Cadmium:** The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that cadmium is a health concern of certain levels of exposure. Food and smoking of tobacco are common sources of general exposure. This inorganic metal is a contaminant in the metals used to galvanize pipe. It generally gets into water by corrosion of galvanized pipes or by improper waste disposal. This chemical has been shown to damage the kidney in animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Some industrial workers who were exposed to relatively large amount of this chemical during working careers also suffered damage to the kidney. EPA has set the drinking water standard for cadmium at 0.005 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated

with little to none of this risk and is considered safe with respect to cadmium.

9. Chromium: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that chromium is a health concern at certain levels of exposure. This inorganic metal occurs naturally in the ground and is often used in the electroplating of metals. It generally gets into water from runoff from old mining operations and improper waste disposal from plating operations. This chemical has been shown to damage the kidney, nervous system, and the circulatory system of laboratory animals such as rats and mice when the animals are exposed at high levels. Some humans who were exposed to high levels of this chemical suffered liver and kidney damage, dermatitis and respiratory problems. EPA has set the drinking water standard for chromium at 0.1 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to chromium.

10. Copper: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that copper is a health concern at certain exposure levels. Copper, a reddish-brown metal, is often used to plumb residential and commercial structures that are connected to water distribution systems. Copper contaminating drinking water as a corrosion by-product occurs as the result of the corrosion of copper pipes that remain in contact with water for a prolonged period of time. Copper is an essential nutrient, but at high doses it has been shown to cause stomach and intestinal distress, liver and kidney damage, and anemia. Persons with Wilson's disease may be at a higher risk of health effects due to copper than the general public. EPA's national primary drinking water regulation requires all public water systems to install optimal corrosion control to minimize copper contamination resulting from the corrosion of plumbing materials. Public water systems serving 50,000 people or fewer that have copper concentrations below 1.3 parts per million (ppm) in more than 90% of tap water samples (the EPA "action level") are not required to install or improve their treatment. Any water system that exceeds the action level must also monitor their source water to determine whether treatment to remove copper in source water is needed.

11. Cyanide: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that cyanide is a health concern at certain levels of exposure. This inorganic chemical is used in electroplating, steel processing, plastics, synthetic fabrics and fertilizer products. It usually gets into water as a result

of improper waste disposal. This chemical has been shown to damage the spleen, brain and liver of humans fatally poisoned with cyanide. EPA has set the drinking water standard for cyanide at 0.2 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meet the EPA standard is associated with little to none of this risk and should be considered safe with respect to cyanide.

12. Lead: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain exposure levels. Materials that contain lead have frequently been used in the construction of water supply distribution systems, and plumbing systems in private homes and other buildings. The most commonly found materials include service lines, pipes, brass and bronze fixtures, and solders and fluxes. Lead in these materials can contaminate drinking water as a result of the corrosion that takes place when water comes into contact with those materials. Lead can cause a variety of adverse health effects in humans. At relatively low levels of exposure, these effects may include interference with red blood cell chemistry, delays in normal physical and mental development in babies and young children, slight deficits in the attention span, hearing, and learning abilities of children, and slight increases in the blood pressure of some adults. EPA's national primary drinking water regulation requires all public water systems to optimize corrosion control to minimize lead contamination resulting from the corrosion of plumbing materials. Public water systems serving 50,000 people or fewer that have lead concentrations below 15 parts per billion (ppb) in more than 90% of tap water samples (the EPA "action level") have optimized their corrosion control treatment. Any water system that exceeds the action level must also monitor their source water to determine whether treatment to remove lead in source water is needed. Any water system that continues to exceed the action level after installation of corrosion control and/or source water treatment must eventually replace all lead service lines contributing in excess of 15 (ppb) of lead to drinking water. Any water system that exceeds the action level must also undertake a public education program to inform consumers of ways they can reduce their exposure to potentially high levels of lead in drinking water.

13. Mercury: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that mercury is a health concern at certain levels of exposure. This inorganic metal is used in electrical equipment and some water pumps. It usually gets into water as a result of improper waste disposal. This chemical has

been shown to damage the kidney of laboratory animals such as rats when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for mercury at 0.002 parts per million (ppm) to protect against the risk for these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to mercury.

14. Nickel: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that nickel poses a health concern at certain levels of exposure. This inorganic metal occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products. It generally gets into water from mining and refining operations. This chemical has been shown to damage the heart and liver in laboratory animals when the animals are exposed to high levels over their lifetimes. EPA has set the drinking water standard at 0.1 parts per million (ppm) for nickel to protect against the risk of these adverse effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to nickel.

15. Nitrate: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that nitrate poses an acute health concern at certain levels of exposure. Nitrate is used in fertilizer and is found in sewage and wastes from human and/or farm animals and generally gets into drinking water from those activities. Excessive levels of nitrate in drinking water have caused serious illness and sometimes death in infants under six months of age. The serious illness in infants is caused because nitrate is converted to nitrite in the body. Nitrite interferes with the oxygen carrying capacity of the child's blood. This is an acute disease in that symptoms can develop rapidly in infants. In most cases, health deteriorates over a period of days. Symptoms include shortness of breath and blueness of the skin. Clearly, expert medical advice should be sought immediately if these symptoms occur. The purpose of this notice is to encourage parents and other responsible parties to provide infants with an alternate source of drinking water. Local and State health authorities are the best source for information concerning alternate sources of drinking water for infants. EPA has set the drinking water standard at 10 parts per million (ppm) for nitrate to protect against the risk of these adverse effects. EPA has also set a drinking water standard for nitrite at 1 ppm. To allow for the fact that the toxicity of nitrate and nitrite are additive, EPA has also established a standard for the sum of nitrate and nitrite at 10 ppm. Drinking water that meets the EPA standard is associated with little to none of

this risk and is considered safe with respect to nitrate.

16. Nitrite: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that nitrite poses an acute health concern at certain levels of exposure. This inorganic chemical is used in fertilizers and is found in sewage and wastes from humans and/or farm animals and generally gets into drinking water as a result of those activities. While excessive levels of nitrite in drinking water have not been observed, other sources of nitrite have caused serious illness and sometimes death in infants under six months of age. The serious illness in infants is caused because nitrite interferes with the oxygen carrying capacity of the child's blood. This is an acute disease in that symptoms can develop rapidly. However, in most cases health deteriorates over a period of days. Symptoms include shortness of breath and blueness of the skin. Clearly, expert medical advice should be sought immediately if these symptoms occur. The purpose of this notice is to encourage parents and other responsible parties to provide infants with an alternate source of drinking water. Local and State health authorities are the best source for information concerning alternate sources of drinking water for infants. EPA has set the drinking water standard at 1 part per million (ppm) for nitrite to protect against the risk of these adverse effects. EPA has also set a drinking water standard for nitrate (converted to nitrite in humans) at 10 ppm and for the sum of nitrate and nitrite at 10 ppm. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to nitrite.

17. Selenium: The United State Environmental Protection Agency (EPA) sets drinking water standards and has determined that selenium is a health concern at certain high levels of exposure. Selenium is also an essential nutrient at low levels of exposure. This inorganic chemical is found naturally in food and soils and is used in electronics, photocopy operations, and the manufacture of glass, chemicals, drugs, and as a fungicide and a feed additive. In humans, exposure to high levels of selenium over a long period of time has resulted in a number of adverse health effects, including a loss of feeling and control in the arms and legs. EPA has set the drinking water standard for selenium at 0.05 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to selenium.

18. Thallium: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that thallium is a health concern at certain high levels of exposure. This inorganic metal is found

naturally in soils and is used in electronics, pharmaceuticals, and the manufacture of glass and alloys. This chemical has been shown to damage the kidney, liver, brain and intestines of laboratory animals when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for thallium at 0.002 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to thallium.

19. Acrylamide: The United States Environmental Protection Agency (EPA) sets drinking standards and has determined that acrylamide is a health concern at certain levels of exposure. Polymers made from acrylamide are sometimes used to treat water supplies to remove particulate contaminants. Acrylamide has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. Sufficiently large doses of acrylamide are known to cause neurological injury. EPA has set the drinking water standard for acrylamide using a treatment technique to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. This treatment technique limits the amount of the polymer which may be added to drinking water to remove particulates. Drinking water systems which comply with this treatment technique have little to no risk and are considered safe with respect to acrylamide.

20. Alachlor: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that alachlor is a health concern at certain levels of exposure. This organic chemical is a widely used pesticide. When soil and climatic conditions are favorable, alachlor may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for alachlor at 0.002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to alachlor.

21. Aldicarb: The United States Environmental Protection Agency (EPA) sets drinking water standards and

has determined that aldicarb is a health concern at certain levels of exposure. Aldicarb is a widely used pesticide.. Under certain soil and climatic conditions (e.g., sandy soil and high rainfall), aldicarb may leach into ground water after normal agricultural applications to crops such as potatoes or peanuts or may enter drinking water supplies as a result of surface runoff. This chemical has been shown to damage the nervous system in laboratory animals such as rats and dogs exposed to high levels. EPA has set the drinking water standard for aldicarb at 0.003 parts pr million (ppm) to protect against the risk of adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to aldicarb.

22. Aldicarb sulfone: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that aldicarb sulfone is a health concern at certain levels of exposure. Aldicarb is a widely used pesticide. Aldicarb sulfone is formed from the breakdown of aldicarb and is considered for registration as a pesticide under the name aldoxycarb. Under certain soil and climatic conditions (e.g., sandy soil and high rainfall) aldicarb sulfone may leach into groundwater after normal agricultural applications to crops such as potatoes or peanuts or may enter drinking water supplies as a result of surface runoff. This chemical has been shown to damage the nervous systems in laboratory animals such as rats and dogs exposed to high levels. EPA has set the drinking water standard for aldicarb sulfone at 0.002 parts per million (ppm) to protect against the risk of adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to aldicarb sulfone.

23. Aldicarb sulfoxide: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that aldicarb sulfoxide is a health concern at certain levels of exposure. Aldicarb is a widely used pesticide. Aldicarb sulfoxide in ground water is primarily a breakdown of aldicarb. Under certain soil and climatic conditions (e.g., sandy soil and high rainfall), aldicarb sulfoxide may leach into groundwater after normal agricultural applications to crops such as potatoes or peanuts or may enter drinking water supplies as a result of surface runoff. This chemical has been shown to damage the nervous systems in laboratory animals such as rats and dogs exposed to high levels. EPA has set the drinking water standard for aldicarb sulfoxide at 0.004 parts per million (ppm) to protect against the risk of adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with

respect to aldicarb sulfoxide.

24. Atrazine: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that atrazine is a health concern at certain levels of exposure. This organic chemical is a herbicide. When soil and climatic conditions are favorable, atrazine may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to affect offspring of rats and the heart of dogs. EPA has set the drinking water standard for atrazine at 0.003 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to atrazine.

25. Benzo(a)pyrene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that benzo(a)pyrene is a health concern at certain levels of exposure. Cigarette smoke and charbroiled meats are a common source of general exposure. The major source of benzo(a)pyrene in drinking water is the leaching from coal tar lining and sealants in water storage tanks. This chemical has been shown to cause cancer in animals such as rats and mice when the animals are exposed at high levels. EPA has set the drinking water standard for benzo(a)pyrene at 0.0002 parts per million (ppm) to protect against the risk of cancer. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to benzo(a)pyrene.

26. Carbofuran: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that carbofuran is a health concern at certain levels of exposure. This organic chemical is a pesticide. When soil and climatic conditions are favorable, carbofuran may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the nervous and reproductive systems of laboratory animals such as rats and mice exposed at high levels over their lifetimes. Some humans who were exposed to relatively large amounts of this chemical during their working careers also suffered damage to the nervous system. Effects on the nervous system are generally rapidly reversible. EPA has set the drinking water standard for carbofuran at 0.04 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to carbofuran.

27. Chlordane: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that chlordane is a health concern at certain levels of exposure. This organic chemical is a pesticide used

to control termites. Chlordane is not very mobile in soils. It usually gets into drinking water after application near water supply intakes or wells. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for chlordane at 0.002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to chlordane.

28. Dalapon: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that dalapon is a health concern at certain levels of exposure. This organic chemical is a widely used herbicide. It may get into drinking water after application to control grasses in crops, drainage ditches and along railroads. This chemical has been shown to cause damage to the kidney and liver in laboratory animals when the animals are exposed to high levels over their lifetimes. EPA has set the drinking water standard for dalapon at 0.2 parts per million (pp) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to dalapon.

29. Dibromochloropropane (DBCP): The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that DBCP is a health concern at certain levels of exposure. This organic chemical was once a popular pesticide. When soil and climatic conditions are favorable, dibromochloropropane may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for DBCP at 0.0002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to DBCP.

30. Dichloromethane: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that dichloromethane

(methylene chloride) is a health concern at certain levels of exposure. This organic chemical is a widely used solvent. It is used in the manufacture of paint remover, as a metal degreaser and as an aerosol propellant. It generally gets into drinking water after improper discharge of waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for dichloromethane at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe with respect to dichloromethane.

31. Di(2-ethylhexyl)adipate: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that di(2-ethylhexyl)adipate is a health concern at certain levels of exposure. Di(2-ethylhexyl)adipate is a widely used plasticizer in a variety of products, including synthetic rubber, food packaging materials and cosmetics. It may get into drinking water after improper waste disposal. This chemical has been shown to damage liver and testes in laboratory animals such as rats and mice exposed to high levels. EPA has set the drinking water standard for di(2-ethylhexyl)adipate at 0.4 parts per million (ppm) to protect against the risk of adverse health effects. Drinking water which meets the EPA standards is associated with little to none of this risk and should be considered safe with respect to di(2-ethylhexyl)adipate.

32. Di(2-ethylhexyl)phthalate: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that di(2-ethylhexyl)phthalate is a health concern at certain levels of exposure. Di(2-ethylhexyl)phthalate is a widely used plasticizer, which is primarily used in the production of polyvinyl chloride (PVC) resins. It may get into drinking water after improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice exposed to high levels over their lifetimes. EPA has set the drinking water standard for di(2-ethylhexyl)phthalate at 0.006 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to di(2-ethylhexyl)phthalate.

33. Dinoseb: The United States Environmental

Protection Agency (EPA) sets drinking water standards and has determined that dinoseb is a health concern at certain levels of exposure. Dinoseb is a widely used pesticide and generally gets into drinking water after application on orchards, vineyard and other crops. This chemical has been shown to damage the thyroid and reproductive organs in laboratory animals such as rats exposed to high levels. EPA has set the drinking water standard for dinoseb at 0.007 parts per million (ppm) to protect against the risk of adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to dinoseb.

34. Diquat: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that diquat is a health concern at certain levels of exposure. This organic chemical is a herbicide used to control terrestrial and aquatic weeds. It may get into drinking water by runoff into surface water. This chemical has been shown to damage the liver, kidney and gastrointestinal tract and cause cataract formation in laboratory animals such as dogs and rats exposed at high levels over their lifetimes. EPA has set the drinking water standard for diquat at 0.02 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to diquat.

35. 2,4-D: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 2,4-D is a health concern at certain levels of exposure. This organic chemical is used as a herbicide and to control algae in reservoirs. When soil and climatic conditions are favorable, 2,4-D may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the liver and kidney of laboratory animals such as rats exposed at high levels during their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system. EPA has set the drinking water standard for 2,4-D at 0.07 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to 2,4-D.

36. Endothall: The United States Environmental Protection Agency (EPA) has determined that endothall is a health concern at certain levels of exposure. This organic chemical is a herbicide used to control terrestrial and aquatic weeds. It may get into water by runoff into surface water. This chemical has been shown to damage the liver, kidney,

gastrointestinal tract and reproductive system of laboratory animals such as rats and mice exposed at high levels over their lifetimes. EPA has set the drinking water standard for endothall at 0.1 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to endothall.

37. Endrin: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that endrin is a health concern at certain levels of exposure. This organic chemical is a pesticide no longer registered for use in the United States. However, this chemical is persistent in treated soils and accumulates in sediments and aquatic and terrestrial biota. This chemical has been shown to cause damage to the liver, kidney and heart in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for endrin at 0.002 parts per million (ppm) to protect against the risk of these adverse health effects which have been observed in laboratory animals. Drinking water that meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to endrin.

38. Epichlorohydrin: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that epichlorohydrin is a health concern at certain levels of exposure. Polymers made from epichlorohydrin are sometimes used in the treatment of water supplies as a flocculent to remove particulates. Epichlorohydrin generally gets into drinking water by improper use of these polymers. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for epichlorohydrin using a treatment technique to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. This treatment technique limits the amount of epichlorohydrin in the polymer and the amount of the polymer which may be added to drinking water as a flocculent to remove particulates. Drinking water systems which comply with this treatment technique have little to no risk and are considered safe with respect to epichlorohydrin.

39. Ethylene dibromide (EDB): The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that EDB is a health concern at certain levels of exposure. This organic chemical was once a

popular pesticide. When soil and climatic conditions are favorable, EDB may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standards for EDB at 0.00005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect EDB.

40. Glyphosate: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that glyphosate is a health concern at certain levels of exposure. This organic chemical is a herbicide used to control grasses and weeds. It may get into drinking water by runoff into surface water. This chemical has been shown to cause damage to the liver and kidneys in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for glyphosate at 0.7 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to glyphosate.

41. Heptachlor: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that heptachlor is a health concern at certain levels of exposure. This organic chemical was once a popular pesticide. When soil and climatic conditions are favorable, heptachlor may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standards for heptachlor at 0.0004 part per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to heptachlor.

42. Heptachlor Epoxide: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that heptachlor epoxide is a health concern at certain levels of exposure. This organic

chemical was once a popular pesticide. When soil and climatic conditions are favorable, heptachlor epoxide may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standards for heptachlor epoxide at 0.0002 part per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to heptachlor epoxide.

43. Hexachlorobenzene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that hexachlorobenzene is a health concern at certain levels of exposure. This organic chemical is produced as an impurity in the manufacture of certain solvents and pesticides. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed to high levels during their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for hexachlorobenzene at 0.001 parts per million (ppm) to protect against the risk of cancer and other adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to hexachlorobenzene.

44. Hexachlorocyclopentadiene: The United States Environmental Protection Agency (EPA) establishes drinking water standards and has determined that hexachlorocyclopentadiene is a health concern at certain levels of exposure. This organic chemical is used as an intermediate in the manufacture of pesticides and flame retardants. It may get into water by discharge from production facilities. This chemical has been shown to damage the kidney and the stomach of laboratory animals when exposed at high levels over their lifetimes. EPA has set the drinking water standard for hexachlorocyclopentadiene at 0.05 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to hexachlorocyclopentadiene.

45. Lindane: The United States Environmental Protection Agency (EPA) sets drinking water standards and

has determined that lindane is a health concern at certain levels of exposure. This organic chemical is used as a pesticide. When soil and climatic conditions are favorable, lindane may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the liver, kidney, nervous systems, and immune system of laboratory animals such as rats, mice and dogs exposed at high levels during their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system and circulatory system. EPA has established the drinking water standard for lindane at 0.0002 part per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to lindane.

46. Methoxychlor: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that methoxychlor is a health concern at certain levels of exposure. This organic chemical is used as a pesticide. When soil and climatic conditions are favorable, methoxychlor may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the liver, kidney, nervous system, and reproductive system of laboratory animals such as rates exposed at high levels during their lifetimes. It has also been shown to produce growth retardation in rats. EPA has set the drinking water standard for methoxychlor at 0.04 part per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to methoxychlor.

47. Oxamyl: The United States Environmental Protection Agency (EPA) establishes drinking water standards and has determined that oxamyl is a health concern at certain levels of exposure. This organic chemical is used as a pesticide for the control of insects and other pests. It may get into drinking water by runoff into surface water or leaching into groundwater. This chemical has been shown to damage the kidneys of laboratory animals such as rats when exposed at high levels over their lifetimes. EPA has set the drinking water standard for oxamyl at 0.2 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to oxamyl.

48. Pentachlorophenol: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that pentachlorophenol is a

health concern at certain levels of exposure. This organic chemical is used a wood preservative, herbicide, disinfectant, and defoliant. It generally gets into drinking water by runoff into surface water or leaching into ground water. This chemical has been shown to produce adverse reproductive effects and to damage the liver and kidneys of laboratory animals such as rats exposed to high levels during their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the liver and kidneys. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed to high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for pentachlorophenol at 0.001 parts per million (ppm) to protect against the risk of cancer or other adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to pentachlorophenol.

49. Picloram: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that picloram is a health concern at certain levels of exposure. This organic chemical is used as a pesticide for broadleaf weed control. It may get into drinking water by runoff into surface water or leaching into ground water as a result of pesticide application and improper waste disposal. This chemical has been shown to cause damage to the kidneys and liver in laboratory animals such as rats when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for picloram at 0.5 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to picloram.

50. Polychlorinated Biphenyls: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that polychlorinated biphenyls (PCBs) are a health concern at certain levels of exposure. These organic chemicals were once widely used in electrical transformers and other industrial equipment. They generally get into drinking water by improper waste disposal or leaking electrical industrial equipment. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for PCBs at 0.0005 part

per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to PCBs.

51. Simazine: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that simazine is a health concern at certain levels of exposure. This organic chemical is a herbicide used to control annual grasses and broadleaf weeds. It may leach into ground water or runs off into surface water after application. This chemical may cause cancer in laboratory animals such as rats and mice exposed at high levels during their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for simazine at 0.004 parts per million (ppm) to reduce the risk of cancer or other adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to simazine.

52. Toxaphene: The United State Environmental Protection Agency (EPA) sets drinking water standards and has determined that toxaphene is a health concern at certain levels of exposure. This organic chemical was once a pesticide widely used on cotton, corn, soybeans, pineapples and other crops. When soil and climatic conditions are favorable, toxaphene may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for toxaphene at 0.003 part per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to toxaphene.

53. 2,3,7,8-TCDD (Dioxin): The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that dioxin is a health concern at certain levels of exposure. This organic chemical is an impurity in the production of some pesticides. It may get into drinking water by industrial discharge of wastes. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed a high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of

cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for dioxin at 0.00000003 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe with respect to dioxin.

54. 2,4,5-TP: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 2,4,5-TP is a health concern at certain levels of exposure. This organic chemical is used as a herbicide. When soil and climatic conditions are favorable, 2,4,5-TP may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the liver and kidney of laboratory animals such as rats and dogs exposed to high levels during their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during working careers also suffered damage to the nervous system. EPA has set the drinking water standard for 2,4,5-TP at 0.05 part per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to 2,4,5-TP.

55. 1,2,4-Trichlorobenzene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,2,4-trichlorobenzene is a health concern at certain levels of exposure. This organic chemical is used as a dye carrier and as a precursor in herbicide manufacture. It generally gets into drinking water by discharges from industrial activities. This chemical has been shown to cause damage to several organs, including the adrenal glands. EPA has set the drinking water standard for 1,2,4-trichlorobenzene at 0.07 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to 1,2,4-trichlorobenzene.

56. 1,1,2-Trichloroethane: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,1,2-trichloroethane is a health concern at certain levels of exposure. This organic chemical is an intermediate in the production of 1,1-dichloroethylene. It generally gets into water by industrial discharge of wastes. This chemical has been shown to damage the kidney and liver of laboratory animals such as rats exposed to high levels during their lifetimes. EPA has set the drinking water standard for 1,1,2-trichloroethane at 0.005 parts per million (ppm) to protect against the risk of these adverse health effects.

Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to 1,1,2-trichloroethane.

57. Benzene: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that benzene is a health concern at certain levels of exposure. This chemical is used as a solvent and degreaser of metals. It is also a major component of gasoline. Drinking water contamination generally results from leaking underground gasoline and petroleum tanks or improper waste disposal. This chemical has been associated with significantly increased risks of leukemia among certain industrial workers who were exposed to relatively large amounts of this chemical during their working careers. This chemical has also been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause increased risk of cancer among exposed industrial workers and in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. The USEPA has set the enforceable drinking water standard for benzene at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in humans and laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

58. Carbon Tetrachloride: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that carbon tetrachloride is a health concern at certain levels of exposure. This chemical was once a popular household cleaning fluid. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. The USEPA has set the enforceable drinking water standard for carbon tetrachloride at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

59. o-Dichlorobenzene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that o-dichlorobenzene is a health concern at certain levels of exposure. This organic chemical is used as a solvent in the production of pesticides

and dyes. It generally gets into water by improper waste disposal. This chemical has been shown to damage the liver, kidney and the blood cells of laboratory animals such as rats and mice exposed to high levels during their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during working careers also suffered damage to the liver, nervous system, and circulatory system. EPA has set the drinking standard for o-dichlorobenzene at 0.6 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to o-dichlorobenzene.

60. Para-dichlorobenzene: The United State Environmental Protection Agency (USEPA) sets drinking water standards and has determined that para-dichlorobenzene is a health concern at certain levels of exposure. This chemical is a component of deodorizers, moth balls and pesticides. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause liver and kidney damage in laboratory animals such as rats and mice when the animals are exposed at high levels over the lifetimes. Chemicals which cause adverse health effects in laboratory animals may also cause adverse health effects in humans who are exposed at lower levels over long periods of time. The USEPA has set the enforceable drinking water standard for Para-dichlorobenzene at 0.075 parts per million (ppm) to reduce the risk of these adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

61. 1,2-Dichloroethane: The United State Environmental Protection Agency (USEPA) sets drinking water standards and has determined that 1,2-dichloroethane is a health concern at certain levels of exposure. This chemical is used as a cleaning fluid for fats, oils, waxes and resins. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. The USEPA has set the enforceable drinking water standard for 1,2-dichloroethane at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

62. 1,1-Dichloroethylene: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that 1,1-dichloroethylene is a health concern at certain levels of exposure. This chemical is used in industry and is found in drinking water as a result of the breakdown of related solvents. The solvents are used as cleaners and degreasers of metals and generally get into drinking water by improper waste disposal. This chemical has been shown to cause liver and kidney damage in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals which cause adverse health effects in laboratory animals may also cause adverse health effects in humans who are exposed at lower levels over long periods of time. The USEPA has set the enforceable drinkin water standard for 1,1-dichloroethylene at 0.007 parts per million (ppm) to reduce the risk of these adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

63. Cis-1,2-Dichloroethylene: The United States Environmental Protection Agency (EPA) establishes drinking water standards and has determined that cis-1,2-dichloroethylene is a health concern at certain levels of exposure. This organic chemical is used as a solvent and intermediate in chemical production. It generally gets into water by improper waste disposal. This chemical has been shown to damage the liver, nervous system, and circulatory system of laboratory animals such as rats and mice when exposed at high levels over their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system. EPA has set the drinking water standard for cis-1,2-dichloroethylene at 0.07 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to cis-1,2-dichloroethylene.

64. Trans-1,2-Dichloroethylene: The United States Environmental Protection Agency (EPA) establishes drinking water standards and has determined that trans-1,2-dichloroethylene is a health concern at certain levels of exposure. This organic chemical is used as a solvent and intermediate in chemical production. It generally gets into water by improper waste disposal. This chemical has been shown to damage the liver, nervous system, and the circulatory system of laboratory animals such as rats and mice when exposed at high levels over their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the

nervous system. EPA has set drinking water standards for trans-1,2 dichloroethylene at 0.1 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to trans-1,2-dichloroethylene.

65. 1,2-Dichloropropane: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,2-dichloropropane is a health concern at certain levels of exposure. This organic chemical is used as a solvent and pesticide. When soil and climatic conditions are favorable, 1,2-dichloropropane may get into drinking water by runoff into surface water or by leaching into ground water. It may also get into drinking water through improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for 1,2-dichloropropane at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to 1,2-dichloropropane.

66. Ethylbenzene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined ethylbenzene is a health concern at certain levels of exposure. This organic chemical is a major component of gasoline. It generally gets into water by improper waste disposal or leaking gasoline tanks. This chemical has been shown to damage the kidney, liver, and nervous system of laboratory animals such as rats exposed to high levels during their lifetimes. EPA has set the drinking water standard for ethylbenzene at 0.7 part per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to ethylbenzene.

67. Monochlorobenzene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that monochlorobenzene is a health concern at certain levels of exposure. This organic chemical is used as a solvent. It generally gets into water by improper waste disposal. This chemical has been shown to damage the liver, kidney and nervous system of laboratory animals such as rats and mice exposed to high levels during their lifetimes. EPA has set the drinking water standard for monochlorobenzene at 0.1 parts per million (ppm) to protect

against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to monochlorobenzene.

68. Styrene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that styrene is a health concern at certain levels of exposure. This organic chemical is commonly used to make plastics and is sometimes a component of resins used for drinking water treatment. Styrene may get into drinking water from improper waste disposal. This chemical has been shown to damage the liver and nervous system in laboratory animals when exposed at high levels during their lifetimes. EPA has set the drinking water standard for styrene at 0.1 part per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to styrene.

69. Tetrachloroethylene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that tetrachloroethylene is a health concern at certain levels of exposure. This organic chemical has been a popular solvent, particularly for dry cleaning. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for tetrachloroethylene at 0.005 part per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to tetrachloroethylene.

70. Toluene: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that toluene is a health concern at certain levels of exposure. This organic chemical is used as a solvent and in the manufacture of gasoline for airplanes. It generally gets into water by improper waste disposal or leaking underground storage tanks. This chemical has been shown to damage the kidney, nervous system, and circulatory system of laboratory animals such as rats and mice exposed to high levels during their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during working careers also suffered damage to the liver, kidney and nervous system. EPA has set the drinking water standard for toluene at 1 part

per million (ppm) to protect against the risk of adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to toluene.

71. 1,1,1-Trichloroethane: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that 1,1,1-trichloroethane is a health concern at certain levels of exposure. This chemical is used as a cleaner and degreaser of metals. It generally gets into drinking water by improper waste disposal. This chemical has been shown to damage the liver, nervous system and circulatory system of laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during their working careers also suffered damage to the liver, nervous system and circulatory system. Chemicals which cause adverse health effects in laboratory animals may also cause adverse health effects in humans who are exposed at lower levels over long periods of time. The USEPA has set the enforceable drinking water standard for 1,1,1-trichloroethane at 0.2 parts per million (ppm) to reduce the risk of these adverse health effects which have been observed in humans and laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

72. Trichloroethylene: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that trichloroethylene is a health concern at certain levels of exposure. This chemical is a common metal cleaning and dry cleaning fluid. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. The USEPA has set the enforceable drinking water standard for trichloroethylene at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

73. Vinyl Chloride: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that vinyl chloride is a health concern at certain levels of exposure. This chemical is used in industry and is found in drinking water as a result

of the breakdown of related solvents. The solvents are used as cleaners and degreasers of metals and generally get into drinking water by improper waste disposal. This chemical has been associated with significantly increased risks of cancer among certain industrial workers who were exposed to relatively large amounts of this chemical during their working careers. This chemical has also been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause increased risk of cancer among exposed industrial workers and in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. The USEPA has set the enforceable drinking water standard for vinyl chloride at 0.002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in humans and laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

74. Xylenes: The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that xylene is a health concern at certain levels of exposure. This organic chemical is used in the manufacture of gasoline for airplanes and as a solvent for pesticides, and as a cleaner and degreaser of metals. It usually get into water by improper waste disposal. This chemical has been shown to damage the liver, kidney and nervous system of laboratory animals such as rats and dogs exposed to high levels during their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system. EPA has set the drinking water standard for xylene at 10 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to xylene.

F. Public Notification for Fluoride: Notice of violations of the MCL for fluoride, notices of variances and exemptions from the MCL for fluoride, and notices of failure to comply with variance and exemption schedules for the MCL level for fluoride shall consist of the public notice prescribed in this Section, plus a description of any steps which the system is taking to come into compliance.

G. Public Notification by the State: The Division may give notice to the public required by this Section on behalf of the owner or operator of a public water system if the Division complies with the requirements of this Section. However, the owner or operator of the public water system remains legally responsible for ensuring that the requirements of this Section are met.

22.413 Frequency and Distribution of Public Notification:

A. MCL, Treatment Technique and Variance and Exemption Schedule Violations:

1. Except as provided in paragraph A.3., of this Section, the owner or operator of a public water system must give notice:

a. By publication in a daily newspaper of general circulation in the area served by the system as soon as possible, but in no case later than fourteen (14) days after the violation or failure. If the area served by the PWS is not served by a daily newspaper of general circulation, notice shall instead be given by publication in a weekly newspaper of general circulation serving the area and;

b. By mail delivery (by direct mail or with the water bill) or by hand delivery not later than forty-five (45) days after the violation or failure. The Division may waive mail or hand delivery if it determines that the owner or operator of the PWS in violation has corrected the violation or failure within the forty-five (45) day period and;

c. For violations of the MCLs of contaminants that may pose an acute risk to human health, by furnishing a copy of the notice to the radio and television stations serving the area served by the PWS as soon as possible but in no case later than seventy-two (72) hours after the violations:

1. Any violations specified by the Division as posing an acute risk to human health.

2. Violation of the MCL for nitrate as defined in and determined in Section 22.602(I)(3).

2. Except as provided in paragraph A.3., of this Section, following the initial notice given under paragraph A.1., of this Section, the owner or operator of the PWS must give notice at least once every three (3) months by mail delivery (by direct mail or with the water bill) or by hand delivery, for as long as the violation or failure exists.

3. Exceptions for community and non-community water systems are as follows:

a. In lieu of the requirements of paragraph A.1.(a) of this Section, the owner or operator of a CWS in an area that is not served by a daily or weekly newspaper of general circulation must give notice by hand delivery or by continuous posting in conspicuous places within the area served by the system. Notice by hand delivery or posting must begin as soon as possible, but no later than seventy-two (72) hours after the violation or failure for acute violations, or fourteen (14) days after the violation or failure for any other violation. Posting must continue for as long as the violation or failure exists. Notice by hand delivery must be repeated at least every three (3) months for as long as the violation or failure exists.

b. In lieu of the requirements of paragraphs A.1.(a) and A.1.(b) of this Section, the owner or operator of a NCWS may give notice by hand delivery or by continuous posting in conspicuous places within the area served by the system. Notice by hand delivery or posting must begin as soon as possible, but no later than seventy-two (72) hours after the violation or failure for acute violations, or fourteen (14) days after the violation or failure for any other violation. Posting must continue for as long as the violation or failure exists. Notice by hand delivery must be repeated at least every three (3) months for as long as the violation or failure exists.

B. Notification to New Billing Units: The owner or operator of a PWS must give a copy of the most recent public notice for any outstanding violation of any MCL, or any treatment technique requirement, or any variance or exemption schedule to all new billing units or new hookups prior to or at the time service begins.

C. Monitoring, Testing Procedure, Variances and Exemptions: The owner or operator of a PWS which fails to perform required monitoring, fails to comply with a testing procedure, or is subject to a variance or exemption shall notify persons served by the system as follows:

1. Except as provided in paragraph C.3. or C.4. of this Section, the owner or operator of a PWS must give notice within three (3) months of the violation or granting of a variance or exemption by publication in a daily newspaper of general circulation in the area served by the system. If the area served by the PWS is not served by a daily newspaper of general circulation, notice shall instead be given by publication in a weekly newspaper of general circulation serving the area.

2. Except as provided in paragraph C.3 or C.4 of this Section, following the initial notice given under paragraph C.1. of this Section, the owner or operator of the PWS must give notice at least once every three months by mail delivery (by direct mail or with water bill) or by hand delivery, for as long as the violation exists. Repeat notice of the existence of a variance or exemption must be given every three months for as long as the variance or exemption remains in effect.

3. Exceptions for community and non-community water systems are as follows:

a. In lieu of the requirements of paragraph C.1. or C.2. of this Section, the owner or operator of a CWS in an area that is not served by a daily or weekly newspaper of general circulation must give notice, within three (3) months of the violation or granting of the variance or exemption, by hand delivery or by continuous posting in conspicuous places within the area served by the system.

Posting must continue for as long as the violation exists or a variance or exemption remains in effect. Notice by hand delivery must be repeated at least every three (3) months for as long as the violation exists or a variance or exemption remains in effect.

b. In lieu of the requirements of paragraphs A.1.(a.) and A.1.(b) of this Section, the owner or operator of a NCWS may give notice within three (3) months of the violation or the granting of a variance or exemption, by hand delivery or by continuous posting in conspicuous places within the area served by the system. Posting must continue for as long as the violation exists or a variance or exemption remains in effect. Notice by hand delivery must be repeated at least every three (3) months for as long as the violation exists or a variance or exemption remains in effect.

4. In lieu of the requirements of paragraphs C.1., C.2. and C.3. of this Section, the owner or operator of a PWS, at the discretion of the Division, may provide less frequent notice for minor monitoring violations as defined by the Division, if EPA has approved the Division's application for a program revision.

D. All posted public notices shall remain readable and be protected by glass, plastic or some other suitable covering and remain in place until such time that the violation or failure has terminated.

E. Notice to the public required by this Section may be given by the Division should the water supplier fail to do so.

F. Nothing in this Section shall limit the authority of the ~~[State Board of Health]~~**[Secretary, Delaware Health and Social Services]** to require notification by newspaper and to radio and television stations when circumstances make more immediate or broader notice appropriate to protect the public's health.

G. All community and non-community water suppliers shall submit to the Division, within ten (10) days of the completion of issuance of public notification, a representative copy of each type of notice distributed, published, posted and/or made available to the person served by the system and/or to the media.

22.414 Public Notification Requirements Pertaining to Lead

A. Applicability of Public Notification Requirements

1. Except as provided in paragraph A.2. of this Section, by June 19, 1988, the owner or operator of each CWS and each NTNCWS shall issue notice to persons served by the system that may be affected by lead contamination of their drinking water. The Division may require subsequent notices. The owner or operator shall provide notice under this Section even if there is no violation

of the national primary drinking water regulation for lead.

2. Notice under paragraph A.1. of this Section is not required if the system demonstrates to the Division that the water system, including the residential and non-residential portions connected to the water system, are lead free. For the purposes of this paragraph, the term "lead free" when used with respect to solders and flux refers to solder and flux containing not more than 0.2 percent lead, and when used with respect to pipes and pipe fittings, refers to pipes and pipe fittings containing not more than 8.0 percent lead.

3. The owner shall review, correct and complete the public notice and return it to the Division within seventy-two (72) hours with approval noted.

B. Manner of Notification

1. Notice shall be given to persons served by the PWS either by:

a. Three newspaper notices one (1) for each of three (3) consecutive months and the first no later than June 19, 1988) or;

b. Once by mail notice with the water bill or in a separate mailing by June 19, 1988 or;

c. Once by hand delivery by June 19, 1988.

2. For NTNCWS, notice may be given by continuous posting. If posting is used, the notice shall be posted in a conspicuous place in the area served by the system and start no later than June 19, 1988, and continue for three (3) months.

C. General Content of Notice

1. Notices issued under this Section shall provide a clear and readily understandable explanation of the potential sources of lead in drinking water, potential adverse health effects, reasonable available methods of mitigating known or potential lead content in drinking water, any steps the water system is taking to mitigate lead content in drinking water and the necessity for seeking alternative water supplies, if any. Use of the mandatory language in paragraph D. of this Section in the notice will be sufficient to explain potential adverse health effects.

2. Each notice shall also include specific advice on how to determine if materials containing lead have been used in homes or the water distribution system and how to minimize exposure to water likely to contain high levels of lead. Each notice shall be conspicuous and shall not contain unduly technical language, unduly small print, or similar problems that frustrate the purpose of the notice. Each notice shall contain the telephone number of the owner, operator or designee of the PWS as a source of additional information regarding the notice. Where appropriate, the notice shall be multi-lingual.

D. Mandatory Health Effects Information: When providing the information in public notices required under paragraph C of this Section on the potential adverse health effects of lead in drinking water, the owner or operator of the water system shall include the following mandatory language specific to lead.

1. Lead: The United States Environmental Protection Agency (USEPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.020 parts per million (ppm). Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard. The USEPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women. Lead levels in your drinking water are likely to be highest:

- * if your home or water system has lead pipes, or
- * if your home has copper pipes with lead solder, and
- * if the home is less than five (5) years old
- * if you have soft or acidic water, or
- * if water sits in the pipes for several hours.

22.415 Public Notification Requirements Pertaining to VOCs: If a CWS or NTNCWS fails to comply with an applicable MCL level established under Section 22.611, or fails to comply with requirements of any schedule prescribed pursuant to a variance or exemption, the water supplier shall notify persons served by the system as provided in Section 22.413.

22.416 Public Notification Requirements Pertaining to Unregulated Contaminants: The owner or operator shall notify persons served by the system of the availability of the results of sampling conducted under Section 26.62 by including a notice in the first set of water bills issued by the system after the receipt of the results or written notice within three months. The notice shall identify a person and supply the telephone number contact for information on monitoring results. For surface water systems, public notification is required only after the first quarter's monitoring for unregulated contaminants, with a statement that monitoring will be conducted for three (3) more quarters with the results available upon request.

22.417 Procedures for Issuance of a Public Notice

A. PMCL Violation:

1. Upon notification that a condition exists as indicated in Section 22.411A., the Division shall prepare a notice in accordance with Section 22.412 and a draft public notice for use in public notification by the water supply owner.

2. As soon as possible, but in no case more than seventy-two (72) hours, the Division shall forward the notice and draft notice to the water supply owner.

3. The owner shall review, correct and complete the public notice and return it to the Division within seventy-two (72) hours with approval noted.

4. The Division shall resolve any discrepancies and approve the public notice until as rapidly as possible and retain the public notice until the final confirmation sample results are received.

5. Upon receipt of the confirmation sampling results, the Division shall determine if a public notice is warranted and shall return the approved public notice to the owner for appropriate public notification.

B. Other Violations or Circumstances Requiring Public Notification:

1. Upon notification that a condition exists as indicated in Section 22.411B. and 22.411C., the Division shall initiate the preparation of a draft public notice and notice if appropriate.

2. As soon as possible, but in no case more than seventy-two (72) hours, the Division shall forward a copy of the draft public notice with attached notice, if applicable, to the water supply owner.

3. The owner shall review, correct and complete the public notice and return it to the Division within seventy-two (72) hours with approval noted.

4. The Division shall resolve any discrepancies and approve the public notice as rapidly as possible.

5. The Division shall then return the approved public notice to the owner for appropriate public notification.

22.42 Record Maintenance:

22.421 Retaining Records: Effective upon the adoption of these Regulations, any owner or operator of a PWS shall accumulate and make available to the Division within the time stated the following records which shall be retained on the premises or at a convenient location:

A. Bacteriological analyses of records for not less than the previous five (5) years.

B. Chemical analyses records for not less than the previous ten (10) years.

C. Actual laboratory reports may be kept, or data may be transferred to tabular summaries, provided that the following information is included:

1. The date, place and time of sampling and the name of the person who collected the sample;
2. Identification of the sample as to whether it was a routine distribution system sample, check sample, raw or process water sample or other special purpose sample;
3. Date of analysis;
4. Laboratory and person responsible for performing analysis;
5. The analytical technique/method used and;
6. The results of the analysis.

D. Records of action taken by the system to correct violations of PMCL regulations shall be kept for a period not less than three (3) years after the last action taken with respect to the particular violation involved.

E. Reports, summaries and communications relating to sanitary surveys shall be kept for a period not less than ten (10) years after completion of the sanitary survey of the system conducted by the system itself, by a private consultant or by any local, State or Federal agency.

F. Records concerning a variance or exemption shall be kept for a period ending not less than five (5) years following the expiration of such variance or exemption.

22.422 Records Kept by Division: Records of microbiological analyses of repeat or special samples shall be retained for not less than one (1) year in the form of actual laboratory reports or in an appropriate summary form. Records of each of the following decisions made pursuant to the total coliform provisions shall be made in writing and retained by the Division.

A. Records of the following decisions must be retained for five (5) years:

1. Any decision to waive the twenty-four (24) hour time limit for collecting repeat samples after a total coliform positive routine sample if the public water system has a logistical problem in collecting the repeat sample that is beyond the system's control, and what alternative time limit the system must meet.

2. Any decision to allow a system to waive the requirement for five (5) routine samples the month following a total coliform-positive sample. If the waiver decision is made, the record of the decision must contain all items listed in that paragraph.

3. Any decision to invalidate a total coliform-positive sample. If the decision to invalidate a total

coliform positive sample is made, the record of the decision must contain all the items in that paragraph.

B. Records of each of the following decisions must be retained in such a manner so that each system's current status may be determined:

1. Any decision to reduce the total coliform monitoring frequency for a CWS serving one thousand (1000) persons or fewer, that has no history of total coliform contamination in its current configuration and had a sanitary survey conducted within the last five (5) years showing that the system is supplied solely by a protected ground water source and is free of sanitary defects, to less than once per month and what the reduced monitoring frequency is. A copy of the reduced monitoring frequency must be provided to the system.

2. Any decision to reduce the total coliform monitoring frequency for a NCWS using only ground water and serving one thousand (1000) persons or fewer to less than once per quarter, and what the reduced monitoring frequency is. A copy of the reduced monitoring frequency must be provided to the system.

3. Any decision to reduce the total coliform monitoring frequency for a NCWS using only ground water and serving more than one thousand (1000) persons during any month the system serves one thousand (1000) persons or fewer. A copy of the reduced monitoring frequency must be provided to the system.

4. Any decision to waive the twenty-four hour limit for taking a total coliform sample for a PWS which uses surface water, or ground water under the influence of surface water, and which does not practice filtration, and which measures a source water turbidity level exceeding one (1) NTU near the first service connection.

5. Any decision that a NCWS is using only protected and disinfected ground water and therefore may reduce the frequency of its sanitary survey to less than once every five (5) years and what that frequency is. A copy of the reduced frequency must be provided to the system.

6. A list of agents other than the Division, if any, approved by the Division to conduct sanitary surveys.

7. Any decision to allow a PWS to forgo fecal coliform or E. coli testing on a total coliform positive sample if that system assumes that the total coliform positive sample is fecal coliform positive or E. coli positive.

22.5 MICRO-BIOLOGICAL REQUIREMENTS:

22.50 Sampling:

22.501 Sampling Sites: Compliance with bacteriological requirements of these Regulations shall be based on examinations of samples collected at sites which are

representative of water throughout the distribution system according to a written sample siting plan. These plans are subject to Division review and revision.

22.502 CWS Sampling Frequency: The supplier of water for a CWS shall sample for total coliform bacteria at least monthly in numbers proportional to the population served by the system in accordance with the following:

Population Served Number of Samples Per Month

25-1,000	1
1,001-2,500	2
2,501-3,300	3
3,301-4,100	4
4,101-4,900	5
4,901-5,800	6
5,801-6,700	7
6,701-7,600	8
7,601-8,500	9
8,501-12,900	10
12,901-17,200	15
17,201-21,500	20
21,501-25,000	25
25,001-33,000	30
33,001-41,000	40
41,001-50,000	50
50,001-59,000	60
59,001-70,000	70
70,001-83,000	80
83,001-96,000	90
96,001-130,000	100
130,001-220,000	120

22.503 Reduced Monitoring Frequency for CWSs: If a CWS serving twenty-five (25) to one thousand (1000) persons has no history of total coliform contamination in its current configuration and a sanitary survey conducted in the past five (5) years shows that the system is supplied solely by a protected ground water source and is free of sanitary defects, the Division may reduce the monitoring frequency specified above, except that in no case may the Division reduce the monitoring frequency to less than one (1) sample per quarter. The Division must approve the reduced monitoring frequency in writing.

22.504 NCWS Sampling Frequency: The supplier of water for a NCWS and NTNCWS shall sample for total coliform bacteria in accordance with the following:

A. A NCWS and NTNCWS using only ground water (except ground water under the direct influence of surface water) and serving one thousand (1000) persons or fewer must monitor each calendar quarter that the system provides water to the public, except that the Division may reduce this

monitoring frequency, in writing, if a sanitary survey shows that the system is free of sanitary defects. Beginning June 29, 1994 the Division cannot reduce the monitoring frequency for a NCWS using only ground water (except ground water under the direct influence of surface water) and serving one thousand (1000) persons or fewer to less than once per year.

B. A NCWS and NTNCWS using only ground water (except ground water under the direct influence of surface water) and serving more than one thousand (1000) persons during any month must monitor at the same frequency as a like-sized CWS, as specified in Section 22.502, except the Division may reduce this monitoring frequency, in writing, for any month the system serves one thousand (1000) persons or fewer. The Division cannot reduce the monitoring frequency to less than once per year. For systems using ground water under the direct influence of surface water, Section 22.504D applies.

C. A NCWS and NTNCWS using surface water, in total or in part, must monitor at the same frequency as a like-sized CWS, as specified in Section 22.502, regardless of the number of persons it serves.

D. A NCWS and NTNCWS using ground water under the direct influence of surface water must monitor at the same frequency as a like-sized CWS, as specified in Section 22.502. The system must begin monitoring at this frequency beginning six (6) months after the Division determines that the ground water is under the direct influence of surface water.

22.505 Special Sampling for Surface Water Systems: A PWS that uses surface water or ground water under the direct influence of surface water, and does not practice filtration in compliance with Section 22.1004, must collect at least one (1) sample near the first service connection each day the turbidity level of the source water, measured as specified in Section 22.702, exceeds one (1) NTU. This sample must be analyzed for the presence of total coliforms. When one (1) or more turbidity measurements in any day exceed one (1) NTU, the system must collect this coliform sample within twenty-four (24) hours of the first exceedance, unless the Division determines that the system, for logistical reasons outside the system's control, cannot have the sample analyzed within thirty (30) hours of collection. Sample results from this coliform monitoring must be included in determining the MCL for total coliforms.

22.506 Monthly/Quarterly Sampling: The PWS must collect samples at regular time intervals throughout the month/quarter, except that a system that uses ground water

(except ground water under the direct influence of surface water) and serves 4,900 persons or fewer, may collect all required samples on a single day if they are taken from different sites.

22.507 Special Purpose Samples: Special purpose samples, such as those taken to determine whether disinfection practices are sufficient following pipe placement, replacement, or repair, shall not be used to determine compliance with the MCL for total coliforms. Repeat samples taken pursuant to Section 22.513 are not considered special purpose samples, and must be used to determine compliance with the MCL for total coliforms.

22.51 Microbiological MCLs

22.511 Total Coliforms, Fecal Coliforms and *E. coli*: The MCLs for microbiological contaminants are in accordance with the following:

A. When any approved analytical methodology from Section 22.52 is used, compliance with the MCL is based on the presence or absence of total coliforms in a sample, rather than coliform density in accordance with the following:

1. For a system which collects at least forty (40) samples per month/quarter, if no more than 5.0 percent of the samples collected during a month/quarter are total coliform-positive, the system is in compliance with the MCL for total coliforms.

2. For a system which collects fewer than forty (40) samples per month/quarter, if no more than one (1) sample collected during a month/quarter is total coliform-positive, the system is in compliance with the MCL for total coliforms.

B. Any fecal coliform-positive repeat sample, or *E. coli*-positive repeat sample, or any total coliform-positive repeat sample following a fecal coliform-positive or *E. coli*-positive routine sample constitutes a violation of the MCL for total coliforms. For purposes of the public notification requirements in Section 22.41, this is a violation that may pose an acute risk to health.

C. A PWS must determine compliance with the MCL for total coliforms in accordance with the above for each month/quarter in which it is required to monitor for total coliforms.

D. The Division hereby identifies the following as the BAT, treatment techniques, or other means available for achieving compliance with the MCL for total coliforms above:

1. Protection of wells from contamination by coliforms by appropriate placement and construction;

2. Maintenance of a disinfectant residual throughout the distribution system;

3. Proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, and continual maintenance of positive water pressure in all parts of the distribution system;

4. Filtration and/or disinfection of surface water, or disinfection of ground water using strong oxidants such as chlorine, chlorine dioxide, or ozone.

5. The development of an EPA-approved State Wellhead Protection Program under Section 1428 of the Safe Drinking Water Act (SDWA).

22.512 Invalidation of Total Coliform-Positive Samples: Each total coliform positive sample counts in compliance calculations, unless it has been invalidated by the Division. Invalidated samples do not count toward the minimum monitoring frequency. The Division may invalidate a sample if:

A. The analytical laboratory acknowledges that improper sample analysis caused the positive result;

B. A laboratory must invalidate a total coliform sample (unless total coliforms are detected) if the sample produces a turbid culture in the absence of gas production using an analytical method where gas formation is examined (e.g. the Multiple-Tube Fermentation Technique), produces a turbid culture in the absence of an acid reaction in the Presence-Absence (P-A) Coliform Test, or exhibits confluent growth or produces colonies too numerous to count with an analytical method using a membrane filter (e.g. Membrane Filter Technique). If a laboratory invalidates a sample because of such interference, the system must collect another sample from the same location as the original sample within twenty-four (24) hours of being notified of the interference problem, and have it analyzed for the presence of total coliforms. The system must continue to re-sample within twenty-four (24) hours and have the samples analyzed until it obtains a valid result. The Division may waive the twenty-four (24) hour time limit on a case-by-case basis.

C. The system determines that the contamination is a domestic or other non-distribution system plumbing problem on the basis that one (1) or more repeat samples taken at the same tap as the original total coliform positive sample is total coliform positive, but all repeat samples at nearby sampling locations that are within five (5) service connections of the original tap are total coliform negative. A total coliform-positive sample cannot be invalidated under

this provision if the PWS has only one (1) service connection; or

D. The Division has substantial grounds to believe that a total coliform positive result is due to some circumstance or condition which does not reflect water quality in the distribution system, if:

1. The basis for this determination is documented in writing.
2. This document is signed and approved by the Division.
3. The documentation is made available to EPA and the public. The written documentation must state the specific cause of the total coliform-positive sample, and what action the system has taken, or will take, to correct this problem.

The system must still collect all repeat samples required under Section 22.513 to determine compliance with the MCL for total coliforms in Section 22.511.

22.513 Repeat Monitoring: When a total coliform-positive sample result is obtained, repeat sampling must be done in accordance with the following:

A. If a routine sample is total-coliform positive, the PWS must collect a set of repeat samples within twenty-four (24) hours of being notified of the positive result. A system which collects more than one (1) routine sample/month must collect no fewer than three (3) repeat samples for each total coliform positive sample found. A system which collects one (1) routine sample/month or fewer must collect no fewer than four (4) repeat samples for each total coliform positive sample found. The Division may extend the twenty-four (24) hour limit on a case-by-case basis if the system has a logistical problem in collecting the repeat samples within twenty-four hours that is beyond its control. In the case of an extension, the Division must specify how much time the system has to collect the repeat samples.

B. The system must collect at least one (1) repeat sample from the sampling tap where the original total coliform-positive sample was taken, and at least one (1) repeat sample at a tap within five (5) service connections upstream and at least one (1) repeat sample at a tap within five (5) service connections downstream of the original sampling site. If a total coliform-positive sample is at the end of the distribution system, or one (1) away from the end of the distribution system, the Division may waive the requirement to collect at least one (1) repeat sample upstream or downstream of the original sampling site.

C. The system must collect all repeat samples on the same day, except that the Division may allow a system with a single service connection to collect the required set of

repeat samples over a four (4) day period or to collect a larger volume repeat sample(s) in one (1) or more sample containers of any size, as long as the total volume collected is at least four hundred (400) mL [three hundred (300) mL for systems which collect more than one (1) routine sample/month].

D. If one (1) or more repeat samples in the set is total coliform-positive, the PWS must collect an additional set of repeat samples in the manner specified in paragraphs A, B, and C of this Section. The additional samples must be collected within twenty-four (24) hours of being notified of the positive result, unless the Division extends the limit as provided in paragraph A of this Section. The system must repeat this process until either total coliforms are not detected in one (1) complete set of repeat samples or the system determines that the MCL for total coliforms in Section 22.511 has been exceeded and notifies the Division.

E. If a system collecting fewer than five (5) routine samples per month has one (1) or more total coliform-positive samples and the Division does not invalidate the sample(s) under Section 22.512, it must collect at least five (5) routine samples during the next month the system provides water to the public, except that the Division may waive this requirement if the conditions of paragraphs E1 and E2 are met. The Division cannot waive the requirement for a system to collect repeat samples in paragraphs A, B, C, and D of this Section.

1. The Division may waive the requirements to collect five (5) routine samples the next month the system provides water to the public if the Division, or an agent approved by the Division, performs a site visit before the end of the next month the system provides water to the public. Although a sanitary survey need not be performed, the site visit must be sufficiently detailed to allow the Division to determine whether additional monitoring and/or any corrective action is needed. The Division cannot approve an employee of the system to perform the site visit, even if the employee is an agent approved by the Division to perform sanitary surveys.

2. The Division may waive the requirements to collect five (5) routine samples the next month the system provides water to the public if the Division has determined why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. In this case, the Division must document this decision to waive the following months's additional monitoring requirement in writing, have it approved and signed by the supervisor of the Division official who recommends such a decision, and make this document

available to the EPA and the public. The written documentation must describe the specific cause of the total coliform-positive sample and what action the system has taken and/or will take to correct this problem. The Division cannot waive the requirement to collect five (5) routine samples the next month the system provides water to the public solely on the grounds that all coliform samples are total coliform-negative. Under this paragraph, a system must still take at least one (1) routine sample before the end of the next month it serves water to the public and use it to determine compliance with the MCL for total coliforms in Section 22.511, unless the Division has determined that the system has corrected the contamination problem before the system took the set of repeat samples required in paragraphs A, B, C, and D of this Section, and all repeat samples were total coliform negative.

F. After a systems collects a routine sample and before it learns the results of the analysis of that sample, if it collects another routine sample(s) from within five (5) adjacent service connections of the initial sample, and the initial sample, after analysis, is found to contain total coliforms, then the system may count the subsequent sample(s) as a repeat sample instead of a routine sample.

G. Results of all routine and repeat samples not invalidated by the Division must be included in determining compliance with the MCL for total coliforms in Section 22.511.

22.514 Initial/Subsequent Sanitary Surveys: PWSs which do not collect five (5) or more routine samples/month must undergo an initial sanitary survey by June 29, 1994 for CWSs and June 29, 1999 for NCWSs. Thereafter, systems must undergo another sanitary survey every five (5) years, except that NCWSs using only protected and disinfected ground water, as defined by the Division, must undergo subsequent sanitary surveys at least every ten (10) years after the initial sanitary survey. The Division must review the results of each sanitary survey to determine whether the existing monitoring frequency is adequate and what additional measures, if any, the system needs to undertake to improve drinking water quality. In conducting a sanitary survey of a system using ground water in a State having an EPA-approved wellhead protection program under Section 1428 of the SDWA, information on sources of contamination within the delineated wellhead protection area that was collected in the course of developing and implementing the program should be considered instead of collecting new information, if the information was collected since the last time the system was subject to a sanitary survey. Sanitary surveys must be performed by the Division

and the system is responsible for ensuring the survey takes place.

22.515 Fecal Coliforms/*Escherichia coli* (*E. coli*) Testing: When a total coliform-positive sample result is obtained, the sample must be analyzed for fecal coliforms or *E. coli* in accordance with the following:

A. If any routine or repeat sample is total coliform-positive, the system must analyze that total coliform-positive culture medium to determine if fecal coliforms are present, except that the system may test for *E. coli* in lieu of fecal coliforms. If fecal coliforms or *E. coli* are present, the system shall notify the Division by the end of the day when the system is notified of the test result, unless the system is notified of the result after the Division office is closed, in which case the system shall notify the Division before the end of the next business day.

B. The Division has the discretion to allow the PWS, on a case by case basis, to forgo fecal coliform or *E. coli* testing on a total coliform-positive sample if that system assumes that the total coliform-positive sample is fecal coliform-positive or *E. coli* positive. Accordingly, the system shall notify the Division as specified in paragraph A of this Section and the provisions of Section 22.511B apply.

22.516 Response to Violation: A PWS which has exceeded the MCL for total coliforms in Section 22.511 must report the violation to the Division no later than the end of the next business day after it learns of the violation, and notify the public in accordance with Section 22.41. A PWS which has failed to comply with a coliform monitoring requirement, including the sanitary survey requirement, must report the monitoring violation to the Division within ten (10) days after the system discovers the violation, and notify the public in accordance with Section 22.41.

22.52 ANALYTICAL REQUIREMENTS

22.521 Analytical Methodology: The standard sample volume required for total coliform analysis, regardless of analytical method used, is one hundred (100) ml. Public water systems need only determine the presence or absence of total coliforms. A determination of total coliform density is not required. Public water systems must conduct total coliform analyses in accordance with one (1) of the following analytical methods:

A. Membrane Filter Technique: As set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al., 16th edition, Method 909, 909A, and 909B - pp.

8886-896; or Microbiological Methods for Monitoring the Environment, Water and Wastes, USEPA, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45628 (EPA-600/8-78-017, December 1978, available from ORD Publications, CERL, USEPA Cincinnati, Ohio 45268), Part III, Section B.2.1-2.6, pp. 108-112.

B. Multiple Tube Fermentation (MTF) Technique: As set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al., 16th edition, Method 908, 908A, and 908B - pp. 870-878, except that 10 fermentation tubes must be used; or Microbiological Methods for Monitoring the Environment, Water and Wastes, USEPA, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45628 (EPA-600/8-78-017, December 1978, available from ORD Publications, CERL, USEPA Cincinnati, Ohio 45268), Part III, Section B.4.1-4.6.4, pp. 114-118 (Most Probable Number Method) except that 10 fermentation tubes must be used. NOTE- In lieu of the 10 tube MTF Technique specified in paragraph A above, a public water system may use the MTF Technique using either five (5) tubes (20 ml sample portions) or a single culture bottle containing a culture medium for the MTF Technique, i.e. lauryl tryptose broth (formulated as described in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al., 16th edition, Method 908A-pp. 872), as long as a 100 ml water sample is used in the analysis.

C. Minimal Medium ONPG-MUG (MMO-MUG) Test: As set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Detection of Total Coliforms and *Escherichia coli* from Drinking Water: Comparison with Presence-Absence Techniques" (Edberg et al.), Applied and Environmental Microbiology, Volume 55, pp. 1003-1008, April 1989. (Note: The MMO-MUG Test) is sometimes referred to as the Autoanalysis Colilert System).

D. Fecal Coliform Test: PWSs must conduct fecal coliform analysis in accordance with the following procedure. When the MTF Technique or Presence-Absence (P-A) Coliform Test is used to test for total coliforms, shake the lactose-positive presumptive tube or P-A bottle vigorously and transfer the growth with a sterile three (3) mm loop or sterile applicator stick into brilliant green lactose bile broth and EC medium to determine the presence of total and fecal coliforms, respectively. For EPA approved analytical methods which use a membrane filter, remove the membrane containing the total coliform colonies from the substrate with a sterile forceps and carefully curl and insert the membrane into a tube of EC medium. (The laboratory

may first remove a small portion of selected colonies for verification.) Alternatively, swab the entire membrane filter surface with a sterile cotton swab and transfer the swab to the EC medium. (The cotton swab should not be left in the EC medium.) Gently shake the inoculated tube of EC medium to insure adequate mixing and incubate in a waterbath at 44.5 ± 0.2 C for twenty-four (24) \pm 2 hours. Gas production of any amount in the inner fermentation tube of the EC medium indicates a positive fecal coliform test. The preparation of EC medium is described in Standard Methods for the Examination of Water and Wastewater, American Public Health Association, 16th edition, Method 908C-pp.879, paragraph 1a. PWSs need only determine the presence or absence of fecal coliforms. A determination of fecal coliform density is not required.

SECTION 22.6 INORGANIC AND ORGANIC CHEMICAL REQUIREMENTS

22.60 INORGANIC CHEMICAL REQUIREMENTS

22.601 PMCLs AND SMCLs: The following are the inorganic PMCLs and SMCLs (mg/L -milligrams per liter). Compliance is determined pursuant to Section 22.602.

A. PMCLs

Substance	MCL
Antimony (Sb)	0.006 mg/L
Arsenic (As)	0.05 mg/L
Asbestos	7 MF/L
Barium (Ba)	2 mg/L
Beryllium (Be)	0.004 mg/L
Cadmium (Cd)	0.005 mg/L
Chromium (Cr)	0.1 mg/L
Cyanide (Cn)	0.2 mg/L
Fluoride (F)	See Section 22.603
Lead (Pb)	0.02 mg/L
Mercury (Hg)	0.002 mg/L
Nickel (Ni)	0.1 mg/L
Nitrate-Nitrogen (NO ₃ -N)	10 mg/L (See Section 22.602 I3)
Nitrite-Nitrogen (NO ₂ -N)	1 mg/L
Total Nitrate Nitrogen and Nitrite Nitrogen	10 mg/L
Selenium (Se)	0.05 mg/L
Thallium (Tl)	0.002 mg/L
Turbidity	See Section 22.701

* MFL - million fibers per liter, with fiber length > 10 microns

B. SMCLs

Substance MCL

Aluminum	0.05-0.2 mg/L
Chloride (Cl)	250 mg/L
Color	15 color units
Copper (Cu)	1 mg/L
Corrosivity	Noncorrosive (See Section 22.71)
Foaming Agents	0.50 mg/L
Iron (Fe)	0.30 mg/L
Manganese (Mn)	0.05 mg/L
Odor	3 threshold odor number
pH	6.5 - 8.5
Silver	0.1 mg/L
Sulfate (SO4)	250 mg/L
Total Dissolved Solids (TDS)	500 mg/L
Zinc (Zn)	5 mg/L

~~C. The following maximum contaminant level for cadmium, chromium, mercury, nitrate, and selenium shall remain effective until July 30, 1992.~~

Cadmium	0.01 mg/L
Chromium	0.05 mg/L
Mercury	0.002 mg/L
Nitrate	10.0 mg/L
Selenium	0.01 mg/L

~~1. The following maximum contaminant level for lead shall remain effective until December 7, 1992.~~

~~Lead 0.05 mg/L~~

~~C.D. The Maximum Contaminant Level Goals (MCLG) for lead and copper are as follows:~~

Lead	0 mg/L
Copper	1.3 mg/L

22.602 SAMPLING AND ANALYTICAL REQUIREMENTS: Community water systems shall conduct monitoring to determine compliance with the maximum contaminant levels specified in Section 22.601 in accordance with this section. Non-transient, non-community water systems shall conduct monitoring to determine compliance with the maximum contaminant levels specified in Section 22.601 in accordance with this section. Transient, non-community water systems shall conduct monitoring to determine compliance with the nitrate and nitrite maximum contaminant levels in Section 22.601 in accordance with this section.

A. Monitoring shall be conducted as follows:

1. Groundwater systems shall take a minimum of

one sample at every entry point to the distribution system which is representative of each well after treatment [hereafter called a sampling point] beginning in the compliance period starting January 1, 1993. The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

a. Groundwater systems with 150 or more service connections shall begin monitoring for Phase II and Phase V contaminants on January 1, 1993.

b. Groundwater systems with less than 150 service connections shall begin monitoring for Phase II contaminants on January 1, 1993 and for Phase V contaminants on January 1, 1996.

2. Surface water systems shall take a minimum of one sample at every entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment [hereafter called a sampling point] beginning in the compliance period beginning January 1, 1993. The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

NOTE: FOR PURPOSES OF THIS PARAGRAPH, SURFACE WATER SYSTEMS INCLUDE SYSTEMS WITH A COMBINATION OF SURFACE AND GROUND SOURCES.

a. Surface water systems with 150 or more service connections shall begin monitoring for Phase II and Phase V contaminants on January 1, 1993.

b. Surface water systems with less than 150 service connections shall begin monitoring for Phase II contaminants on January 1, 1993 and for Phase V contaminants on January 1, 1996.

3. If a system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

4. The Division may reduce the total number of samples which must be analyzed by allowing the use of compositing. Composite samples from a maximum of five sampling points are allowed provided that the detection limit of the method used for analysis is less than one-fifth of the MCL. Compositing of samples must be done in the laboratory.

a. If the concentration in the composite sample is greater than or equal to one-fifth of the MCL of any inorganic chemical, then a follow-up sample must be taken within 14 days at each sampling point included in the

composite. These samples must be analyzed for the contaminants which exceeded one-fifth of the MCL in the composite sample. Detection limits for each analytical method are the following:

DETECTION LIMITS FOR INORGANIC
CONTAMINANTS

Contaminants	MCL (mg/L)	Method	Detection Limit (mg/L)
Antimony	0.006	Atomic Absorption furnace CP-Mass Spectrometry Hydride-Atomic Absorption	0.003 0.0008 6 0.0004 0.001
Asbestos	7MFL2	Transmission Electron Microscopy	0.01 MFL
Barium	2	Atomic Absorption furnace Technique Atomic Absorption direct aspiration	0.002 0.1
		Inductively Coupled Plasma	0.002 (0.001) 1
Beryllium	0.004	Atomic Absorption furnace xl Inductively Coupled Plasma3 ICP-Mass Spectrometry	0.0002 0.00002 6 0.0003 0.0003
Cadmium	0.005	Atomic Absorption furnace Technique Inductively Coupled Plasma	0.0001 0.001 1
Chromium	0.1	Atomic Absorption furnace Technique Inductively Coupled Plasma	0.001 0.007 (0.001) 1
Cyanide	0.2	Distillation, Spectrophotometric4 Distillation, Automated, Spectrophotometric4 Distillation, Selective Electrode4 Distillation, Amenable Spectrophotometric5	0.02 0.005 0.05 0.02
Mercury	0.002	Manual Cold Vapor Technique Automated Cold Vapor Technique	0.0002 0.0002
Nickel	0.1	Atomic Absorption furnace Inductively Coupled Plasma3 ICP-Mass Spectrometry	0.001 0.0006 6 0.005 0.0005
Nitrate	10	Manual Cadmium Reduction Automated Hydrazine Reduction Automated Cadmium Reduction Ion Selective Electrode Ion Chromatography	0.01 0.01 0.05 1 0.01
Nitrite	1	Spectrophotometric Automated Cadmium Reduction Manual Cadmium Reduction Ion Chromatography	0.01 0.05 0.01 0.004
Selenium	0.05	Atomic Absorption furnace Atomic Absorption gaseous hydride	0.002 0.002
Thallium	0.002	Atomic Absorption furnace ICP-Mass Spectrometry	0.001 0.0007 6 0.0003

1 Using concentration technique in Appendix A to EPA Method 200.7.

2 MFL = million fibers per liter > 10 um.

3 Using a 2X Preconcentration step as noted in Method 200.7. Lower MDLs may be achieved when using a 4X preconcentration.

4 Screening method for total cyanides.

5 Measures "free" cyanides.

6 Lower MDLs are reported using stabilized temperature

graphite furnace atomic absorption.

b. If the population served by the system is >3,300 persons, then compositing may only be permitted by the Division at sampling points within a single system. In systems serving <3,300 persons, the State may permit compositing among different systems provided the 5-sample limit is maintained.

c. If duplicates of the original sample taken from each sampling point used in the composite are available, the system may use these instead of resampling. The duplicates must be analyzed and the results reported to the Division within 14 days of collection

5. The frequency of monitoring for asbestos shall be in accordance with paragraph (B) of this section; the frequency of monitoring for antimony, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, and thallium shall be in accordance with paragraph (C) of this section; the frequency of monitoring for nitrate shall be in accordance with paragraph (D) of this section; and the frequency of monitoring for nitrite shall be in accordance with paragraph (E) of this section.

B. The frequency of monitoring conducted to determine compliance with the maximum contaminant level for asbestos specified in Section 22.601 shall be conducted as follows:

1. Each community and non-transient, non-community water system is required to monitor for asbestos during the first three-year compliance period of each nine-year compliance cycle beginning in the compliance period starting January 1, 1993.

2. If the system believes it is not vulnerable to either asbestos contamination in its source water or due to corrosion of asbestos-cement pipe, or both, it may apply to the Division for a waiver of the monitoring requirement in paragraph (B1) of this section. If the Division grants the waiver, the system is not required to monitor.

3. The Division may grant a waiver based on a consideration of the following factors:

a. Potential asbestos contamination of the water source, and

b. The use of asbestos-cement pipe for finished water distribution and the corrosive nature of the water.

4. A waiver remains in effect until the completion of the three-year compliance period. Systems not receiving a waiver must monitor in accordance with the provisions of paragraph (B1) of this section.

5. A system vulnerable to asbestos contamination due solely to corrosion of asbestos-cement pipe shall take one sample at a tap served by asbestos-cement pipe and

under conditions where asbestos contamination is most likely to occur.

6. A system vulnerable to asbestos contamination due solely to source water shall monitor in accordance with the provision of paragraph (A) of this section.

7. A system vulnerable to asbestos contamination due both to its source water supply and corrosion of asbestos-cement pipe shall take one sample at each entry point after treatment and a minimum of one tap sample served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

8. A system which exceeds PMCL listed in Section 22.601 shall monitor quarterly beginning in the next quarter after the violation occurred.

9. The Division may decrease the quarterly monitoring requirement to the frequency specified in paragraph B1 of this section provided the Division has determined that the system is reliably and consistently below the maximum contaminant level. In no case can a Division make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface (or combined surface/ground) water system takes a minimum of four quarterly samples.

10. If monitoring data collected after January 1, 1990 are generally consistent with the requirements of this section then the Division may allow systems to use that data to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

C. The frequency of monitoring conducted to determine compliance with the maximum contaminant levels in Section 22.601 for antimony, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium and thallium shall be as follows:

1. Groundwater systems shall take one sample at each sampling point once every three (3) years. Surface Water systems [or combined surface/ground] shall take one sample annually at each sampling point beginning January 1, 1993.

2. The system may apply to the Division for a waiver from the monitoring frequencies specified in paragraph C(1) of this section.

3. A condition of the waiver shall require that a system shall take a minimum of one sample while the waiver is effective. The term during which the waiver is effective shall not exceed one compliance cycle (i.e., nine years).

4. The Division may grant a waiver provided surface water systems have monitored annually for at least three years and groundwater systems have conducted a minimum of three rounds of monitoring. (At least one sample shall have been taken since January 1, 1990). Both

surface and groundwater systems shall demonstrate that all previous analytical results were less than the maximum contaminant level. Systems that use a new water source are not eligible for a waiver until three rounds of monitoring from the new source have been completed.

5. In determining the appropriate reduced monitoring frequency, the Division shall consider:

a. Reported concentrations from all previous monitoring.

b. The degree of variation in reported concentrations; and

c. Other factors which may affect contaminant concentrations such as changes in groundwater pumping rates, changes in the systems configuration, changes in the system's operating procedures, or changes in stream flows or characteristics.

6. A decision by the Division to grant a waiver shall be made in writing and shall set forth the basis for the determination. The determination may be initiated by the Division or upon an application by the public water system. The public water system shall specify the basis for its request. The Division shall review and, where appropriate, revise its determination of the appropriate monitoring frequency when the system submits new monitoring data or when other data relevant to the system's appropriate monitoring frequency become available.

7. Systems which exceed the MCLs as calculated in paragraph I of this Section shall monitor quarterly beginning in the next quarter after the violation occurred.

8. The Division may decrease the quarterly monitoring requirement to the frequencies specified in paragraphs C1 and C2 of this section provided it has determined that the system is reliably and consistently below the maximum contaminant level. In no case can the Division make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface water system takes a minimum of four quarterly samples.

D. All public water systems (community; non-transient, non-community; and transient, non-community systems) shall monitor to determine compliance with the maximum contaminant level for nitrate in Section 22.601.

1. Community and non-transient, non-community water systems served by groundwater systems shall monitor annually beginning January 1, 1993; systems served by surface water shall monitor quarterly beginning January 1, 1993.

2. For community and non-transient, non-community water systems, the repeat monitoring frequency for groundwater systems shall be quarterly for at

least one year following any one sample in which the concentration is >50 percent of the MCL. The Division may allow a groundwater system to reduce the sampling frequency to annually after four consecutive quarterly samples are reliably and consistently less than the MCL.

3. For community and non-transient, non-community water systems, the Division may allow a surface water system to reduce the sampling frequency to annually if all analytical results from four consecutive quarters are <50 percent of the MCL. A surface water system shall return to quarterly monitoring if any one sample is >50 percent of the MCL.

4. Each transient non-community water system shall monitor annually beginning January 1, 1993.

5. After the initial round of quarterly sampling is completed, each community and non-transient non-community system which is monitoring annually shall take subsequent samples during the quarter(s) which previously resulted in the highest analytical result.

E. All public water systems (community; non-transient, non-community; and transient, non-community systems) shall monitor to determine compliance with the maximum contaminant level for nitrite in Section 22.601

1. All public water systems shall take one sample at each sampling point in the distribution system during the compliance period beginning January 1, 1993 and ending December 31, 1995.

2. After the initial sample, systems where an analytical result for nitrite is <50 percent of the MCL shall monitor at the frequency specified by the Division.

3. For community, non-transient, non-community, and transient non-community water systems, the repeat monitoring frequency for any water system shall be quarterly for at least one year following any one sample in which the concentration is >50 percent of the MCL. The Division may allow a system to reduce the sampling frequency to annually after determining the system is reliably and consistently less than the MCL.

4. Systems which are monitoring annually shall take each subsequent sample during the quarter(s) which previously resulted in the highest analytical result.

F. Confirmation Samples:

1. Where the results of sampling for antimony, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium indicate an exceedance of the maximum contaminant level, the Division may require that one additional sample be collected as soon as possible after the initial sample was taken (but not to exceed two weeks) at the same sampling point.

2. Where nitrate or nitrite sampling results indicate an exceedance of the maximum contaminant level, the system shall take a confirmation sample within 24 hours of the system's receipt of notification of the analytical results of the first sample. Systems unable to comply with the 24-hour sampling requirement must immediately notify the consumers in the area served by the public water system in accordance with Section 22.41. Systems exercising this option must take and analyze a confirmation sample within two weeks of notification of the analytical results of the first sample.

3. If a Division-required confirmation sample is taken for any contaminant, then the results of the initial and confirmation sample shall be averaged. The resulting average shall be used to determine the system's compliance in accordance with paragraph I of this section. The Division has the discretion to delete results of obvious sampling errors.

G. The Division may require more frequent monitoring than specified in paragraphs B, C, D and E of this section or may require confirmation samples for positive and negative results at its discretion.

H. Systems may apply to the Division to conduct more frequent monitoring than the minimum monitoring frequencies specified in this section.

I. Compliance with Section 22.601 shall be determined based on the analytical result(s) obtained at each sampling point:

1. For systems which are conducting monitoring at a frequency greater than annual, compliance with the maximum contaminant levels for antimony, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, and thallium is determined by a running annual average at each sampling point. If the average at any sampling point is greater than the MCL, then the system is out of compliance. If any one sample would cause the annual average to be exceeded, then the system is out of compliance immediately. Any sample below the detection limit shall be calculated at zero for the purpose of determining the annual average.

2. For systems which are monitoring annually, or less frequently, the system is out of compliance with the maximum contaminant levels for antimony, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, and thallium if the level of a contaminant at any sampling point is greater than the MCL. If a confirmation sample is required by the Division, the determination of compliance will be based on the average of two samples.

3. Compliance with the maximum contaminant

levels for nitrate and nitrite is determined based on one sample if the levels of these contaminants are below the MCLs. If the levels of nitrate and/or nitrite exceed the MCLs in the initial sample, a confirmation sample is required and compliance shall be determined based on the average of the initial and confirmation samples.

4. If a public water system has a distribution system separable from other parts of the distribution system with no interconnections, the Division may allow the system to give public notice to only the area served by that portion of the system which is out of compliance.

J. Each public water system shall monitor at the time designated by the Division during each compliance period.

K. At the discretion of the Division, nitrate levels not to exceed 20 mg/L may be allowed in NCWS and NTNCWS if the supplier of water demonstrates to the satisfaction of the Division that:

1. Such water will not be available to children under one (1) year of age;
2. There will be continuous posting of the fact that nitrate levels exceed ten (10) mg/L and the potential health effects of exposure and;
3. No adverse health effects shall result.

22.603 Fluoride (F):

A. Where fluoridation has been or will be instituted as provided by Delaware Law and the fluoride content of a water supply is less than 0.8 mg/L, fluoride should be adjusted to provide a concentration within a range of 0.8-1.2 mg/L and shall not exceed 1.8 mg/L. Defluoridation of water shall be provided when the natural fluoride concentration exceeds 1.8 mg/L. In addition to the sampling and analysis required by Section 22.605, fluoridated and defluoridated water supplies shall be sampled and analyzed daily by the supplier of water at a representative point(s) in the water supply system. The fluoride levels shall be reported to the Division pursuant to Section 22.401.

B. All municipal water supplies, whether municipally owned or privately owned, shall comply with paragraph A of this section. All affected water supplies shall submit cost estimates to the Department of Health and Social Services no later than November 15, 1998.

22.604 Sodium (Na):

A. The supplier of water for a CWS shall collect and analyze one (1) sample per plant at the entry point of the distribution system for the determination of sodium concentration levels; samples must be collected and analyzed annually for systems utilizing surface water sources in whole or in part and at least every three (3) years

for systems utilizing solely ground water sources. The minimum number of samples required to be taken by the system shall be based on the number of treatment plants used by the system, except that multiple wells drawing raw water from a single aquifer may, with Division approval be considered one (1) treatment plant for determining the minimum number of samples. The supplier of water may be required by the Division to collect and analyze water samples for sodium more frequently in locations where the sodium content is variable.

B. The supplier of water shall report to the Division the results of analyses for sodium pursuant to Section 22.401.

C. The supplier of water shall notify appropriate local and State public health officials of the sodium levels by written notice by direct mail within three (3) months. A copy of each notice required to be provided by this paragraph shall be sent to the Division within ten (10) days of issuance. The supplier of water is not required to notify appropriate local and State public health officials of the sodium levels where the Division provides such notices in lieu of the supplier.

D. Analysis for sodium shall performed by the flame photometric method in accordance with the procedures described in "Standard Methods for the EXamination of Water Wastewater" 14th Edition, pp. 250-253, or by Method 273.1, Atomic Absorption - Direct Aspiration or Method 273.2, Atomic Absorption Graphite Furnace, in "Methods for Chemical Analysis of Water and Waste," EMSL Cincinnati, EPA, 1979, or by Method D1428-64(a) in Annual Book of ASTM Standards, part 31, Water or any alternate analytical technique approved by the Division.

22.605 Inorganic Compliance Determination: Analysis for the purpose of determining compliance with Section 22.601 shall be in accordance with the following:

A. PMCL analyses for all CWSs utilizing surface water sources shall be conducted annually. SMCL analyses shall be performed at the discretion of the Division.

B. PMCL analyses for all CWSs utilizing only ground water sources shall be conducted at three (3) year intervals. SMCL analyses shall be performed at the discretion of the Division.

C. For NCWSs and NTNCWSs, whether supplied by surface or ground water sources, analyses for nitrate shall be conducted at intervals determined by the Division.

D. The Division has the authority to determine compliance or initiate enforcement action based upon analytical results and other information compiled by its sanctioned representatives and agencies.

E. If the result of an analysis made pursuant to paragraphs A, B and C indicates that the level of any primary contaminant listed in Section 22.601, excluding nitrates, exceeds the PMCL, the supplier of water shall report to the Division within seven (7) days and initiate three (3) additional analyses at the same sampling point with one (1) month.

F. When the average of four (4) analyses made pursuant to paragraph E of this section, rounded to the same number of significant figures as the PMCL for the substance in question, exceeds the PMCL, the supplier of water shall notify the Division pursuant to Section 22.40 and give notice to the public pursuant to Section 22.41. Monitoring after public notification shall be at a frequency designated by the Division and shall continue until the PMCL has not been exceeded in two (2) successive samples or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

G. The provision of paragraphs E and F of this Section notwithstanding compliance with the PMCL for nitrate shall be determined on the basis of the mean of two (2) analyses. When a level exceeding the PMCL for nitrate is found, a second analysis shall be initiated within twenty-four (24) hours, and if the mean of the two (2) analyses exceeds the PMCL, the supplier of water shall report his findings to the Division pursuant to Section 22.40 and shall notify the public pursuant to Section 22.41.

H. For the initial analyses required by paragraphs A, B and C of this Section, data for surface waters acquired within one (1) year prior to the effective date and data for ground waters acquired within three (3) years prior to the effective date of this Section may be substituted at the discretion of the Division.

22.606 Analytical Methodology: Analyses conducted to determine compliance with Section 22.601 for inorganic chemicals shall be made in accordance with the following methods.

A. PMCLs¹¹

1. Antimony--Atomic Absorption Furnace Technique¹⁴ using Method¹ 204.2 or Method³ 3113; Atomic Absorption Platform Technique¹⁴ using Method⁹ 220.9; ICP-Mass Spectrometry¹⁴ using Method⁹ 200.8; Hydride-Atomic Absorption¹⁵ using Method² D-3697-87.

2. Arsenic--Atomic Absorption Furnace Technique using Method¹ 206.2 or Method³ 30415; Atomic Absorption Gaseous Hydride using Method¹ 206.3, Method² D2972-84B, Method³ 303E or Method⁴ I-3063-85; Inductively Coupled Plasma using Method¹ 200.7A8; or Spectrophotometric Silver

Diethyldithiocarbamate using Method¹ 206.4, Method² D2972-84A or Method³ 307B after C(4A).

3. Asbestos--Transmission Electron Microscopy "Analytical Method For Determination of Asbestos Fiber in Water," EPA-600/4-83-043, September 1983, U.S. EPA, Environmental Research Laboratory, Athens, Georgia 30613.

4. Barium--Atomic Absorption Direct Aspiration¹⁴ using Method¹ 208.1 or Method³ 3111D; Atomic Absorption Furnace Technique¹⁴ using Method¹ 208.2, or Method³ 3113B; or Inductively Coupled Plasma^{8,14} using Method¹ 200.7 or Method³ 3120.

5. Beryllium--Atomic Absorption Furnace Technique¹⁴ using Method¹ 210.2 or Method² D-3645-84B or Method³ 3113; Atomic Absorption Platform Technique¹⁴ using Method⁹ 200.9; Inductively Coupled Plasma^{8,14} using Method⁹ 200.7 or Method³ 3120; ICP-Mass Spectrometry¹⁴ using Method⁹ 200.8.

6. Cadmium--Atomic Absorption Furnace Technique¹⁴ using Method¹ 213.2, Method³ 3113B; or Inductively Coupled Plasma¹⁴ using Method¹ 200.7.

7. Chromium--Atomic Absorption Furnace Technique¹⁴ using Method¹ 218.2, Method³ 3113B; or Inductively Coupled Plasma¹⁴ using Method¹ 200.7 or Method³ 3120.

8. Cyanide--Spectrophotometric Distillation using Method¹ 335.2 or Method² D-2036-89A or Method³ 4500-CN-D or Method⁴ I330085; Automated Spectrophotometric Distillation using Method¹ 335.3 or Method³ 4500-CN-E; Selective Electrode Distillation using Method² D-2036-89A or Method³ 4500-CN-F; Amenable Spectrophotometric Distillation using Method¹ 335.1 or Method² D-2036-89B or Method³ 4500-CN-G.

9. Fluoride--Colorimetric SPADNS with Distillation using Method¹ 340.1, Method² D1179-72A or Method³ 43A and C; Potentiometric Ion Selective Electrode using Method¹ 340.2, Method² D1179-72B or Method³ 413B; Automated Alizarin Fluoride Blue with Distillation using Method¹ 340.3, Method³ 413E or Method⁵ 129-71W; or Automated Ion Selective Electrode using Method⁶ 380-75WE.

10. Lead--Atomic Absorption Furnace Technique using Method¹ 239.2

11. Mercury--Manual Cold Vapor Technique¹⁵ using Method¹ 245.1, Method² D3223-86 or Method³ 3112B; or Automated Cold Vapor Technique¹⁵ using Method¹ 245.2.

12. Nickel--Atomic Absorption Furnace Technique¹⁴ using Method¹ 249.2 or Method³ 3113; Atomic Absorption Platform Technique¹⁴ using Method⁹

200.9; Atomic Absorption Direct Aspiration¹⁴ using Method¹ 249.1 or Method³ 3111B; Inductively Coupled Plasma¹⁴ using Method⁹ 200.7 or Method³ 3120; ICP-Mass Spectrometry¹⁴ using Method⁹ 200.8.

13. Nitrate-N--Manual Cadmium Reduction using Method¹ 353.3, Method² D3867-90 or Method³ 4500-NO₃-E; Automated Hydrazine Reduction using Method¹ 353.1, Automated Cadmium Reduction using Method¹ 353.2, Method² D3867-90 or Method³ 4500-NO₃-F; Ion Selective Electrode using Method⁷ WeWWG/5880; or Ion Chromatography using Method¹¹ 300.0 or Method¹⁰ B-1011.

14. Nitrite-N--Spectrophotometric using Method¹ 354.1 Manual Cadmium Reduction using Method¹ 353.3, Method² D3867-90 or Method³ 4500-NO₃-E; Automated Cadmium Reduction using Method¹ 353.2, Method² D3867-90 or Method³ 4500-NO₃-F; or Ion Chromatography using Method¹¹ 300.0 or Method¹⁰ B-1011.

15. Selenium--Atomic Absorption Gaseous Hydride¹⁵ Using Method² D3859-84A, Method³ 3114B; Atomic Absorption Furnace Technique^{13 14} using Method¹ 270.2, Method² D3859-88 or Method³ 3113B.

16. Thallium--Atomic Absorption Furnace Technique¹⁴ using Method¹ 279.2 or Method³ 3113; Atomic Absorption Platform Technique¹⁴ using Method⁹ 200.9; ICP-Mass Spectrometry¹⁴ using Method⁹ 200.8.

B. SMCLs

1. Aluminum--Atomic Absorption Direct Aspiration using Method¹ 202.1, Method³ 303C, or Method⁴ I-305i-84; Atomic Absorption Graphite Furnace Technique using Method¹ 202.2 or Method³ 304; Atomic Absorption Platform Technique using Method⁹ 200.9; Inductively Coupled Plasma Technique using Method⁹ 200.7 or Method³ 3120B; ICP-Mass Spectrometry using Method⁹ 200.8.

2. Chloride--Potentiometric using Method³ 407C; or Ion Chromatography using Method¹ 300.0, Method² D4327 or Method³ 429.

3. Color--Colorimetric Platinum Cobalt using Method¹ 110.2; Visual Comparison using Method³ 204A; or Spectrophotometric using Method³ 204B.

4. Foaming Agents--Methylene Blue Active Substances using Method¹ 425.1; or Anionic Surfactants as MBAS using Method³ 512B.

5. Iron--Atomic Absorption Direct Aspiration using Method¹ 236.1; Atomic Absorption Furnace Technique using Method¹ 236.2; or Metals by Atomic Absorption Spectrometry using Method³ 303.

6. Manganese--Atomic Absorption Direct Aspiration using Method¹ 243.1; Atomic Absorption

Furnace Technique using Method¹ 243.2; or Metals by Atomic Absorption Spectrometry using Method³ 303.

7. Odor--Threshold Odor Consistent Series using Method¹ 140.1; or Odor using Method³ 207.

8. pH--Potentiometric using Method¹ 150.1, Method² D1293-84A or B, or Method³ 423.

9. Sulfate--Turbidimetric using Method¹ 375.4 or Method² D516-82A; or Ion Chromatography using Method¹ 300.0 or Method² D4327.

10. Total Dissolved Solids (Total Filterable Residue)--Gravimetric using Method¹ 160.1, Method³ 209B or Method⁴ I-1750-84.

11. Zinc--Atomic Absorption Direct Aspiration using Method¹ 289.1; Atomic Absorption Furnace Technique using Method¹ 289.2; or Metals by Atomic Absorption Spectrometry using Method³ 303.

12. Any alternate analytical technique approved by the Division.

1 "Methods of Chemical analysis of Water and Wastes," EPA Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA-600/4-79-020), March 1985. Available from ORD Publications, CERL, EPA, Cincinnati, Ohio 45268.

2 Annual Book of ASTM Standards, Volume 11.01, American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19013.

3 "Standard Methods for the Examination of Water and Wastewater," 17th Edition, American Public Health Association, American Water Works Association, Water Pollution Control Federation, 1985.

4 "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," Techniques of Water-Resources Investigations of the United States Geological Survey Book 5, Chapter A-1, Third Edition, 1989. Available at Superintendent of Documents, U.S. Government Printing Office, Washington D.C.

5 "Fluoride in Water and Wastewater. Industrial Method #129-71 W." Technicon Industrial Systems. Tarrytown, New York 10591, December 1972.

6 "Fluoride in Water and Wastewater," Technicon Industrial Systems. Tarrytown, New York 10591, February 1976.

7 "Orion Guide to Water and Wastewater Analysis." Form WeWWG/5880, p. 5, 1985. Orion Research, Inc., Cambridge, Maryland.

8 "Inductively Coupled Plasma Atomic Emission Analysis of Drinking Water," Appendix to Method 200.7, September 1985. U.S.E.P.A. Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

9 "Methods for the Determination of Metals in Environmental Samples," Available at NTIS, PB 91-231498.

10 "Water Test Method for Determination of Nitrite/Nitrate in Water Using Single Column Ion Chromatograph, Method B-1011," Millipore Corporation, Waters Chromatography Division, 34 Maple Street, Milford, MA 001757.

11 "Method 300. Determination of Inorganic Anions in Water by Ion Chromatography," Inorganic Chemistry Branch, Environmental Monitoring Systems Laboratory, August 1991.

12 The addition of 1 mL of 30% H₂O₂ to each 100 mL of standards and samples is required before analysis.

13 Prior to dilution of the Arsenic and Selenium calibration standards, add 2 mL of 30% H₂O₂ for each 100 mL of standard.

14 Samples that contain less than 1 NTU (nephelometric turbidity unit) and are properly preserved (conc HNO₃ to pH < 2) may be analyzed directly (without digestion) for total metals, otherwise digestion is required. Turbidity must be measured on the preserved samples just prior to the initiation of metal analysis. When digestion is required, the total recoverable technique as defined in the method must be used.

15 For the gaseous hydride determinations of antimony and selenium and for the determination of mercury by the cold vapor techniques, the proper digestion technique as defined in the method must be followed to ensure the element is in the proper state for analyses.

16 For approved analytical procedures for metals, the technique applicable to total metals must be used.

C. Sample Collection and Preservation: - Sample collection for antimony, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, nitrate, nitrite, selenium and thallium under this section shall be conducted using the sample preservation method(s), container, and maximum holding time procedures specified in the table below:

Contaminant	Preservative ¹	Container ²	Time ³
Antimony	Conc HNO ₃ to pH <2	P or G	6 months
Asbestos	Cool, 4 oC	P or G	
Barium	Conc HNO ₃ to pH <2	P or G	6 months
Beryllium	Conc HNO ₃ to pH <2	P or G	6 months
Cadmium	Conc HNO ₃ to pH <2	P or G	6 months
Chromium	Conc HNO ₃ to pH <2	P or G	6 months
Cyanide	Cool 4o C, NaOH to pH >124	P or G	14 days
Fluoride	None	P or G	
Mercury	Conc HNO ₃ to pH <2	P or G	1 month
Nickel	Conc HNO ₃ to pH <2	P or G	28 days
Nitrate:			
-Chlorinated	Cool, 4 oC	P or G	6 months
-Non-chlorinated	Conc H ₂ SO ₄ to pH <2	P or G	28 days
Nitrite	Cool, 4 oC	P or G	14 days
Selenium	Conc HNO ₃ to pH <2	P or G	48 hours
Thallium	Conc HNO ₃ to pH <2	P or G	6 months

1 If HNO₃ cannot be used because of shipping restrictions, sample may be initially preserved by icing and immediately shipped to the laboratory. Upon receipt in the laboratory, the sample must be acidified with conc HNO₃ to pH <2. At time of analysis, sample container should be thoroughly rinsed with 1:1 HNO₃; washings should be added to sample.

2 P = plastic, hard or soft; G = glass, hard or soft.

3 In all cases, samples should be analyzed as soon after collection as possible.

4 See method(s) for the informaton for preservation.

D. Lab Approval: Analysis under this section shall only be conducted by laboratories that have received approval by EPA or the State of Delaware. Laboratories may conduct sample analysis under provisional certification until January 1, 1996. To receive approval to conduct analyses for antimony, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, nitrate, nitrite, selenium, and thallium the laboratory must:

1. Analyze Performance Evaluation samples which include those substances provided by EPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the State of Delaware.

2. Achieve quantitative results on the analyses that are within the following acceptance limits:

Contaminants	Acceptance limit
Antimony	6#30 at ≥ 0.006 mg/l
Asbestos	2 Standard deviations based on study statistics
Barium	$\pm 15\%$ at ≥ 0.15 mg/l
Beryllium	$\pm 15\%$ at ≥ 0.001 mg/l

Cadmium	±20% at ≥0.002 mg/l
Chromium	±15% at ≥0.01 mg/l
Cyanide	±25% at ≥0.1 mg/l
Fluoride	±10% at ≥1 to 10 mg/l
Mercury	±30% at ≥0.0005 mg/l
Nickel	±15% at ≥0.01 mg/l
Nitrate	±10% at ≥0.4 mg/l
Nitrite	±15% at ≥0.4 mg/l
Selenium	±20% at ≥0.01 mg/l
Thallium	±30% at ≥0.002 mg/l

22.607 Lead (Pb) and Copper (Cu): - Unless otherwise indicated, each of the provisions of this Section applies to CWSs and NTNCWSs. The requirements in Section (22.607) shall take effect November 9, 1992.

A. General Requirements:

1. Action Level:

a. The lead action level is exceeded if the concentration of lead in more than 10 percent of tap water samples collected during any monitoring period conducted in accordance with Section 22.607(G) is greater than 0.015 mg/L (i.e., if the "90th percentile" lead level is greater than 0.015 mg/L).

b. The copper action level is exceeded if the concentration of copper in more than 10 percent of tap water samples collected during any monitoring period conducted in accordance with Section 22.607(G) is greater than 1.3 mg/L (i.e., if the "90th percentile" copper level is greater than 1.3 mg/L).

c. The 90th percentile lead and copper levels shall be computed as follows:

1. The results of all lead or copper samples taken during a monitoring period shall be placed in ascending order from the sample with the lowest concentration to the sample with the highest concentration. Each sampling result shall be assigned a number ascending by single integers beginning with the number 1 for the sample with the lowest contaminant level. The number assigned to the sample with the highest contaminant level shall be equal to the total number of samples taken.

2. The number of samples taken during the monitoring period shall be multiplied by 0.9.

3. The contaminant concentration in the numbered sample yielded by the calculation in paragraph 1C(2) is the 90th percentile contaminant level.

4. For water systems serving fewer than 100 people that collect five samples per monitoring period, the 90th percentile is computed by taking the average of the highest and second highest concentrations.

2. CorrosionControlTreatmentRequirements:

a. All water systems shall install and operate optimal corrosion control treatment as defined in Section 22.147.

b. Any water system that complies with the applicable corrosion control treatment requirements specified by the Division under Sections 22.607 B and C shall be deemed in compliance with each treatment requirement contained in paragraph 2(a) of this section.

3. Source Water Treatment Requirements: Any system exceeding the lead or copper action level shall implement all applicable source water treatment requirements specified by the Division under Section 22.607D.

4. Lead Service Line Replacement: Any system exceeding the lead action level after implementation of applicable corrosion control and source water treatment requirements shall complete the lead service line replacement requirements contained in Section 22.607E.

5. Public Education Requirements: Any system exceeding the lead action level shall implement the public education requirements contained in Section 22.607F.

6. Monitoring and Analytical Requirements: Tap water monitoring for lead and copper, monitoring for water quality parameters, source water monitoring for lead and copper, and analyses of the monitoring results under this Section shall be completed in compliance with Sections 22.607 G, H, I and L.

7. Reporting Requirements: Systems shall report to the Division any information required by the treatment provisions of this Section and Section 22.607J.

8. Recordkeeping Requirements: Systems shall maintain records in accordance with Section 22.607K.

9. Violation of National Primary Drinking Water Regulations: Failure to comply with the applicable requirements of Section 22.607 including requirements established by the Division pursuant to these provisions, shall constitute a violation of the national primary drinking water regulations for lead and/or copper.

B. Applicability of Corrosion Control Treatment Steps for Small, Medium Size and Large Water Systems:

1. Systems shall complete the applicable corrosion control treatment requirements described in Section 22.607C by the deadlines established in this section.

a. A large system (serving >50,000 persons) shall complete the corrosion control treatment steps specified in paragraph (4) of this section, unless it is deemed to have optimized corrosion control under paragraph 2(b) or 2(c) of this section.

b. A small system (serving <3300 persons) and a medium-size system (serving >3,300 and <50,000

persons) shall complete the corrosion control treatment steps specified in paragraph (5) of this section, unless it is deemed to have optimized corrosion control under paragraph 2(a), 2(b) or 2(c) of this section.

2. A system is deemed to have optimized corrosion control and is not required to complete the applicable corrosion control treatment steps identified in this section if the system satisfies one of the following criteria:

a. A small or medium-size water system is deemed to have optimized corrosion control if the system meets the lead and copper action levels during each of two consecutive six-month monitoring periods conducted in accordance with Section 22.607(G).

b. Any water systems may be deemed by the Division to have optimized corrosion control treatment if the system demonstrates to the satisfaction of the Division that it has conducted activities equivalent to the corrosion control steps applicable to such system under this section. If the division makes this determination, it shall provide the systems with written notice explaining the basis for its decision and shall specify the water quality control parameters representing optimal corrosion control in accordance with Section 22.607(C)(6). A system shall provide the Division with the following information in order to support a determination under this paragraph.

1. The results of all test samples collected for each of the water quality parameters in section 22.607(C)3(a).

2. A report explaining the test methods used by the water system to evaluate the corrosion control treatments listed in Section 22.607(C)3(a), the results of all tests conducted, and the basis for the system's selection of optimal corrosion control treatment.

3. A report explaining how corrosion control has been installed and how it is being maintained to insure minimal lead and copper concentrations at consumer's taps; and

4. The results of tap water samples collected in accordance with Section 22.607G at least once every six months for one year after corrosion control has been installed.

c. Any water system is deemed to have optimized corrosion control if it submits results of tap water monitoring conducted in accordance with Section 22.607(G) and source water monitoring conducted in accordance with Section 22.607(I) that demonstrates for two consecutive six-month monitoring periods that the difference between the 90th percentile tap water lead level computed under Section 22.607(A)(1)(c), and the highest source water lead concentration, is less than the Practical Quantitation Level

(PQL) for lead specified in Section 22.607(L) (2)(c).

3. Any small or medium-size water system that is required to complete the corrosion control steps due to its exceedance of the lead or copper action level may cease completing the treatment steps whenever the system meets both action levels during each of two consecutive monitoring periods conducted pursuant to Section 22.607(G) and submits the results to the Division. If any such water system thereafter exceeds the lead or copper action level during any monitoring period, the system (or the Division, as the case may be) shall recommence completion of the applicable treatment steps, beginning with the first treatment step which was not previously completed in its entirety. The Division may require a system to repeat treatment steps previously completed by the system where the Division determines that this is necessary to properly implement the treatment requirements of this section. The Division shall notify the system in writing of such a determination and explain the basis for its decision.

4. Treatment Steps and Deadlines for Large Systems:

a. Except as provided in paragraph 2(b) and 2(c) of this section, large systems shall complete the following corrosion control treatment steps (described in the referenced portions of Sections 22.607(C), (G) and (H) by the indicated dates.

Step 1: The system shall conduct two six month initial monitoring periods by January 1, 1993.

Step 2: The system shall complete corrosion control studies, Section 22.607(C)3, in 18 months, by July 1, 1994.

Step 3: The Division shall designate optimal corrosion control treatment, Section 22.607(C)4, in 6 months, by January 1, 1995.

Step 4: The system shall install optimal corrosion control treatment, Section 22.607(C)5, in 24 months, by January 1, 1997.

Step 5: The system shall complete followup sampling, Section 22.607(G)4(b) and Section 22.607 (H)3, in 12 months, by January 1, 1998

Step 6: The Division shall review installation of treatment and designate optimal water quality control parameters, Section 22.607(C)6, in 6 months, by July 1, 1998.

Step 7: The system shall operate in compliance with the Division specified optimal water quality control parameters, Section 22.607(C)7, and continue to conduct tap sampling, Section 22.607(G)4 and Section 22.607(H)4.

5. Treatment Steps and Deadlines for Small and

Medium-Size Systems:

a. Except as provided in paragraph (2) of this section, small and medium-size systems shall complete the following corrosion control treatment steps (described in the referenced portions of Section 22.607 (C), (G) and (H) by the indicated time periods.

Step 1: The system shall conduct initial tap sampling, Section 22.607(G)4(a) and Section 22.607 (H)2, until the system either exceeds the lead or copper action level or becomes eligible for reduced monitoring under Section 22.607(G)4(d). A system exceeding the lead or copper action level shall recommend optimal corrosion control treatment, Section 22.607 (C)1, within six months after it exceeds one of the action levels.

Step 2: Within 12 months after a system exceeds the lead or copper action level, the Division may require the system to perform corrosion control studies. The Division shall specify optimal corrosion control treatment, Section 22.607(C)4, within the following time frames.

1. For medium-size systems, within 18 months after such system exceeds the lead or copper action level.

2. For small systems, within 24 months after such system exceeds the lead or copper action level.

Step 3: If the Division requires a system to perform corrosion control studies under step 2, the system shall complete the studies, Section 22.607(C)3, within 18 months after the Division requires that such studies be conducted.

Step 4: If the system has performed corrosion control studies under step 2, the Division shall designate optimal corrosion control treatment, Section 22.607(C)4, within 6 months after completion of step 3.

Step 5: The system shall install optimal corrosion control treatment, Section 22.607(C)5, within 24 months after the Division designates optimal corrosion control treatment.

Step 6: The system shall complete follow-up sampling, Section 22.607(G)4(b) and Section 22.607(H)3, within 36 months after the Division designates optimal corrosion control treatment.

Step 7: The Division shall review the systems's installation of treatment and designate optimal water quality control parameters, Section 22.607(C)6, within 6 months after completion of Step 6.

Step 8: The system shall operate in compliance with the Division-designated optimal water quality control parameters, Section 22.607(C)7, and continue to conduct tap sampling, Section 22.607(G)4(c) and Section 22.607 (H)4.

C. Description of Corrosion Control Treatment Requirements: Each System shall complete the corrosion control treatment requirements described below which are applicable to such systems under Section 22.607(B).

1. System Recommendation Regarding Corrosion Control Treatment: Based upon the results of lead and copper tap monitoring and water quality parameter monitoring, small and medium-size water systems exceeding the lead or copper action level shall recommend installation of one or more of the corrosion control treatments listed in paragraph (3)(a) of this section which the system believes constitutes optimal corrosion control for that system. The Division may require the system to conduct additional water quality parameter monitoring in accordance with Section 22.607(H)(2) to assist the Division in reviewing the system's recommendation.

2. Division Decision to Require Studies of Corrosion Control Treatment (Applicable to Small and Medium Size Systems): The Division may require any small or medium-size system that exceeds the lead or copper action level to perform corrosion control studies under paragraph (3) of this section to identify optimal corrosion control treatment for the system.

3. Performance of Corrosion Control Studies:

a. Any public water system performing corrosion control studies shall evaluate the effectiveness of each of the following treatments, and, if appropriate, combinations of the following treatments to identify the optimal corrosion control treatment for that system:

1. Alkalinity and pH adjustment;
2. Calcium hardness adjustment; and
3. The addition of a phosphate or silicate

based corrosion inhibitor at a concentration sufficient to maintain an effective residual concentration in all test tap samples.

b. The water system shall evaluate each of the corrosion control treatments using either pipe rig/loop tests, metal coupon tests, partial-system tests, or analyses based on documented analogous treatments with other systems of similar size, water chemistry and distribution system configuration.

c. The water system shall measure the following water quality parameters in any tests conducted under this paragraph before and after evaluating the corrosion control treatment listed above:

1. Lead;
2. Copper;
3. pH;
4. Alkalinity;
5. Calcium;

6. Conductivity;
7. Orthophosphate (when an inhibitor containing a phosphate compound is used);
8. Silicate (when an inhibitor containing a silicate compound is used);
9. Water temperature.

d. The water system shall identify all chemical or physical constraints that limit or prohibit the use of a particular corrosion control treatment and document such constraints with at least one of the following:

1. Data and documentation showing that a particular corrosion control treatment has adversely affected other water treatment processes when used by another water system with comparable water quality characteristics; and/or

2. Data and documentation demonstrating that the water system has previously attempted to evaluate a particular corrosion control treatment and has found that the treatment is ineffective or adversely affects other water quality treatment processes.

- e. The water system shall evaluate the effect of the chemicals used for corrosion control treatment on other water quality treatments processes.

- f. On the basis of an analysis of the data generated during each evaluation, the water system shall recommend to the Division in writing the treatment option that the corrosion control studies indicate constitutes optimal corrosion control treatment for that system. The water system shall provide a rationale for its recommendation along with all supporting documentation specified in paragraphs (3)(a) through (e) of this section.

4. Division Designation of Optimal Corrosion Control Treatment:

- a. Based upon consideration of available information including, where applicable, studies performed under paragraph (3) of this section and a system's recommended treatment alternative, the Division shall either approve the corrosion control treatment option recommended by the system, or designate alternative corrosion control treatment(s) from among those listed in paragraph (3)(a) of this section. When designating optimal treatment the Division shall consider the effects that additional corrosion control treatment will have on water quality parameters and on other quality treatment processes.

- b. The Division shall notify the system of its decision on optimal corrosion control treatment in writing and explain the basis for this determination within 6 months of receiving follow up samples. If the Division requests additional information to aid its review, the water system shall provide the information.

5. Installation of Optimal Corrosion Control: Each system shall properly install and operate throughout its distribution system the optimal corrosion control treatment designated by the Division under paragraph (4) of this section.

6. Division Review of Treatment and Specification of Optimal Water Quality Control Parameters: The Division shall evaluate the results of all lead and copper tap samples and water quality parameter samples submitted by the water system and determine whether the system has properly installed and operated the optimal corrosion control treatment designated by the Division in paragraph (4) of this section. Upon reviewing the results of tap water and water quality parameter monitoring by the system, both before and after the system installs optimal corrosion control treatment, the Division shall designate:

- a. A minimum value or a range of values for pH measured at each entry point to the distribution system;

- b. A minimum pH value measured in all tap samples. Such value shall be equal to or greater than 7.0 unless the Division determines that meeting a pH level of 7.0 is not technologically feasible or is not necessary for the system to optimize corrosion control;

- c. If a corrosion inhibitor is used, a minimum concentration or a range of concentrations for the inhibitor, measured at each entry point to the distribution system and in all tap samples, that the Division determines is necessary to form a passivating film on the interior walls of the pipes of the distribution system;

- d. If alkalinity is adjusted as part of optimal corrosion control treatment, a minimum concentration or a range of concentrations for alkalinity, measured at each entry point to the distribution system and in all tap samples;

- e. If calcium carbonate stabilization is used as part of corrosion control, a minimum concentration or a range of concentrations for calcium, measured in all tap samples. The values for the applicable water quality control parameters listed above shall be those that the Division determines to reflect optimal corrosion control treatment for the system. The Division may designate values for additional water quality control parameters determined by the Division to reflect optimal corrosion control for the system. The Division shall notify the system in writing of these determinations and explain the basis for its decisions.

7. Continued Operation and Monitoring: All systems shall maintain water quality parameter values at or above minimum values or within a range designated by the Division under paragraph (6) of this section in each sample collected under Section 22.607 (H)4. If the water quality parameter value of any sample is below the minimum value

or outside the range designated by the Division, then the system is out of compliance with this paragraph. As specified in Section 22.607 (H)4, the system may take a confirmation sample for any water quality parameter value not later than 3 days after the first sample. If a confirmation sample is taken, the result must be averaged with the first sampling result and the average must be used for any compliance determination under this paragraph. The Division has the discretion to delete results of obvious sampling errors from this calculation.

8. Modification of Division's Corrosion Control Treatment Decision: Upon its own initiative, or in response to a request by the water system or other interested party, the Division may modify treatment determination. The requests in writing must explain why the change is appropriate and provide supporting documentation. The treatment may be changed when the Division determines that it is necessary for the water system to continue optimizing corrosion control. The Division's decision must specify new treatment, explain basis for decision, and provide for implementation.

9. EPA Treatment Decisions in Lieu of the Division's Decisions: The regional administrator may issue federal determinations in lieu of the Division's determinations when:

- a. The Division fails to issue a determination in a timely manner.
- b. The Division abuses its discretion in a substantial number of cases or in cases affecting large populations.
- c. The technical basis of the Division's decision is indefensible in federal enforcement action(s).

D. Source Water Treatment Requirements: Systems shall complete the applicable source water monitoring and treatment requirements (described in the referenced portions of paragraph (2) of this section, and in Section 22.607(G) and (I)) by the following deadlines:

1. Deadlines for Completing Source Water Treatment Steps:

Step 1: A system exceeding the lead or copper action level shall complete lead and copper source water monitoring, Section 22.607 (I)2, and make a treatment recommendation to the Division, Section 22.607(D)2(a), within 6 months after exceeding the lead or copper action level.

Step 2: The Division shall make a determination regarding source water treatment, Section 22.607(D)2(b) within 6 months after submission of monitoring results under step 1.

Step 3: If the Division requires installation of source water treatment, the system shall install the

treatment, Section 22.607(D)2(c), within 24 months after completion of step 2.

Step 4: The system shall complete follow-up tap water monitoring, Section 22.607(G)4(b), and source water monitoring, Section 22.607(I)3, within 36 months after completion of step 2.

Step 5: The Division shall review the system's installation and operation of source water treatment and specify maximum permissible source water levels for lead and copper, Section 22.607(D)2(d), within 6 months after completion of step 4.

Step 6: The system shall operate in compliance with the Division-specified maximum permissible lead and copper source water levels, Section 22.607(D)2(d), and continue source water monitoring, Section 22.607(I)4.

2. Description of Source Water Treatment Requirements:

a. System Treatment Recommendation: Any system which exceeds the lead or copper action level shall recommend in writing to the Division the installation and operation of one of the source water treatments listed in paragraph (2b) of this section. A system may recommend that no treatment be installed based upon a demonstration that source water treatment is not necessary to minimize lead and copper levels at user's taps.

b. Division Determination Regarding Source Water Treatment: The Division shall complete an evaluation of the results of all source water samples submitted by the water system to determine whether source water treatment is necessary to minimize lead or copper levels in water delivered to users' taps. If the Division determines that treatment is needed, the Division shall either require installation and operation of the source water treatment recommended by the system (if any) or require the installation and operation of another source water treatment from among the following: ion exchange, reverse osmosis, lime softening or coagulation/filtration. If the Division request additional information to aid in its review, the water system shall provide the information by the date specified by the Division in its request. The Division shall notify the system in writing of its determination and set forth the basis for its decision.

c. Installation of Source Water Treatment: Each system shall properly install and operate the source water treatment designated by the Division under paragraph (2b) of this section.

d. Division Review of Source Water Treatment and Specification of Maximum Permissible Source Water Levels: The Division shall review the source

water samples taken by the water system both before and after the system installs source water treatment, and determine whether the system has properly installed and operated the source water treatment designated by the Division. Based upon its review, the Division shall designate the maximum permissible lead and copper concentrations for finished water entering the distribution system. Such levels shall reflect the contaminant removal capability of the treatment properly operated and maintained. The Division shall notify the system in writing and explain the basis for its decision.

e. Continued Operation and Maintenance: Each water system shall maintain lead and copper levels below the maximum permissible concentrations designated by the Division at each sampling point monitored in accordance with Section 22.607(I). The system is out of compliance with this paragraph if the level of lead or copper at any sampling point is greater than the maximum permissible concentration designated by the Division.

f. Modification of Division Treatment Decisions: Upon its own initiative or in response to a request by a water system or other interested party, the Division may modify its determination of the source water treatment under paragraph (2b) of this section, or maximum permissible lead and copper concentrations for finished water entering the distribution system under paragraph (2d) of this section. A request for modification by a system or other interested party shall be in writing, explain why the modification is appropriate, and provide supporting documentation. The Division may modify its determination where it concludes that such change is necessary to ensure that the system continues to minimize lead and copper concentrations in source water. A revised determination shall be made in writing and set forth the new treatment requirements, explain the basis for the Division's decision and provide an implementation schedule for completing the treatment modifications.

g. EPA Treatment Decisions in Lieu of the Division's Decisions: The regional administrator may issue federal determinations in lieu of the Division's determination when:

1. The Division fails to issue a determination in a timely manner.
2. The Division abuses its discretion in a substantial number of cases or in cases affecting large populations.
3. The technical basis of the Division's decision is indefensible in federal enforcement action(s).

E. Lead Service Line Replacement Requirements:

1. Systems that fail to meet the lead action level

in tap samples taken pursuant to Section 22.607(G)4(b) after installing corrosion control and/or source water treatment (whichever sampling occurs later) shall replace lead service lines in accordance with the requirements of this section. If a system is in violation of Section 22.607(B) or (D) for failure to install source water or corrosion control treatment, the Division may require the system to commence lead service line replacement under this section after the date by which the system was required to conduct monitoring under Section 22.607 (G)4(b) has passed.

2. A system shall replace annually at least 7 percent of the initial number of lead service lines in its distribution system. The initial number of lead service lines is the number of lead lines in place at the time the replacement program begins. The systems shall identify the initial number of lead service lines in its distribution system based upon a materials evaluation, including the evaluation required under Section 22.607(G)1. The first year of lead service line replacement shall begin on the date the action level was exceeded in tap sampling referenced in paragraph (1) of this section.

3. A system is not required to replace an individual lead service line if the lead concentration in all service line samples from that line taken pursuant to Section 22.607(G)2(c), is less than or equal to 0.015 mg/L.

4. A water system shall replace the entire service line (up to the building inlet) unless it demonstrates to the satisfaction of the Division under paragraph (5) of this section that it control less than the entire service line. In such cases, the system shall replace the portion of the line which the Division determines is under the system's control. The system shall notify the user served by the line that the system will replace the portion of the service line under its control and shall offer to replace the building owner's portion of the line, but is not required to bear the cost of replacing the building owner's portion of the line. For buildings where only a portion of the lead service line is replaced, the water system shall inform the resident(s) that the system will collect a first flush tap water sample after partial replacement of the service line is completed if the resident(s) so desire. In cases where the resident(s) accept the offer, the system shall collect the sample and report the results to the resident(s) within 14 days following partial lead service line replacement.

5. A water system is presumed to control the entire lead service line (up to the building inlet) unless the system demonstrates to the satisfaction of the Division, in a letter submitted under Section 22.607(J)5(d), that it does not have any of the following forms of control over the entire line (as defined by Division statutes, municipal ordinances,

public service contracts or other applicable legal authority); authority to set standards for construction, repair, or maintenance of the line, authority to replace, repair, or maintain the service line, or ownership of the service line. The Division shall review the information supplied by the system and determine whether the system controls less than the entire service line and, in such cases, shall determine the extent of the system's control. The Division's determination shall be in writing and explain the basis for its decision.

6. The Division shall require a system to replace lead service lines on a shorter schedule than that required by this section, taking into account the number of lead service lines in the system, where such a shorter replacement schedule is feasible. The Division shall make this determination in writing and notify the system of its finding within 6 months after the system is triggered into lead service line replacement based on monitoring referenced in paragraph (1) of this section.

7. Any system may cease replacing lead service lines whenever lead service line samples collected pursuant to paragraph (1) meet the lead action level during each of two consecutive monitoring periods and the system submits the results to the Division. If the lead service line samples in any such water system thereafter exceeds the lead action level, the system shall recommence replacing lead service lines, pursuant to paragraph (2) in this section.

8. To demonstrate compliance with paragraphs (1) through (4) of this section, a system shall report to the Division the information specified in Section 22.607(J)5.

F. Public Education and Supplemental Requirements: A water system that exceeds the lead action level based on tap water samples collected in accordance with Section 22.607(G) shall deliver the public education materials contained in paragraphs (1) and (2) of this section in accordance with the requirements in paragraph (3) of this section.

1. Content of Written Materials: A water system shall include the following text in all of the printed materials it distributes through its lead public education program. Any additional information presented by a system shall be consistent with the information below and be in plain English that can be understood by laypersons.

a. Introduction: The United States Environmental Protection Agency (EPA) and (insert name of water supplier) are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law we are required to have a program in

place to minimize lead in your drinking water by (insert date when corrosion control will be completed for your system). This program includes corrosion control treatment, source water treatment, and public education. We are also required to replace each lead service line that we control if the line contributes lead concentrations of 15 ppb or more after we have completed the comprehensive treatment program. If you have any questions about how we are carrying out the requirements of the lead regulation please give us a call at (insert water system's phone number). This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water.

b. Health effects of Lead: Lead is a common metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination-like dirt and dust-that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

c. Lead in Drinking Water:

1. Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

2. Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes, and other plumbing materials to 8.0%.

3. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means

the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

d. Steps You Can Take in the Home to Reduce Exposure to Lead in Drinking Water:

1. Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. Some local laboratories that can provide this service are listed at the end of this booklet. For more information on having your water tested, please call (insert phone number of water system).

2. If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take following precautions:

a. Let the water run from the tap before using it for drinking or cooking anytime the water in a faucet has gone unused for more than six hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually uses less than one or two gallons of water and costs less than (insert a cost estimate based on flushing two times a day for 30 days) per month. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush water to wash the dishes or water the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more, and sometimes larger pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

b. Try not to cook with or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove.

c. Remove loose lead solder and debris from the plumbing materials installed in newly

constructed homes, or homes in which the plumbing has recently been replaced, by removing the faucet strainers from all taps and running the water from 3 to 5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

d. If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify the Division of Public Health about the violation.

e. Determine whether or not the service line that connects your home or apartment to the water main is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the liner or by contacting the plumbing contractor who installed the line. You can identify the plumbing contractor by checking the city's record of building permits which should be maintained in the files of the (insert name of department that issues building permits). A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes, or pipe fittings that contain lead. The public water system that delivers water to your home should also maintain records of the materials located in the distribution system. If the service line that connects your dwelling to the water main contributes more than 15 ppb to drinking water, after our comprehensive treatment program is in place, we are required to replace the line. If the line is only partially controlled by the (insert name of the city, county, or water system that controls the line), we are required to provide you with information on how to replace your portion of the service line, and offer to replace that portion of the line at your expense and take a follow-up tap water sample within 14 days of the replacement. Acceptable replacement alternatives include copper, steel, iron and plastic pipes.

f. Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

3. The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations in excess of 15 ppb after flushing, or after we have completed our actions to

minimize lead levels, then you may want to take the following additional measures:

a. Purchase or lease a home treatment device. Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap, however all lead reduction claims should be investigated. Be sure to check the actual performance of a specific home treatment device before and after installing the unit.

b. Purchase bottled water for drinking and cooking.

4. You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. The Division of Public Health and local government agencies that can be contacted include:

a. (Insert the name of city, county or department of public utilities) at (insert phone number) can provide you with information about your community's water supply, and a list of local laboratories that have been certified by EPA for testing water quality;

b. (Insert the name of city or county department that issues building permits) at (insert phone number) can provide you with information about building permit records that should contain the names of plumbing contractors that plumbed your home; and

c. The Division of Public Health at (302) 739-5410 or the (insert the name of the city or county health department) at (insert phone number) can provide you with information about the health effects of lead and how you can have your child's blood tested.

5. The following is a list of some Division approved laboratories in your area that you can call to have your water tested for lead. (Insert names and phone numbers of at least two laboratories).

2. Content of Broadcast Materials: A water system shall include the following information in all public service announcements submitted under its lead public education program to television and radio stations for broadcasting:

a. Why should everyone want to know the facts about lead and drinking water? Because an unhealthy amount of lead can enter drinking water through the plumbing in your home. That's why I urge you to do what I did. I had my water tested for (insert free or \$ per sample).

You can contact the (insert the name of the city or water system) for information on testing and on simple ways to reduce your exposure to lead in drinking water.

1. To have your water tested for lead, or to get more information about this public health concern, please call (insert the phone number of the city or water system).

3. Delivery of a Public Education Program:

a. In communities where a significant proportion of the population speaks a language other than English, public education materials shall be communicated in the appropriate language(s).

b. A community water system that fails to meet the lead action level on the basis of tap water samples collected in accordance with Section 22.607(G) shall, within 60 days:

1. Insert notices in each customer's water utility bill containing the information in paragraph (a) of this section, along with the following alert on the water bill itself in large print: "SOME HOMES IN THIS COMMUNITY HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE ENCLOSED NOTICE FOR FURTHER INFORMATION."

2. Submit the information in paragraph (1) of this section to the editorial department of the major daily and weekly newspapers circulated throughout the community.

3. Deliver pamphlets and/or brochures that contain the public education materials in paragraphs (b) and (d) of this section to facilities and organizations, including the following:

a. public schools and/or local school boards;

b. city or county health department;

c. Women, Infants and Children and/or Head Start Program(s) whenever available;

d. public and private hospitals and/or clinics;

e. pediatricians;

f. family planning clinics and;

g. local welfare agencies.

4. Submit the public service announcement in paragraph (2) of this section to at least five of the radio and television stations with the largest audiences that broadcast to the community served by the water system.

c. A community water system shall repeat the tasks contained in paragraphs 3(b),(2)and(3) of this section every 12 months, and the tasks contained in

paragraphs 3(b)(4) of this section every 6 months for as long as the system exceeds the lead action level.

d. Within 60 days after it exceeds the lead action level, a non-transient non-community water system shall deliver the public education materials contained in paragraphs 1(a),(b) and (d) of this section as follows:

1. post informational posters on lead in drinking water in public places or common areas in each of the buildings served by the system; and

2. distribute informational pamphlets and/or brochures on lead in drinking water to each person served by the non-transient non-community water system.

e. A non-transient non-community water system shall repeat the tasks contained in paragraph 3(d) of this section at least once during each calendar year in which the system exceeds the lead action level,

f. A water system may discontinue delivery of public education materials if the system has met the lead action level during the most recent six-month monitoring period conducted pursuant to Section 22.607(G). Such a system shall recommence public education in accordance with this section if it subsequently exceeds the lead action level during any monitoring period.

4. Supplemental Monitoring and Notification of Results: A water system that fails to meet the lead action level on the basis of tap samples collected in accordance with Section 22.607(G) shall offer to sample the tap water of any customer who requests it. The system is not required to pay for collecting or analyzing the sample, nor is the system required to collect and analyze the sample itself.

G. Monitoring Requirements for Lead and Copper in Tap Water:

1. Sample Site Location:

a. By the applicable date for commencement of monitoring under paragraph 4(a) of this section, each water system shall complete a materials evaluation of its distribution system in order to identify a pool of targeted sampling sites that meets the requirements of this section, and which is sufficiently large enough to ensure that the water system can collect the number of lead and copper tap samples required in paragraph (3) of this section. All large systems shall have established targeted sampling sites by January 1, 1992; all medium size systems by July 1, 1992; and all small systems by July 1, 1993. All sites from which first draw samples are collected shall be selected from this pool of targeted sampling sites. Sampling sites may not include faucets that have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants.

b. A water system shall use the information

on lead, copper, and galvanized steel that is required to collect under Section 22.714 of these regulations (special monitoring for corrosivity characteristics) when conducting a materials evaluation. When an evaluation of the information collected pursuant to Section 22.714 is insufficient to locate the requisite number of lead and copper sampling sites that meet the targeting criteria in paragraph (1) of this section, the water system shall review the sources of information listed below in order to identify a sufficient number of sampling sites. In addition, the system shall seek to collect such information where possible in the course of its normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities):

1. All plumbing codes, permits, and records in the files of the building department(s) which indicate the plumbing materials that are installed within publicly and privately owned structures connected to the distribution system;

2. All inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system; and

3. All existing water quality information, which includes the results of all prior analyses of the system or individual structures connected to the system, indicating locations that may be particularly susceptible to high lead or copper concentrations.

c. The sampling sites selected for a community water system's sampling pool ("tier 1 sampling sites") shall consist of single family structures that:

1. Contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or

2. Are served by a lead service line. When multiple-family residences comprise at least 20 percent of the structures served by a water system, the system may include these types of structures in its sampling pool.

d. Any community water system with insufficient tier 1 sampling sites shall complete its sampling pool with "tier 2 sampling sites", consisting of buildings, including multiple-family residences that:

1. Contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or

2. are served by a lead service line.

e. Any community water system with insufficient tier 1 and tier 2 sampling sites shall complete its sampling pool with "tier 3 sampling sites", consisting of single family structures that contain copper pipes with lead solder installed before 1983.

f. The sampling sites selected for a non-transient non-community water system ("tier 1 sampling sites") shall consist of buildings that:

1. contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or
2. are served by a lead service line.

g. A non-transient non-community water system with insufficient tier 1 sites that meet the targeting criteria in paragraph 1(f) of this section shall complete its sampling pool with tier 2 sampling sites that contain copper pipes with lead solder installed before 1983.

h. Any water system whose sampling pool does not consist exclusively of tier 1 sites shall demonstrate in a letter submitted to the Division under Section 22.607(J)1(b) why a review of the information listed in paragraph 1(b) of this section was inadequate to locate a sufficient number of tier 1 sites. Any community water system which includes tier 3 sampling sites in its sampling pool shall demonstrate in such a letter why it was unable to locate a sufficient number of tier 1 and tier 2 sampling sites. For large systems this shall be completed by January 1, 1992; for medium size systems by July 1, 1992; and for small systems by July 1, 1993.

i. Any water system whose distribution system contains lead service lines shall draw 50 percent of the samples it collects during each monitoring period from sites that contain lead pipes, or copper pipes with lead solder, and 50 percent of those samples from sites served by a lead service line. A water system that cannot identify a sufficient number of sampling sites served by a lead service line shall demonstrate in a letter submitted to the Division under Section 22.607(J)1(d) why the system was unable to locate a sufficient number of such sites. Such a water system shall collect lead service line samples from all of the sites identified as being served by such lines.

2. Sample Collection Methods:

a. All tap samples for lead and copper collected in accordance with this subpart, with the exception of lead service line samples collected under Section 22.607(E)3, shall be first draw samples.

b. Each first-draw tap sample for lead and copper shall be one liter in volume and have stood motionless in the plumbing system of each sampling site for at least six hours. First-draw samples from residential housing shall be collected from the cold-water kitchen tap or bathroom sink tap. First-draw samples from a non-residential building shall be collected at an interior tap from which water is typically drawn for consumption. First-draw samples may be collected by the system or the system may allow residents to collect first-draw samples

after instructing the residents of the sampling procedures specified in this paragraph. If a system allows residents to perform sampling, the system may not challenge, based on alleged errors in sample collection, the accuracy of sampling results. Acidification of samples may be done up to 14 days after collection.

c. Each service line sample shall be one liter in volume and have stood motionless in the lead service line for at least six hours. Lead service line samples shall be collected in one of the following three ways:

1. At the tap after flushing the volume of water between the tap and the lead service line. The volume of water shall be calculated based on the interior diameter and length of the pipe between the tap and the lead service line;
2. Tapping directly into the lead service line; or
3. If the sampling site is a building constructed as a single-family residence, allowing the water to run until there is a significant change in temperature which would be indicative of water that has been standing in the lead service line.

d. A water system shall collect each first-draw tap sample from the same sampling site from which it collected a previous sample. If, for any reason, the water system cannot gain entry to a sampling site in order to collect a follow-up tap sample, the system may collect the follow-up tap sample from pool as long as the new site meets the same targeting criteria, and is within reasonable proximity of the original site.

3. Number of Samples: Water systems shall collect at least one sample during each monitoring period specified in paragraph (4)(a) of this section from the number of sites listed in the first column below ("standard monitoring"). A system conducting reduced monitoring under paragraph 4(d) of this section may collect one sample from the number of sites specified in the second column below during each monitoring period specified in paragraph 4(d) of this section.

System size (no. people served)	No. of sites (standard monitoring)	No. of sites (reduced monitoring)
>100,000	100	50
10,001-100,000	60	30
3,301 - 10,000	40	20
501 - 3,300	20	10
101 - 500	10	5
<100	5	5

4. Timing of Monitoring:

a. Initial Tap Sampling: The first six-month

monitoring period for small, medium-size and large systems shall begin on the following dates:

System Size (no. people served)	First six-month monitoring period begins on
>50,000	January 1, 1992
3,301 - 50,000	July 1, 1992
<3,300	July 1, 1993

1. All large systems shall monitor during two consecutive six-month periods.

2. All small and medium-size systems shall monitor during each six-month monitoring period until:

a. the system exceeds the lead or copper action level and is therefore required to implement the corrosion control treatment requirements under Section 22.607(B) in which case the system shall continue monitoring in accordance with paragraph 4(b) of this section, or

b. the system meets the lead or copper action levels during two consecutive six-month monitoring periods, in which case the system may reduce monitoring in accordance with paragraph 1(d) of this section.

b. Monitoring after Installation of Corrosion Control and Source Water Treatment:

1. Any large system which installs optimal corrosion control treatment pursuant to Section 22.607(B)(4) Step 4 shall monitor during two consecutive six-month periods by the date specified in Section 22.607(B)(4) Step 5.

2. Any small or medium-size system which installs optimal corrosion control treatment pursuant to Section 22.607(B)(5) Step 5 shall monitor during two consecutive six-month periods by the date specified in Section 22.607(B)(5) Step 6.

3. Any system which installs source water treatment pursuant to Section 22.607(D)1 Step 3 shall monitor during two consecutive six-month periods by the date specified in Section 22.607(D)1 Step 4.

c. Monitoring after Division specifies Water Quality Parameter Values for Optimal Corrosion Control: After the Division specifies the values for water quality control parameters under Section 22.607(C)6, the system shall monitor during each subsequent six-month monitoring period, with the first monitoring period to begin on the date the Division specifies the optimal values under Section 22.607(C)6.

d. Reduced Monitoring:

1. A small or medium-size water system that meets the lead and copper action levels during each of two consecutive six-month monitoring periods may reduce the number of samples in accordance with paragraph (3) of this section, and reduce the frequency of sampling to once per year. Division approval is not required.

2. Any water system that maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the Division under Section 22.607(C)6 during each of two consecutive six-month monitoring periods may request that the Division allow the system to reduce the frequency of monitoring to once per year and to reduce the number of lead and copper samples in accordance with paragraph (3) of this section. The Division shall review the information submitted by the water system and shall make its decision in writing, setting forth the basis for its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

3. A small or medium-size water system that meets the lead and copper action levels during three consecutive years of monitoring may reduce the frequency of monitoring for lead and copper from annually to once every three years. Any water system that maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the Division under Section 22.607(C)6 during three consecutive years of monitoring may request that the Division allow the system to reduce the frequency of monitoring from annually to once every three years. The Division shall review the information submitted by the water system and shall make its decision in writing, setting forth the basis for its determination. The Division shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

4. A water system that reduces the number and frequency of sampling shall collect these samples from sites included in the pool of targeted sampling sites identified in paragraph (1) of this section. Systems sampling annually or less frequently shall conduct the lead and copper tap sampling during the months of June, July, August or September.

5. A small or medium-size water system subject to reduced monitoring that exceeds the lead or copper action levels shall resume sampling in accordance with paragraph 4(c) of this section and collect the number of samples specified for standard monitoring under paragraph (3) of this section. Any water system subject to reduced

monitoring frequency that fails to operate within the range of values for the water quality control parameters specified by the Division under Section 22.607(C)6 shall resume tap water sampling in accordance with paragraph 4(c) of this section and collect the number of samples specified for standard monitoring under paragraph (3) of this section.

5. Additional Monitoring by Systems: The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the system and the Division in making any determinations (i.e., calculating the 90th percentile lead or copper level) under this section.

H. Monitoring Requirements for Water Quality Parameters: All large water systems and all small and medium-size systems that exceed the lead or copper action level shall monitor water quality parameters in addition to lead and copper in accordance with this section. The requirements of this section are summarized in the table at the end of this section.

1. General Requirements:

a. Sample Collection Methods:

1. Tap samples shall be representative of water quality throughout the distribution system taking into account the number of persons served, the different sources of water, the different treatment methods employed by the system, and seasonal variability. Tap sampling under this section is not required to be conducted at taps targeted for lead and copper sampling under Section 22.607(G)1. (NOTE: Systems may find it convenient to conduct tap sampling for water quality parameters at sites used for coliform sampling under Section 22.5.

2. Samples collected at the entry point(s) to the distribution system shall be from locations representative of each source after treatment. If a system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

b. Number of Samples:

1. Systems shall collect two tap samples for applicable water quality parameters during each monitoring period specified under paragraphs (2) and (5) of this section from the following number of sites:

System Size (no. people served)	No. of sites for water quality parameters
>100,000	25
10,001-100,000	10

3,301 - 10,000	3
501 to 3,300	2
101 to 500	1
≤100	1

2. Systems shall collect two samples for each applicable water quality parameter at each entry point to the distribution system during each monitoring period specified in paragraph (2) of this section. During each monitoring period specified in paragraphs (3) through (5) of this section, systems shall collect one sample for each applicable water quality parameter at each entry point to the distribution system.

2. Initial Sampling: All large water systems shall measure the applicable water quality parameters as specified below at taps and at each entry point to the distribution system during each six-month monitoring period specified in Section 22.607(G)4(a). All small and medium-size systems shall measure the applicable water quality parameters at the locations specified below during each six-month monitoring period specified in Section 22.607(G)4(a) during which the system exceeds the lead or copper action levels.

a. At taps:

1. pH;
2. Alkalinity;
3. Orthophosphate, when an inhibitor containing a phosphate compound is used;
4. Silica, when an inhibitor containing a silicate compound is used;
5. Calcium;
6. Conductivity; and
7. Water Temperature.

b. At each entry point to the distribution system, all of the applicable parameters listed in paragraph (H) 2 (a).

3. Monitoring after Installation of Corrosion Control: Any large system which installs optimal corrosion control treatment pursuant to Section 22.607(B)(4) Step 4 shall measure the water quality parameters at the locations and frequencies specified below during each six-month monitoring period specified in Section 22.607(G)4(b)(1). Any small or medium-size system which installs optimal corrosion control treatment shall conduct such monitoring during each six-month monitoring period specified in Section 22.607(G)4(b)(2) in which the system exceeds the lead or copper action level.

a. At taps two samples for:

1. pH;

2. Alkalinity;
3. Orthophosphate, when an inhibitor containing a phosphate compound is used;
4. Silica, when an inhibitor;
5. Calcium, when calcium carbonate stabilization is used as part of corrosion control.

b. At each entry point to the distribution system, one sample every two weeks (bi-weekly) for:

1. pH;
2. When alkalinity is adjusted as part of optimal corrosion control, a reading of the dosage rate of the chemical used to adjust alkalinity, and the alkalinity concentration; and
3. When a corrosion inhibitor is used as part of optimal corrosion control, a reading of the dosage rate of the inhibitor used, and the concentration of orthophosphate or silica (whichever is applicable).

4. Monitoring after Division Specifies Water Quality Parameter Values for Optimal Corrosion Control: After the Division specifies the values for applicable water quality control parameters reflecting optimal corrosion control treatment under Section 22.607(C)6, all large systems shall measure the applicable water quality parameters in accordance with paragraph (3) of this section during each monitoring period specified in Section 22.607(G)4(c). Any small or medium-size system shall conduct such monitoring during each monitoring period specified in Section 22.607(G)4(c) in which the system exceeds the lead or copper action level. The system may take a confirmation sample for any water quality parameter value no later than 3 days after the first sample. If a confirmation sample is taken, the result must be averaged with the first sampling result and the average must be used for any compliance determination under Section 22.607(C)7. The Division has discretion to delete results of obvious sampling errors from this calculation.

5. Reduced Monitoring:

a. Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment during each of two consecutive six-month monitoring periods under paragraph (4) of this section shall continue monitoring at the entry point(s) to the distribution system as specified in paragraph 3(b) of this section. Such system may collect two tap samples for applicable water quality parameters from the following reduced number of sites during each six-month monitoring period.

b. Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the Division under

Section 22.607(C)6 during three consecutive years of monitoring may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in the paragraph 5(a) of this section from every six months to annually.

System Size (no. people served)	Reduced No. of sites for water quality parameters
>100,000	10
10,001 to 100,000	7
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
<100	1

c. A water system that conducts sampling annually shall collect these samples evenly throughout the year so as to reflect seasonal variability.

d. Any water system subject to reduced monitoring frequency that fails to operate within the range of values for the water quality parameters specified by the Division under Section 22.607(C)(6) shall resume tap water sampling in accordance with the number and frequency requirements in paragraph (3) of this section.

6. Additional Monitoring by Systems: The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the system and the Division in making any determinations(i.e., determining concentrations of water quality parameters) under this section or Section 22.607(C).

SUMMARY OF MONITORING REQUIREMENTS FOR WATER QUALITY PARAMETERS

Monitoring	Parameters	location	frequency
Initial Monitoring	pH, alkalinity, orthophosphate or silica, calcium conductivity temperature	Taps and at entry to the distribution system	Every 6 months
After installation of Corrosion Control	pH, alkalinity, orthophosphate or silica, calcium	Taps	Every 6 months
After Division Specifies Parameter Values for Optimal Corrosion Control	pH, alkalinity, dosage rate and concentration (if alkalinity adjusted as part of corrosion control) inhibitor dosage rate and inhibitor residual	Entry point(s) to the distribution system	Bi-weekly
Reduced Monitoring	pH, alkalinity, orthophosphate or silica, calcium	Taps	Every 6 months at a reduced number of sites
	pH, alkalinity dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual	Entry point(s) to the distribution system	Bi-weekly

1. Table is for illustrated purposes; consult the text of

this section for precise regulatory requirements.

2. Small and medium-size systems have to monitor for water quality parameters only during monitoring periods in which the systems exceeds the lead or copper level.

3. Orthophosphate must be measured only when an inhibitor containing a phosphate compound is used. Silica must be measured only when an inhibitor containing silicate compound is used.

4. Calcium must be measured only when calcium carbonate stabilization is used as part of corrosion control.

5. Inhibitor dosage rates and inhibitor residual concentrations (orthophosphate or silica) must be measured only when an inhibitor is used.

I. Monitoring Requirements for Lead and Copper in Source Water:

1. Sample Location Collection Methods, and Number of samples:

a. A water system that fails to meet the lead or copper action level on the basis of tap samples collected in accordance with Section 22.607(G) shall collect lead and copper source water samples in accordance with the requirements regarding sample location, number of samples, and collection methods specified in Section 22.602(A)(1) - (4) (inorganic chemical sampling). (NOTE: The timing of sampling for lead and copper shall be in accordance with paragraphs(2) and (3) of this section, and not dates specified in Section 22.602(A)(1) and (2).

b. Where the results of sampling indicate an exceedance of maximum permissible source water levels established under Section 22.607(D)2(d), the Division may require that one additional sample be collected as soon as possible after the initial sample was taken (but not to exceed two weeks) at the same sampling point. If a Division-required confirmation sample is taken for lead or copper, then the results of the initial and confirmation sample shall be averaged in determining compliance with the Division-specified maximum permissible levels. Any sample value below the detection limit shall be considered to be zero. Any value above the detection limit but below the PQL shall either be considered as the measure value or be considered one-half the PQL.

2. Monitoring Frequency after System Exceeds Tap Water Action Level: Any system which exceeds the lead or copper action level at the tap shall collect one source water sample from each entry point to the distribution system within six months after the exceedance.

3. Monitoring Frequency after Installation of Source Water Treatment: Any system which installs source water treatment pursuant to Section 22.607(D)(1) Step 2 shall collect an additional source water sample from each

entry point to the distribution system during two consecutive six-month monitoring periods by the deadline specified in Section 22.607(D)(1) Step 4.

4. Monitoring Frequency after Division Specifies Maximum Permissible Source Water Levels or Determines that Source Water Treatment is not Needed:

a. A system shall monitor at the frequency specified below in cases where the Division specifies maximum permissible source water levels under Section 22.607(D)2(d) or determines that the system is not required to install source water treatment under Section 22.607(D)2(d).

1. A water system using only groundwater shall collect samples once during the three-year compliance period (as that term is defined in Section 22.1) in effect when the applicable Division determination under paragraph 4(a) of this section is made. Such systems shall collect samples once during each subsequent compliance period.

2. A water system using surface water (or a combination of surface and groundwater) shall collect samples once during each year, the first annual monitoring period to begin on the date on which the applicable Division determination is made under paragraph 4(a) of this section.

b. A system is not required to conduct source water sampling for lead and/or copper if the system meets the action level for the specific contaminant in tap water samples during the entire source water sampling period applicable to the system under paragraph 4(a)(1) or (2) of this section.

5. Reduced Monitoring Frequency:

a. A water system using only groundwater which demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and/or copper concentrations specified by the Division in Section 22.607(D)(1) Step 2 during at least three consecutive compliance periods under paragraph 4(a) of this section may reduce the monitoring frequency for lead and/or copper to once during each nine-year compliance cycle (as that term is defined in Section 22.1). Division approval is not required.

b. A water system using surface water (or a combination of surface and ground waters) which demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the Division in Section 22.607(D)2(d) for at least three consecutive years may reduce the monitoring frequency in paragraph 4(a) of this section to once during each nine-year compliance cycle (as that term is defined in

Section 22.1). Division approval is not required.

c. A water system that uses a new source of water is not eligible for reduced monitoring for lead and/or copper until concentrations in samples collected from the new source during three consecutive monitoring periods are below the maximum permissible lead and copper concentrations specified by the Division in Section 22.607(D)1 Step 5.

J. Reporting Requirements: All water systems shall report all of the following information to the Division in accordance with this section.

1. Reporting Requirements for Tap Water Monitoring for Lead and Copper and for Water Quality Parameter Monitoring:

a. A water system shall report the information specified below for all tap water samples within the first 10 days following the end of each applicable monitoring period specified in Section 22.607 (G),(H) and (I) (i.e., every six-months, annually, or every 3 years).

1. the results of all tap samples for lead and copper including the location of each site and the criteria under Section 22.206(G)1(c),(d),(e),(f), or (g) under which the site was selected for the system's sampling pool;

2. a certification that each first draw sample collected by the water system is one-liter in volume and, to the best of their knowledge, has stood motionless in the service line, or in the interior plumbing of a sampling site, for at least six hours;

3. where residents collected samples, a certification that each tap sample collected by the residents was taken after the water system informed them of proper sampling procedures specified in 22.607(G)2(b).

4. the 90th percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period (calculated in accordance with 22.607(A)1(c);

5. with the exception of initial tap sampling conducted pursuant to Section 22.607(G)4(a) the system shall designate any site which was not sampled during previous monitoring periods, and include an explanation of why 2 sampling sites have changed;

6. the results of all tap samples for pH, and where applicable, alkalinity, calcium, conductivity, temperature, and orthophosphate or silica collected under Section 22.607(H)2-5.

7. the results of all samples collected at the entry point(s) to the distribution system for applicable water quality parameters under Section 22.607(H)2-5.

b. By the applicable date in Section 22.607(G)4(a) for commencement of monitoring, each

community water system which does not complete its targeted sampling pool with tier 1 sampling sites meeting the criteria in Section 22.607(G)1(c) shall send a letter to the Division justifying its selection of tier 2 and/or tier 3 sampling sites under Section 22.607(G)1(d) and/or 1(e).

c. By the applicable date in Section 22.607(G)4(a) for commencement of monitoring, each non-transient, non-community water system which does not complete its sampling pool with tier 1 sampling sites meeting the criteria in Section 22.607(G)1(f) shall send a letter to the Division justifying its selection of sampling sites under Section 22.607(G)1(g).

d. By the applicable date in Section 22.607(G)4(a) for commencement of monitoring, each water system with lead service lines that is not able to locate the number of sites served by such lines required under Section 22.607(G)1(i) shall send a letter to the Division demonstrating why it was unable to locate a sufficient number of such sites based upon the information listed in Section 22.607(G)1(b).

e. Each water system that requests that the Division reduce the number and frequency of sampling shall provide the information required under Section 22.607(G)4(d).

2. Source Water Monitoring Reporting Requirements:

a. A water system shall report the sampling results for all source water samples collected in accordance with Section 22.607(I) within the first 10 days following the end of each source water monitoring periods (i.e., annually, per compliance period, per compliance cycle) specified in Section 22.607(I).

b. With the exception of the first round of source water sampling conducted pursuant to Section 22.607(I)2, the system shall specify any site which was not sampled during previous monitoring periods, and include an explanation of why the sampling point has changed.

3. Corrosion Control Treatment Reporting Requirements: By the applicable dates under Section 22.607(B), systems shall report the following information:

a. for systems demonstrating that they have already optimized corrosion control, information required in Section 22.607(C)3(b) or (c).

b. for systems required to optimize corrosion control, their recommendation regarding optimal corrosion control treatment under Section 22.607(C)1.

c. for systems required to evaluate the effectiveness of corrosion control treatments under Section 22.607(C)3, the information required by that paragraph.

d. for systems required to install optimal

corrosion control designated by the Division under Section 22.607(C)4, a letter certifying that the system has completed installing that treatment.

4. **Source Water Treatment Reporting Requirements:** By the applicable dates in Section 22.607(D), systems shall provide the following information to the Division:

a. if required under Section 22.607(D)2(a) their recommendation regarding source water treatment;

b. for systems required to install source water treatment under Section 22.607(D)2(b), a letter certifying that the system has completed installing the treatment designated by the Division within 24 months after the Division designated the treatment.

5. **Lead Service Line Replacement Reporting Requirements:** Systems shall report the following information to the Division to demonstrate compliance with the requirements of Section 22.607(E):

a. Within 12 months after a system exceeds the lead action level in sampling referred to in Section 22.607(E)1, the system shall demonstrate in writing to the Division that it has conducted a material evaluation, including the evaluation in Section 22.607(G)1, to identify the initial number of lead service lines in its distribution system, and shall provide the Division with the system's schedule for replacing annually at least 7 percent of the initial number of lead service lines in its distribution system.

b. Within 12 months after a system exceeds the lead action level in sampling referred to in Section 22.607(E)1, and every 12 months thereafter, the system shall demonstrate to the Division in writing that the system has either:

1. replaced in the previous 12 months at least 7 percent of the initial lead service lines (or a greater number of lines specified by the Division under Section 22.607(E)6 in its distribution system; or

2. conducted sampling which demonstrates that the lead concentration in all service lines samples from an individual line(s), taken pursuant to Section 22.607(G)2(c), is less than or equal to 0.015 mg/L. In such cases, the total number of lines replaced and/or which meet the criteria in Section 22.607 (E)2 shall equal at least 7 percent of the initial number of lead lines identified under paragraph (a) of this section (or the percentage specified by the Division under Section 22.607(E)6.

c. The annual letter submitted to the Division under paragraph 5(b) of this section shall contain the following information:

1. the number of lead service lines scheduled to be replaced during the previous year of the

system's replacement schedule;

2. the number and location of each lead service line replaced during the previous year of the system's replacement schedule;

3. if measured, the water lead concentration and location of each lead service line sampled, the sampling method, and the date of sampling.

d. As soon as practicable, but in no case later than three months after a system exceeds the lead action level in sampling referred to in Section 22.607(E)1, any system seeking to rebut the presumption that it has control over the entire lead service line pursuant to Section 22.607(E)4 shall submit a letter to the Division describing the legal authority (e.g., Division statutes, municipal ordinances, public service contracts or other applicable legal authority) which limits the system's control over the service lines and the extent of the system's control.

6. **Public Education Program Reporting Requirements:** By December 31st of each year, any water system that is subject to the public education requirements in Section 22.607(F) shall submit a letter to the Division demonstrating that the system has delivered the public education materials that meet the content requirements in Section 22.607(F)1 and 2 and the delivery requirements in Section 22.607(F)3. This information shall include a list of all the newspapers, radio stations, television stations, facilities and organizations to which the system delivered public education materials during the previous year. The water system shall submit the letter required by this paragraph annually for as long as it exceeds the lead action level.

7. **Reporting of Additional Monitoring Data:** Any system which collects sampling data in addition to that required by this section shall report the results to the Division by the end of the applicable monitoring period under Sections 22.607(G), (H) and (I) during which the samples are collected.

K. **Recordkeeping Requirements:** Any system subject to the requirements of this subpart shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, Division determinations, and any other information required by Section 22.607(B) through Section 22.607(I). Each water system shall retain the records required by this section for no fewer than 12 years.

L. **Analytical Methodology:**

1. Analysis for lead, copper, pH conductivity, calcium, alkalinity, or the phosphate, silica and temperature shall be conducted using the following methods:

a. Lead: Atomic absorption Furnace

Technique using Method 239.2, Method D3559-85D or Method 3113; Inductively Coupled Plasma; Mass Spectrometry using Methods 200.8; or Atomic Absorption, Platform Furnace Technique using Method 200.9 .

b. Copper: Atomic Absorption, Furnace Technique using Method 220.2, Method D1688-90C or Method 3113; Atomic Absorption, Direct Aspiration using Method 220.1, Method D1688-90A or Method 3111-B; Inductively Coupled Plasma using Method 200.7 , or Method 3120; Inductively Coupled Plasma, Mass Spectrometry using Method 200.8 ; or Atomic Absorption, Platform Furnace using Method 200.9

c. pH: Electrometric using Method 150.1, Method 150.2, Method D1293-84B or Method 4500-H.

d. Conductivity: Conductance using Method 120.1, Method D1125-82B or Method 2510.

e. Calcium: EDTA Titrametric using Method 215.2, Method D511-88A or Method 3500-Ca-D; Atomic Absorption, Direct Aspiration using Method 215.1, Method D511-88B or Method 3111-B; or Inductively Coupled Plasma using Method 200.7 or Method 3120.

f. Alkalinity: Titrametric using Method 310.1, Method D1067-88B or Method 2320; or Electrometric Titration using Method I-1030-85.

g. Orthophosphate (Unfiltered No digestion or Hydrolysis): Colorimetric, Automated, Ascorbic Acid using Method 365.1, or Method 4500-P-F; Colorimetric, Ascorbic Acid Two Reagent using Method 365.3, or Method 4500-P-F; Colorimetric, Ascorbic Acid, Single Reagent using Method 365.2, Method D515-88A; Colorimetric Phosphomolybdate using Method I-1601-85; Colorimetric, Automated Segmented Flow using Method I-2601-85; or Colorimetric, Automated Discrete using Method I2598-85; Ion Chromatography using Method 300.0, Method D4327-88 or Method 4110.

h. Silica: Colorimetric, Molybdate Blue using Method I-1700-85; Colorimetric, Automated Segmented Flow using Method I-2700-85; Colorimetric using Method 370.1, or Method D859-88; Molybdosilicate using Method 4500-Si-D; Heteropoly Blue using Method 4500-Si-E, Automated Method for Molybdate-Reactive Silica using Method 4500-Si-F; or Inductively Coupled Plasma using Method 200.7 , or Method 3120.

i. Temperature: Thermometric using Method 2550.

1. The procedures 239.2, 220.2, 220.1, 150.1, 150.2, 120.1, 215.1, 215.2, 310.1, 365.1, 365.3, 365.2, and 370.1 are incorporated by reference and shall be done in accordance with "Methods for Chemical Analysis of Water and Wastes," EPA Environmental Monitoring and Support

Laboratory, Cincinnati, OH (EPA-600/4-79-020). Revised March 1983, pp. 239.2-1 through 239.2-2 and metals-1 through metals-19, 220.2-1 through 220.2-2 and metals-1 through metals-19, 220.1-1 through 220.1-2 and metals-1 through metals-19, 150.1-1 through 150.1-3, 150.2-1 through 150.2-3, 120.1-1 through 120.1-3, 215.2-1 through 215.2-3, 215.1-1 through 215.1-2, 310.1-1 through 310.1-3, 365.1-1 through 365.1-9, 365.3-1 through 365.3-4, 365.1-1 through 365.2-6 and 370.1-1 through 370.1-5, respectively. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from ORD Publications, CERL, EPA, Cincinnati, OH 45268. Copies may be inspected at the United State Environmental Protection Agency, 401 M. Street, SW., Room EB-15, Washing, D.C. 29460 or at the Office of the Federal Register, 1100 L. Street, NW., Room 8401, Washington, D.C.

2. The procedures D3559-85D, D1688-90C, D1688-90A, D1293-64B, D1125-82B, D511-88, D1067-88B, D515-88A, D4327-88A, and D859-88 are incorporated by reference and shall be done in accordance with Annual Book of ASTM Standards, Vol 11.01, American Society for Testing and Materials, 1990. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 551(a) and 1 CFR Part 51. Copies may be obtained from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103. Copies may be inspected at the United State Environmental Protection Agency, 401 L. Street, SW., Room EB-15, Washington, D.C. 20460 or at the Office of the Federal Register, 1100 L. Street, NW, Room 8401, Washington, D.C.

3. The procedures 3113, 3111-B, 3120, 4500-11, 2510, 3500-Ca-D, 3120, 2320, 4500-P-F, 4500-P-E, 4110, 4500-Si-D, 4500-Si-E, 4500-Si-F, and 2550 are incorporated by reference and shall be done in accordance with "Standard Methods for the Examination of Water and Wastewater," 17th Edition, American Public Health Association, American Water Works Association, Water Pollution Control Federation, 1989, pp. 3-43, 3-20 through 3023, 3-53 through 3-63, 4-94 through 4-102, 2-57 through 2-61, 3-85 through 3-87, 2-35 through 2-90, 4-178 through 4-181, 4-117 through 4-178, 4-2 through 4-6, 4-184 through 4-187, 4-188 through 4-189, 4-189 through 4-191, and 2-60 through 2-81, respectively. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from the American Water Works Association, Customer Service, 6666 West Quincy

Avenue, Denver, CO 80235, Phone (303) 794-7711. Copies may be inspected at the United States Environmental Protection Agency, 401 M. Street, SW, Room EB-15, Washington, D.C., 20460 or at the Office of the Federal Register, 1100 L. Street, NW, Room 8401, Washington, D.C.

4. The procedures 1-2001-85, 1-1030-05, 1-1601-85, 12588-85, 1-1700-85, and 1-2700-85 are incorporated by reference and shall be done in accordance with "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," 3rd edition, U.S. Department of Interior, U.S. Geological Survey, 1989, pp. 55-56, 381-382, 383-385, 387-388, 415-416, and 417-419, respectively. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. and 1 CFR Part 51. Copies may be purchased from the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO 68225. Copies may be inspected at the United States Environmental Protection Agency, 401 M. Street, SW, Room EB-15, Washing, D.C. 20460 or the Office of the Federal Register, 1100 L. Street, NW, Room 8401, Washington, D.C.

5. "Determination of Metals and Trace Elements in Water and Wastes by Inductively-Coupled Plasma-Mass Spectrometry," Revision 3.2, August 1990, U.S. EPA, EMSL. This document is available from U.S. EPA, EMSL, Cincinnati, OH 45268.

6. "Determination of Trace Elements in Water and Wastes by Inductively-Coupled Plasma-Mass Spectrometry," Method 200.8, August 1990, Revision 4.3, U.S. EPA EMSL. This document is available from U.S. EPA, EMSL, Cincinnati, OH, 45268.

7. "Determination of Trace Elements by Stabilized Temperature Graphite Furnace Atomic Absorption, Spectrometry, " Method 200.9, August 1990, U.S. EPA EMSL. This documents is available from U.S. EPA, EMSL, Cincinnati, OH 45268.

8. "Determination of Inorganic Ions in Water by Ion Chomoatography," Method 300.0, December 1989, U.S. EPA, EMSL. This document is available from U.S. EPA, EMSL, Cincinnati, OH 45268.

9. For analyzing lead and copper, the technique applicable to total metals must be used and samples cannot be filtered. Samples containing less than 1 NTU (nephelometric turbidity unit) and that are properly preserved (conc. HNO₃ to pH <2) may be analyzed directly (without digestion) for total metals; otherwise, digestion is required. Turbidity must be measured on the preserved samples just prior to when metal analysis is initiated. When

digestion is required, the 'total recoverable' technique as defined in the method must be used.

2. Analyses under this section shall only be conducted by laboratories that have been approved by the EPA or the Division. To obtain certification to conduct analyses for lead and copper, laboratories must:

a. Analyze performance evaluation samples which include lead and copper provided by EPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the Division; and

b. Achieve quantitative acceptance limits as follows:

1. Lead: ± 30 percent of the actual amount in the Performance Evaluation sample when the actual amount is greater than or equal to 0.005 mg/L; and

2. Copper: ± 10 percent of the actual amount in the Performance Evaluation sample when the actual amount is greater than or equal to 0.050 mg/L;

c. Achieve method detection limits according to the procedures listed in Section 22.607(L)(1) are as follows:

1. Lead: 0.001 mg/L (only if source water compositing is done under Section 22.602(A)4(a)); and

2. Copper: 0.001 mg/L or 0.020 mg/L when atomic absorption direct aspiration is used (only if source water compositing is done under Section 22.602(A)4(a)).

d. Be currently certified by EPA or the Division to perform analyses to the specifications described in paragraph (L)2 of this section.

3. The Division has the authority to allow the use of previously collected monitoring data for purposes of monitoring, if the data were collected and analyzed in accordance with the requirements of this Section.

4. All water systems must report lead measurements between the PQL and the MDL as measured or as one-half the PQL (0.0075 mg/l). All levels below the lead MDL must be reported as zero.

5. All water systems must report copper measurements between the PQL and the MDL as measured or as one-half the PQL (0.025 mg/l). All levels below the copper MDL must be reported as zero.

22.61 Organic Chemical Requirements:

22.611 PMCL's: The following are the organic PMCLs (mg/L-milligrams per liter). Compliance is determined pursuant to Sections 22.612, 22.613, and 22.614.

A. The following maximum contaminant levels for

synthetic organic contaminants apply to community water systems and not-transient, non-community water systems:

Pesticides and PCBs

Contaminant	MCL
Alachlor	0.002 mg/L
Aldicarb	0.003 mg/L
Aldicarb Sulfone	0.002 mg/L
Aldicarb Sulfoxide	0.004 mg/L
Atrazine	0.003 mg/L
Benzo(a)pyrene	0.0002 mg/L
Carbofuran	0.04 mg/L
Chlordane	0.002 mg/L
Dalapon	0.2 mg/L
Di(2-ethylhexyl) adipate	0.4 mg/L
Di(2-ethylhexyl) phthalate	0.006 mg/L
Dibromochloropropane	0.0002 mg/L
Dinoseb	0.007 mg/L
Diquat	0.02 mg/L
2,4-D	0.07 mg/L
Endothall	0.1 mg/L
Endrin	0.002 mg/L
Ethylenedibromide (EDB)	0.00005 mg/L
Glyphosate	0.7 mg/L
Heptachlor	0.0004 mg/L
Hepachlor epoxide	0.0002 mg/L
Hexachlorobenzene	0.001 mg/L
Hexachlorocyclopentadiene	0.05 mg/L
Lindane	0.0002 mg/L
Methoxychlor	0.04 mg/L
Oxamyl (Vydate)	0.2 mg/L
Pentachlorophenol	0.001 mg/L
Picloram	0.5 mg/L
Polychlorinated biphenyls (PCBs)	0.0005 mg/L
Simazine	0.004 mg/L
2,3,7,8-TCDD (Dioxin)	3 X 10 ⁻⁸ mg/L
Toxaphene	0.003 mg/L
2,4,5-TP (Silvex)	0.05 mg/L

B. Total Trihalomethanes (TTHMs)

Contaminant MCL

TTHMs	0.10 mg/L
-------	-----------

C. Volatile Synthetic Organic Chemicals (VOCs)

Contaminant MCL

Benzene	0.005 mg/L
Carbon Tetrachloride	0.005 mg/L
0-Dichlorobenzene	0.6 mg/L
P-Dichlorobenzene	0.075 mg/L
1,2 Dichloroethane	0.005 mg/L
1,1 Dichloroethylene	0.007 mg/L
Cis-1,2-Dichloroethylene	0.07 mg/L
Trans 1,2 Dichloroethylene	0.1 mg/L
Dichloromethane	0.005 mg/L
1,2 Dichloropropane	0.005 mg/L
Ethylbenzene	0.7 mg/L
Monochlorobenzene	0.1 mg/L
Styrene	0.1 mg/L
Tetrachloroethylene	0.005 mg/L

Toluene	1 mg/L
1,2,4-Trichlorobenzene	0.07 mg/L
1,1,1-Trichloroethane	0.2 mg/L
1,1,2-Trichloroethane	0.005 mg/L
Trichloroethylene	0.005 mg/L
Vinyl Chloride	0.002 mg/L
Xylenes (total)	10 mg/L

22.612 Sampling, Analytical Requirements and Compliance Determination For Contaminants Listed in 22.611A: Monitoring of the contaminants listed in Section 22.611A for the purposes of determining compliance with the MCLs shall be conducted as follows:

A. Groundwater systems shall take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment (hereafter called a sampling point). Each sample must be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

B. Surface water systems shall take a minimum of one sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment (hereafter called a sampling point). Each sample must be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant. (NOTE: For purposes of this paragraph, surface water systems include systems with a combination of surface and ground sources).

C. If the system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating condition (i.e., when water representative of all sources is being used).

D. Monitoring frequency:

1. Each community and non-transient non-community water system shall take four consecutive quarterly samples for each contaminant listed in Section 22.611A during each compliance period beginning with the compliance period starting January 1, 1993.

2. Systems serving more than 3,300 persons which do not detect a contaminant in the initial compliance period may reduce the sampling frequency to a minimum of two quarterly samples in one year during each repeat compliance period.

3. Systems serving less than or equal to 3,300 persons which do not detect a contaminant in the initial compliance period may reduce the sampling frequency to a minimum of one sample during each repeat compliance period.

E. Each community and non-transient water system

which does not detect a contaminant listed in Section 22.611A may apply to the Division for a waiver from the requirement of paragraph (D)(1) of this section upon completion of the initial monitoring. A system must reapply for a waiver at the end of each compliance period.

F. The Division may grant a waiver after evaluating the following factors: Knowledge of previous use (including transport, storage, or disposal) of the contaminant within the watershed or zone of influence of the system. If a determination by the Division reveals no previous use of the contaminant within the watershed or zone of influence, a waiver may be granted. If previous use of the contaminant is unknown, or it has been used previously, then the following factors shall be used to determine whether a waiver is granted:

1. Previous analytical results.
2. The proximity of the system to a potential point or non-point source of contamination. Point sources include spills and leaks of chemicals at or near a water treatment facilities or at manufacturing, distribution, or storage facilities, or from hazardous and municipal waste landfills and other waste handling or treatment facilities. Non-point sources include the use of pesticides to control insect and weed pests on agricultural areas, forest lands, home and gardens, and other land application uses.
3. The environmental persistence and transport of the pesticide or PCBs.
4. How well the water source is protected against contamination due to such factors as depth of the well, the type of soil and the integrity of the well casing.
5. Elevated nitrate levels at the water supply source.
6. Use of PCBs in equipment used in the production, storage or distribution of water (i.e., PCBs used in pumps, transformers, etc).

G. If an organic contaminant listed in Section 22.611 (A) is detected in any sample then:

1. Each system must monitor quarterly at each sampling point which resulted in a detection.
2. The Division may decrease the quarterly monitoring requirement specified in paragraph (1) of this section provided it has determined that the system is reliably and consistently below the maximum contaminant level. In no case shall the Division make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface water system take a minimum of four quarterly samples.
3. After the Division determines the system is reliably and consistently below the maximum contaminant level the Division may allow the system to monitor annually.

Systems which monitor annually must monitor during the quarter that previously yielded the highest analytical result.

4. Systems which have 3 consecutive annual samples with no detection of a contaminant may apply to the Division for a waiver as specified in paragraph (F) of this section.

5. If monitoring results in detection of one or more of certain related contaminants (aldicarb, aldicarb sulfone, aldicarb sulfoxide and heptachlor, heptachlor epoxide), then subsequent monitoring shall analyze for all related contaminants.

H. Systems which violate the MCL listed in Section 22.611A must monitor quarterly. After a minimum of four quarterly samples show the system is in compliance and the Division determines the system to be reliably and consistently below the MCL as specified in paragraph K, the system shall monitor at the frequency specified in paragraph (G)3 of this section.

I. The Division may require a confirmation sample for positive or negative results. If a confirmation sample is required by the Division, the result must be averaged with the first sampling result and the average used for the compliance determination as specified in paragraph K. The Division has the discretion to delete results of obvious sampling errors from this calculation.

J. The Division may reduce the total number of samples a system must analyze by allowing the use of compositing. Composite samples from a maximum of five sampling points are allowed. Detection Limit must be less than one-fifth of the MCL. Compositing of samples must be done in the laboratory and analyzed within 14 days of sample collections.

1. If the concentration in the composite sample detects one or more contaminants listed in Section 22.611A, then a follow-up sample must be taken and analyzed within 14 days from each sampling point included in the composite.

2. If duplicates of the original sample taken from each sampling point used in the composite are available, the system may use these duplicates instead of resampling. The duplicate must be analyzed and the results reported to the Division within 14 days of collection.

3. If the population served by the system is >3,300 persons, then compositing may only be permitted by the Division at sampling points within a single system. In systems serving <3,300 persons, the Division may permit compositing among different systems provided the 5-sample limit is maintained.

K. Compliance with Section 22.611 shall be determined based on the analytical results obtained at each sampling point.

1. For systems which are conducting monitoring at a frequency greater than annually, compliance is determined by a running annual average of all samples taken at each sampling point. If the annual average of any sampling point is greater than the MCL, then the system is out of compliance. If the initial sample or a subsequent sample would cause the annual average to be exceeded, then the system is out of compliance immediately. Any samples below the detection limit shall be calculated as zero for purposes of determining the annual average.

2. If monitoring is conducted annually, or less frequently, the system is out of compliance if the level of a contaminant at any sampling point is greater than the MCL. If a confirmation sample is required by the Division, the determination of compliance will be based on the average of two samples.

3. If a public water system has a distribution system separable from other parts of the distribution system with no interconnections, the Division may allow the system to give public notice to only that portion of the system which is out of compliance.

L. Analysis for the contaminants listed in Section 22.611A shall be conducted using the following EPA methods or their equivalent as approved by EPA. These methods are contained in "Methods for the Determination of Organic Compounds in Drinking Water," ORD Publications, CEKI, EPA/600/4-80/039, December 1988. These documents are available from the National Technical Information Service (NTIS), U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161. The toll free number is 1-800-226-4700.

1. Method 504: "1,2-Dibromoethane (EDB) and 2,2-Dibromo-3chloropropane (DBCP) in Water by Microextraction and Gas Chromatography." Method 504 can be used to measure dibromochloropropane (DBCP) and ethylene dibromide (EDB).

2. Method 505: "Analysis of Organohalide Pesticides and Commercial Polychlorinated Biphenyl Products (Aroclors) in Water by Microextraction and Gas Chromatography." Method 505 can be used to measure alachlor, atrazine, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorocyclopentadiene, lindane, methoxychlor, toxaphene and simazine. Method 505 can be used as a screen for PCBs.

3. Method 507: "Determination of Nitrogen-and Phosphorus-Containing Pesticides in Ground Water by Gas Chromatography with a Nitrogen-Phosphorus Detector." Method 507 can be used to measure alachlor, atrazine and simazine.

4. Method 508: "Determination of Chlorinated

Pesticides in Water by Gas Chromatography with an Electron Capture Detector." Method 508 can be used to measure chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, lindane, methoxychlor and toxaphene. Method 508 can be used as a screen for PCBs.

5. Method 508A: "Screening for Polychlorinated Biphenyls by Perchlorination and Gas Chromatography." Method 508A is used to quantitate PCBs as decachlorobiphenyl if detected in Methods 505 or 508.

6. Method 515.1: "Determination of Chlorinated Acids in Water by Gas Chromatography with an Electron Capture Detector." Method 515.1 can be used to measure 2,4-D, dalapon, dinoseb, pentachlorophenol, picloram and 2,4,5-TP (Silvex).

7. Method 525.1: "Determination of Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary Column Gas Chromatography/Mass Spectrometry." Method 525.1 can be used to measure alachlor, atrazine, chlordane, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorocyclopentadiene, lindane, methoxychlor, pentachlorophenol, polynuclear aromatic hydrocarbons, simazine and toxaphene.

8. Method 531.1: "Measurement of N-Methyl Carbamoyloximes and N-Methyl Carbamates in Water by Direct Aqueous Injection HPLC with Post-Column Derivatization." Method 531.1 can be used to measure aldicarb, aldicarb sulfoxide, aldicarb sulfone, carbofuran and oxamyl.

9. Method 1613: "Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution." Method 1613 can be used to measure 2,3,7,8-TCDD (dioxin). This method is available from USEPA-OST, Sample Control Center, P.O. Box 1407, Alexandria, VA 22313.

10. Method 547: "Analysis of Glyphosate in Drinking Water by Direct Aqueous Injection HPLC with Post-Column Derivatization." Method 547 can be used to measure glyphosate.

11. Method 548: "Determination of Endothall in Aqueous Samples." Method 548 can be used to measure endothall.

12. Method 549: "Determination of Diquat and Paraquat in Drinking Water by High Performance Liquid Chromatography with Ultraviolet Detection." Method 549 can be used to measure diquat.

13. Method 550: "Determination of Polycyclic Aromatic Hydrocarbon in Drinking Water by Liquid-Liquid Extraction and HPLC with Coupled Ultraviolet and Fluorescence Detection." Method 550 can be used to

measure benzo(a)pyrene and other polynuclear aromatic hydrocarbons

14. Method 550.1: "Determination of Polycyclic Aromatic Hydrocarbons in Drinking Water by Liquid-Solid Extraction and HPLC with Coupled Ultraviolet and Fluorescence Detection." Method 550.1 can be used to measure benzo(a)pyrene and other polynuclear aromatic hydrocarbons.

M. Analysis for PCBs shall be conducted as follows:

1. Each system which monitors for PCBs shall analyze each sample using either Method 505 or Method 508 (see paragraph (M)(2) of this section).

2. If PCBs (as one of seven Aroclors) are detected (as designated in this paragraph) in any sample analyzed using Methods 505 or 508, the system shall reanalyze the sample using Method 508A to quantitate PCBs (as decachlorobiphenyl).

3. Compliance with the PCB MCL shall be determined based upon the quantitative results of analyses using Method 508A.

AROCLOR	DETECTION limit (mg/l)
1016	0.00008
1221	0.02
1232	0.0005
1242	0.0003
1248	0.0001
1254	0.0001
1260	0.0002

N. If monitoring data collected after January 1, 1990, are generally consistent with the requirements of Section 22.612, then the Division may allow systems to use that data to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

O. The Division may increase the required monitoring frequency, where necessary, to detect variations within the system (e.g., fluctuations in concentration due to seasonal use, changes in water source).

P. The Division has the authority to determine compliance or initiate enforcement action based upon analytical results and other information compiled by their sanctioned representatives and agencies.

Q. Each public water system shall monitor at the time designated by the Division within each compliance period.

R. Detection as used in this paragraph shall be defined as greater than or equal to the following concentrations for each contaminant.

Contaminant	Detection Limit
Alachlor	0.0002
Aldicarb	0.0005
Aldicarb sulfoxide	0.0005
Aldicarb sulfone	0.0008
Atrazine	0.0001
Benzo(a)pyrene	0.00002
Carboforan	0.0009
Chlordane	0.0002
Dalapon	0.001
Dibromochloropropane (DBCP)	0.00002
Di (2-ethylhexyl) adipate	0.0006
Di (2-ethylhexyl) phthalate	0.0006
Dinoseb	0.0002
Diquat	0.0004
2,4-D	0.0001
Endothall	0.009
Endrin	0.00001
Ethylene dibromide (EDB)	0.00001
Glyphosate	0.006
Heptachlor	0.00004
Heptachlor epoxide	0.00002
Hexachlorobenzene	0.0001
Hexachlorocyclopentadiene	0.0001
Lindane	0.00002
Methoxychlor	0.0001
Oxamyl	0.002
Picloram	0.0001
Polychlorinated biphenyls (PCBs) (as decachlorobiphenyl)	0.0001
Pentachlorophenol	0.00004
Simazine	0.00007
Toxaphene	0.001
2,3,7,8-TCDD (Dioxin)	0.000000005
2,4,5-TP (Silvex)	0.0002

S. Analysis under this section shall only be conducted by laboratories that have received certification by EPA or the Division and have met the following conditions:

1. To receive certification to conduct analyses for the contaminants in Section 22.611A the laboratory must:

a. Analyze Performance Evaluation samples which include those substances provided by EPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the Division.

b. The laboratory shall achieve quantitative results on the analyses that are within the following acceptance limits:

Contaminant	Acceptance Limits (percent)
DBCP	±40
EDB	±40
Alachlor	±45
Atrazine	±45
Benzo(a)pyrene	2 Standard Deviations
Carbofuran	±45
Chlordane	±45
Dalapon	2 Standard Deviations
Di(2-Ethylhexyl)adipate	2 Standard Deviations
Di(2-Ethylhexyl)phthalate	2 Standard Deviations
Dinoseb	2 Standard Deviations
Diquat	2 Standard Deviations

Endothall	2 Standard Deviations
Endrin	±30
Glyphosate	2 Standard Deviations
Heptachlor	±45
Heptachlor epoxide	±45
Hexachlorobenzene	2 Standard Deviations
Hexachlorocyclopentadiene	2 Standard Deviations
Lindane	±45
Methoxychlor	±45
Oxamyl	2 Standard Deviations
PCBs(as Decachlorobiphenyl)	0 - 200
Picloram	2 Standard Deviations
Simazine	2 Standard Deviations
Toxaphene	±45
Aldicarb	2 Standard Deviations
Aldicarb sulfoxide	2 Standard Deviations
Aldicarb sulfone	2 Standard Deviations
Pentachlorophenol	±50
2,3,7,8-TCDD (Dioxin)	2 Standard Deviations
2,4-D	±50
2,4,5-TP (Silvex)	±50

22.613 Sampling, Analytical Requirements and Compliance Determination for TTHMS: Monitoring of TTHMs for the purpose of determining compliance with the MCL listed in Section 22.611B shall be conducted as follows:

A. Community water systems which serve a population of 10,000 or more individuals and which add a disinfectant (oxidant) to the water in any part of the drinking water treatment process shall analyze for total trihalomethanes in accordance with this Section. For the purpose of this Section, the minimum number of samples required to be taken by the system shall be based on the number of treatment plants used by the system, except that multiple wells drawing raw water from a single aquifer may, with the Division's approval, be considered one treatment plant for determining the minimum number of samples. All samples taken within an established frequency shall be collected within a twenty-four (24) hour period.

B. For all community water systems utilizing surface water sources in whole or part, and for all community water systems utilizing only ground water sources that have not been determined by the Division to qualify for the monitoring requirements of paragraphs(E) and (F) of this Section, analyses for total trihalomethanes shall be performed at quarterly intervals on at least four (4) water samples from each treatment plant used by the systems. At least twenty-five (25) percent of the samples shall be taken at locations within the distribution system reflecting the maximum residence time of the water in the system. The remaining seventy-five (75) percent shall be taken at representative locations in the distribution system taking into account number of persons served, different sources of water and different treatment methods employed. The results of all

analyses per quarter shall be arithmetically averaged and reported to the division within thirty (30) days of the system's receipt of such results. All samples collected shall be used in the computation of the average, unless the analytical results are invalidated for technical reasons. Sampling and analyses shall be conducted in accordance with the methods listed in paragraph H of this Section.

C. The monitoring frequency required by paragraph B of this Section may be reduced by the Division to a minimum of one (1) sample analyzed for TTHMs per quarter taken at a point in the distribution system reflecting the maximum residence time of the water in the system, upon written determination by the Division that the data from at least one (1) year of monitoring in accordance with paragraph B of this Section and local conditions demonstrate that total trihalomethane concentrations will be consistently below the PMCL.

D. If at any time during which the reduced monitoring frequency prescribed under this paragraph applies, the results from any analysis exceed 0.10 mg/L of TTHMs and such results are confirmed by at least one (1) check sample taken promptly after such results are received, or if the system makes any significant change to its source of water or treatment program, the system shall immediately begin monitoring in accordance with the requirements of paragraph B of this Section, which monitoring shall continue for at least one (1) year before the frequency may be reduced again. At the option of the Division, a system's monitoring frequency may and should be increased above the minimum in those cases where it is necessary to detect variations of TTHM levels within the distribution system.

E. The monitoring frequency required by paragraph B of this Section may be reduced by the Division for ground water supplies to a minimum of one (1) sample for maximum TTHM potential per year for each treatment plant used by the system taken at a point in the distribution system reflecting maximum residence time of the water in the system. The system shall submit to the Division the results of at least one (1) sample analyzed for maximum TTHM potential for each treatment plant used by the system taken at a point in the distribution system. The system's monitoring frequency may only be reduced by the Division when, based upon the data, the system has a maximum TTHM potential of less than 0.10 mg/L and when, based upon an assessment of local conditions of the system, the system is not likely to approach or exceed the PMCL for TTHMs. The results of all analyses shall be reported to the Division within thirty (30) days of the system's receipt of such results. All samples collected shall be used for determining whether the system must comply with the monitoring requirements of

paragraphs B, C and D of this Section, unless the analytical results are invalidated for technical reasons. Sampling and analyses shall be conducted in accordance with the methods listed in paragraph (H) of this Section.

F. If at any time during which the reduced monitoring frequency prescribed under paragraph E of this Section applies, the results from any analyses taken by the system for maximum TTHM potential are equal to or greater than 0.10 mg/L, and such results are confirmed by at least one (1) check sample taken promptly after such results are received, the system shall immediately begin monitoring in accordance with the requirements of paragraphs B, C and D of this Section and such monitoring shall continue for at least one (1) year before the frequency may be reduced again. In the event of any significant change to the system's raw water or treatment program, the system shall immediately analyze an additional sample for maximum TTHM potential taken at a point in the distribution system reflecting maximum residence time of the water in the system for the purpose of determining whether the system must comply with the monitoring requirements of paragraphs B, C and D of this Section. At the option of the Division, monitoring frequencies may and should be increased above the minimum in those cases where this necessary to detect variations of TTHM levels within the distribution system.

G. Compliance with Section 22.611B shall be determined based on running annual average of quarterly samples collected by the system as prescribed in paragraphs B or C of this Section. If the average of samples covering any twelve (12) month period exceeds the PMCL, the supplier of water shall report to the Division pursuant to Section 22.40 and notify the public pursuant to Section 22.41. Monitoring after public notification shall be at a frequency designated by the Division and shall continue until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

H. Sampling and analyses pursuant to this Section shall be conducted by one of the following EPA approved methods:

1. "The Analysis of Trihalomethanes in Drinking Waters by the Purge and Trap Method," Method 501.1, EMSL, EPA, Cincinnati, Ohio.
2. "The Analysis of Trihalomethanes in Drinking Water by Liquid/Liquid Extraction," Method 501.2, EMSL, EPA, Cincinnati, Ohio.

Samples taken pursuant to 1 and 2 above, for TTHMs, shall be dechlorinated upon collection to prevent further production of trihalomethanes, according to the procedures described in the above two methods. Samples for maximum TTHM potential should not be dechlorinated, and

should be held for seven (7) days at 25 C or above prior to analysis, according to the procedures described in the above (2) methods.

3. Any alternate analytical technique approved by the Division.

J. Before a community water system makes any significant modifications to its existing treatment process for the purposes of achieving compliance with Section 22.611B, such system must submit and obtain Division approval of a detailed plan setting forth its proposed modification and those safeguards that it will implement to ensure that the bacteriological quality of the drinking water served by such system will not be adversely affected by such modification. Each system shall comply with the provisions set forth in the Division approved plan. At a minimum, a Division approved plan shall require the system modifying its disinfection practice to:

1. Evaluate the water system for sanitary defects and evaluate the source water for biological quality.
2. Evaluate its existing treatment practice and consider improvements that will minimize disinfectant demand and optimize finished water quality throughout the distribution system.
3. Provide baseline water quality survey data of the distribution system. Such data should include the results from monitoring for coliform and fecal coliform bacteria, fecal streptococci, standard plate counts at 35°C and 20°C, phosphate, ammonia, nitrogen and total organic carbon. Virus studies should be required where source waters are heavily contaminated with sewage effluent.
4. Conduct additional monitoring to assure continued maintenance of optimal biological quality in finished water, for example, when chloramines are introduced as disinfectants or when pre-chlorination is being discontinued. Additional monitoring should also be required by the Division for chlorate, chlorite and chlorine dioxide when chlorine dioxide is used as a disinfectant. Standard plate count analyses should also be required by the division as appropriate before and after any modifications.
5. Demonstrate an active disinfectant residual throughout the distribution system at all times during and after the modification.

22.614 Sampling, Analytical Requirements and Compliance Determination for VOC's: Monitoring of the contaminants listed in Section 22.611C for the purpose of determining compliance with the MCLs shall be conducted as follows:

A. Groundwater systems shall take a minimum of one sample at every entry point to the distribution system which

is representative of each well after treatment (hereafter called a sampling point). If conditions warrant, the Division may designate additional sampling points within the distribution system or at the consumer's tap which more accurately determine consumer exposure. Each sample must be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

B. Surface water systems shall take a minimum of one sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment (hereafter called a sampling point). If conditions warrant, the Division may designate additional sampling points within the distribution system or at the consumer's tap which more accurately determines consumer exposure. Each sample must be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plan, or within the distribution system. NOTE: For purposes of this paragraph, surface water systems include systems with a combination of surface and ground surfaces.

C. If the system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water representative of all sources is being used).

D. Each community and non-transient non-community water system shall take four consecutive quarterly samples for each contaminant listed in Section 22.611C, during each compliance period beginning in the initial compliance period.

E. Groundwater and surface water systems which do not detect one of the contaminants listed in Section 22.611C after conducting the initial round of monitoring required in paragraph D of this Section may take one sample annually.

F. For groundwater and surface water systems, if the initial monitoring for contaminants listed in Section 22.611C as allowed in paragraph R of this section has been completed by December 31, 1992 and the system did not detect any contaminant listed in Section 22.611C then the system shall take one sample annually. After a minimum of three years of annual sampling, the Division may allow groundwater systems which have no previous detection of any contaminant listed in Section 22.611C to take one sample during each compliance period.

G. Each community and non-transient non-community groundwater system which does not detect a contaminant listed in Section 22.611C may apply to the Division for a waiver from the requirement of paragraph E and F of this Section after completing the initial monitoring. (For the

purposes of this section, detection is defined as >0.0005 mg/L). A waiver shall be effective for no more than six years (two compliance periods).

1. The Division may also issue waivers to small systems (those serving $\leq 3,300$ persons) for the initial round of monitoring for 1,2,4-trichlorobenzene.

H. The Division may grant a waiver after evaluating the following factor(s):

1. Knowledge of previous use (including transport, storage, or disposal) of the contaminant within the watershed or zone of influence of the system. If a determination by the Division reveals no previous use of the contaminant within the watershed or zone of influence, a waiver may be granted.

2. If previous use of the contaminant is unknown or it has been used previously, then the following factors shall be used to determine whether a waiver is granted.

a. Previous analytical results.

b. The proximity of the system to potential point or non-point source of contamination. Point sources include spills and leaks of chemicals at or near a water treatment facility or at manufacturing, distribution, or storage facilities, or from hazardous and municipal waste landfills and other waste handling or treatment facilities.

c. The environmental persistence and transport of the contaminants.

d. The number of persons served by the public water system and the proximity of a smaller system to a larger system.

e. How well the water source is protected against contamination such as whether it is a surface or groundwater system. Groundwater systems must consider factors such as depth of the well, the type of soil, and well head protection. Surface water systems must consider watershed protection.

I. As a condition of the waiver a system must take one sample at each sampling point during the time the waiver is effective (i.e., one sample during two compliance periods or six years) and update its vulnerability assessment considering the factors listed in paragraph H of this section. Based on this vulnerability assessment the Division must confirm that the system is non-vulnerable. If the Division does not make this reconfirmation within three years of the initial determination, then the waiver is invalidated and the system is required to sample annually as specified in paragraph E of this section.

J. Each community and not-transient non-community surface water system which does not detect a contaminant listed in Section 22.611C may apply to the Division for a waiver from the requirements of Paragraph F of this Section

after completing the initial monitoring. Composite samples from a maximum of five sampling points are allowed, provided that the detection limit of the method used for analysis is less than one-fifth of the MCL. Systems meeting this criterion must be determined by the Division to be non-vulnerable based on a vulnerability assessment during each compliance period. Each system receiving a waiver shall sample at the frequency specified by the Division (if any).

K. If a contaminant listed in Section 22.611C, excluding vinyl chloride, is detected at a level exceeding 0.0005 mg/L in any sample then:

1. The system must monitor quarterly at each sampling point which resulted in a detection.

2. The Division may decrease the quarterly monitoring requirement specified in paragraph K(1) of this section provided it has determined that the system is reliably and consistently below the maximum contaminant level. In no case shall the Division make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface water system takes a minimum of four quarterly samples.

3. If the Division determines that the system is reliably and consistently below the MCL, the Division may allow the system to monitor annually. Systems which monitor annually must monitor during the quarter(s) which previously yielded the highest analytical result.

4. Systems which have three consecutive annual samples with no detection of a contaminant may apply to the Division for a waiver as specified in paragraph G of this section.

5. Groundwater systems which have detected one or more of the following two-carbon organic compounds: trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1,1-trichloroethane, cis-1,2-dichloroethylene or 1,1-dichloroethylene shall monitor quarterly for vinyl chloride. A vinyl chloride sample shall be taken at each sampling point at which one or more of the two-carbon organic compounds was detected. If the results of the first analysis do not detect vinyl chloride, the Division may reduce the quarterly monitoring frequency of vinyl chloride monitoring to one sample during each compliance period. Surface water systems are required to monitor for vinyl chloride as specified by the Division.

L. Systems which violate the requirements of Section 22.611C as determined by paragraph O of this section must monitor quarterly. After a minimum of four consecutive quarterly samples shows the system is in compliance as specified in paragraph O of this Section, and the Division determines that the system is reliably and consistently below

the maximum contaminant level, the system may monitor at the frequency and time specified in paragraph K (3) of this section.

M. The Division may require a confirmation sample for positive or negative results. If a confirmation sample is required by the Division, the result must be averaged with the first sampling result and the average is used for the compliance determination as specified by Paragraph O of this Section. The Division has the discretion to delete results of obvious sampling errors from this calculation.

N. The Division may reduce the total number of samples a system must analyze by allowing the use of compositing. Composite samples from a maximum of five sampling points are allowed, providing that the detection limit of the method used for analysis is less than one-fifth of the MCL. Compositing of samples must be done in the laboratory and analyzed within 14 days of sample collection.

1. If the concentration in the composite sample is >0.0005 mg/L for any contaminant listed in Section 22.611C, then a follow-up sample must be taken and analyzed within 14 days from each sampling point included in the composite.

2. If duplicates of the original sample taken from each sampling point used in the composite are available, the system may use these instead of resampling. The duplicate must be analyzed and the results reported to the Division within 14 days of collection.

3. If the population served by the system is >3,300 persons, then compositing may only be permitted by the Division at sampling points within a single system. In systems serving <3,300 persons, the Division may permit compositing among different systems provided the 5-sample limit is maintained.

4. Compositing samples prior to GC analysis:

a. Add 5 ml or equal larger amounts of each sample (up to 5 samples are allowed) to a 25 ml glass syringe. Special precautions must be made to maintain zero headspace in the syringe.

b. The samples must be cooled at 4o C during this step to minimize volatilization losses.

c. Mix well and draw out a 5-ml aliquot for analysis.

d. Follow sample introduction, purging and desorption steps described in the method.

e. If less than five samples are used for compositing, a proportionately small syringe may be used.

5. Compositing samples prior to GC/MS analysis:

a. Inject 5-ml or equal larger amounts of each aqueous sample (up to 5 samples are allowed) into a 25-ml purging device using the sample introduction

technique described in the method.

b. The total volume of the sample in the purging device must be 25 ml.

c. Purge and desorb as described in the method.

O. Compliance with Section 22.611C shall be determined based on the analytical results obtained at each sampling point:

1. For systems which are conducting monitoring at a frequency greater than annual, compliance is determined by a running annual average of all samples taken at each sampling point. If the annual average of any sampling point is greater than the MCL, then the system is out of compliance. If the initial sample or a subsequent sample would cause the annual average to be exceeded, then the system is out of compliance immediately. Any samples below the detection limit shall be calculated as zero for purposes of determining the annual average.

2. If monitoring is conducted annually, or less frequently, the system is out of compliance if the level of a contaminant at any sampling point is greater than the MCL. If a confirmation sample is required by the Division, the determination of compliance will be based on the average of two samples.

3. If a public water system has a distribution system separable from other parts of the distribution system with no interconnections, the Division may allow the system to give public notice to only that area served by that portion of the system which is out of compliance.

P. Analysis for the contaminants listed in Section 22.611C shall be conducted using the following EPA methods or their equivalent as approved by EPA. These methods are contained in "Methods for the Determination of Organic Compounds in Drinking Water," ORD Publications, CERL, EPA/600/4-88/039. These documents are available from the National Technical Information Service (NTIS) NTIS PB91-231480 and PB91-146027, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161. The toll-free number is 1-800-336-4700.

1. Method 502.1: "Volatile Halogenated Organic Chemicals in Water by Purge and Trap Gas Chromatography."

2. Method 502.2: "Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series."

3. Method 503.1: "Volatile Aromatic and Unsaturated Organic Compounds in Water by Purge and Trap Gas Chromatography."

4. Method 524.1: "Measurement of Purgeable

Organic Compounds in Water by Purged Column Gas Chromatography/Mass Spectrometry."

5. Method 524.2: "Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry."

Q. Analysis under this section shall only be conducted by laboratories that have received approval by EPA or the Division according to the following conditions:

1. To receive conditional approval to conduct analyses for the contaminants in Section 22.611 C, excluding vinyl chloride, the laboratory must:

a. Analyze Performance Evaluation samples which include these substances provided by EPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the Division.

b. Achieve the quantitative acceptance limits for at least 80 percent of the regulated organic chemicals listed in Section 22.611 C.

c. Achieve quantitative results on the analyses performed under paragraph (P) of this section that are within ± 20 percent of the actual amount of the substances in the Performance Evaluation sample when the actual amount is greater than or equal to 0.010 mg/L.

d. Achieve quantitative results on the analyses performed under paragraph (P) of this section that are within ± 40 percent of the actual amount of the substance in the Performance Evaluation sample when the actual amount is less than 0.010 mg/L.

e. Achieve a method detection limit of 0.0005 mg/L according to the procedures listed in Appendix B of 40 CFR Part 136.

(1). {Reserved}.

2. To receive certification for vinyl chloride, the laboratory must:

a. Analyze Performance Evaluation samples provided by the EPA Environmental Monitoring Systems or equivalent samples provided by the State.

b. Achieve quantitative results on the analyses performed under paragraph (2) (a) of this Section that are within ± 40 percent of the actual amount of vinyl chloride in the Performance Evaluation sample.

c. Achieve a method detection limit of 0.0005 mg/l, according to the procedures listed in Appendix B of 40 CFR Part 136.

d. Obtain certification for the contaminants listed in Section 22.611 (C).

3. Laboratories may conduct sample analysis under provisional certification until January 1, 1996.

R. The Division may allow the use of monitoring data collected after January 1, 1988 for purposes of initial

monitoring compliance. If the data are generally consistent with the other requirements in this section, the Division may use those data (i.e., a single sample rather than four quarterly samples) to satisfy the initial monitoring requirement of paragraph D of this section.

1. Systems which use grandfathered samples and did not detect any contaminant listed in Section 22.611 (C), excluding vinyl chloride, shall begin monitoring annually in accordance with paragraph (F) of this Section beginning with the initial compliance period.

S. The Division may increase required monitoring where necessary to detect variations within the system.

T. Each approved laboratory must determine the method detection limit (MDL), as defined in Appendix B of 40 CFR Part 136, at which it is capable of detecting VOCs. The acceptable MDL is 0.0005 mg/L. This concentration is the detection concentration for purposes of this section.

U. Each public water system shall monitor at the time designated by the Division within each compliance period.

22.62 Unregulated Contaminants

22.621 Sampling and Analytical Methodology For Unregulated Volatile Organic Contaminants: Monitoring of the contaminants listed in Paragraph E of this Section shall be conducted as follows:

A. All CWSs and NTNCWSs shall monitor for the contaminants listed in paragraph E of this Section by the Date Specified in the table below:

System Population	Begin No Later Than
Greater than 10,000	First Calendar Quarter of 1989
3,300 - 10,000	First Calendar Quarter of 1989
Less than 3,300	First Calendar Quarter of 1991

B. Surface water systems shall sample in the distribution system representative of each water source or at entry points to the distribution system. The minimum number of samples in one (1) year of quarterly samples per water source.

C. Ground water systems shall sample at points of entry to the distribution system representative of each well. The minimum number of samples in one (1) sample per entry point to the distribution system.

D. The Division may require confirmation samples for positive or negative results.

E. CWSs and NTNCWSs shall monitor for the following contaminants:

Bromobenzene	Dibromomethane
Bromodichloromethane	Dichlorobenzene
Bromoform	1,1-Dichloroethane
Bromomethane	1,1-Dichloropropene
Chlorobenzene	1,3-Dichloropropene
Chlorodibromomethane	1,3-Dichloropropane
Chloroethane	2,2-Dichloropropane
Chloroform	1,1,1,2-Tetrachloroethane
Chloromethane	1,1,2,2-Tetrachloroethane
o-chlorotoluene	1,2,3-Trichloropropane
p-chlorotoluene	

F. {Reserved}

G. Analysis for the contaminants listed in Section 22.621 E and J shall be conducted using the following EPA methods or their equivalent as approved by EPA. These methods are contained in "Methods for the Determination of Organic Compounds in Drinking Water," ORD Publications, CERL, EPA/600/4-88/039, December 1988. These documents are available from the National Technical Information Service (NTIS), U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161. The toll-free number is 1-800-336-4700.

1. Method 502.1: "Volatile Halogenated Organic Chemicals in Water by Purge and Trap Gas Chromatography."

2. Method 502.2: "Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and electrolytic Conductivity Detectors in Series."

3. Method 503.1: "Volatile Aromatic and Unsaturated Organic Compounds in Water by Purge and Trap Gas Chromatography."

4. Method 524.1: "Volatile Organic Compounds in Water by Purge and Trap Gas Chromatography/Mass Spectrometry."

5. Method 524.2: "Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography/Mass Spectrometry."

H. Any alternate analytical technique approved by the United States Environmental Protection Agency.

I. Analyses for contaminants listed in 22.621 E may be conducted only by laboratories approved under Section 22.614 Q.

J. Monitoring for the following compounds is required at the discretion of the Division:

Bromochloromethane	n-Propylbenzene
n-Butylbenzene	Secbutylbenzene
Dichlorodifluoromethane	Tertbutylbenzene
Fluorotrichloromethane	1,2,3-Trichlorobenzene

Hexachlorobutadene	1,2,4-Trichlorobenzene
Isopropylbenzene	1,2,4-Trimethylbenzene
p-Isopropyltoluene	1,3,5-Trimethylbenzene
Naphthalene	

22.622 Sampling and Analytical Methodology For Unregulated Synthetic and Inorganic Contaminants: Monitoring of the contaminants listed in Paragraphs (K) and (L) of this section shall be conducted as follows:

A. Each community (CWS) and non-transient, non-community (NTNCWS) water system shall take four consecutive quarterly samples at each sampling point for each contaminant listed paragraph (K) of this section and report the results to the Division. Monitoring must be completed by December 31, 1995.

B. Each CWS and NTNCWS shall take one sample at each sampling point for each contaminant listed in paragraph (L) of this section and report the results to the Division. Monitoring must be completed by December 31, 1995.

C. Each CWS and NTNCWS may apply to the Division for a waiver from the requirements of paragraphs (A) and (B) of this section.

D. The Division may grant a waiver for the requirement of paragraph (A) of this section based on the criteria specified in Section 22.614 paragraph (H). The Division may grant a waiver from the requirement of paragraph (B) of this section if previous analytical results indicate contamination would not occur, provided this data was collected after January 1, 1990.

E. Groundwater systems shall take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment (hereafter called a sampling point). Each sample must be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

F. Surface water systems shall take a minimum of one sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment (hereafter called a sampling point). Each sample must be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

NOTE: For purposes of this paragraph, surface water systems include systems with a combination of surface and ground sources.

G. If the system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions (i.e.,

when water representative of all sources is being used).

H. The Division may require a confirmation sample for positive or negative results.

I. The Division may reduce the total number of samples a system must analyze by allowing the use of compositing. Composite samples from a maximum of five sampling points are allowed. Compositing of samples must be done in the laboratory and the composite sample must be analyzed within 14 days of collection. If the population served by the system is >3,300 persons, then compositing may only be permitted by the Division at sampling points within a single system. In systems serving $\leq 3,300$ persons, the Division may permit compositing among different systems provided the 5-sample limit is maintained.

J. Instead of performing the monitoring required by this section, a CWS or NTNCWS serving fewer than 150 service connections may send a letter to the Division stating that the system is available for sampling. This letter must be sent to the Division by January 1, 1994. The system shall not send such sample to the Division, unless requested to do so by the Division.

K. List of Unregulated Synthetic Organic Contaminants:

Organic Contaminants	EPA Analytical Methods
Aldrin	505, 508, 525
Butachlor	507, 525
Carbaryl	531.1
Dicamba	515.1
Dieldrin	505, 508, 525
3-Hydroxycarbofuran	531.1
Methomyl	531.1
Metolachlor	507, 525
Metribuzin	507, 508, 525
Propachlo	507, 525

L. List of Unregulated Inorganic Contaminants:

Contaminant	EPA analytical method
(1) Sulfate	Colorimetric.

M. Any alternate analytical technique approved by the United States Environmental Protection Agency.

22.63 Best Available Technologies (BAT)

A. The Division hereby identifies as indicated in the table below either granular activated carbon (GAC), packed tower aeration (PTA), or oxidation (OX) through chlorination or ozonation as the best technology, treatment technique, or other means available for achieving compliance with the maximum contaminant level for organic contaminants identified in Section 22.611 paragraphs (A)

and (C).

BAT for Organic Contaminants Listed in Section 22.611 (A) and (C)

Chemical	gac	pta	ox
Alachlor		X	
Aldicarb		X	
Aldicarb sulfone		X	
Aldicarb sulfoxide		X	
Atrazine		X	
Benzene		X	X
Benzo(a)pyrene	X		
Carbofuran		X	
Carbon tetrachloride		X	X
Chlordane		X	
2,4-D	X		
Dalapone	X		
Dibromochloropropane (DBCP)		X	X
o-Dichlorobenzene	X	X	
1,2-Dichloroethane	X	X	
cis-1,2-Dichloroethylene	X	X	
trans-1,2-Dichloroethylene	X	X	
1,1-Dichloroethylene	X	X	
Dichloromethane		X	
1,2-Dichloropropane	X	X	
Di(2-ethylhexyl)adipate	X	X	
Di(2-ethylhexyl)phthalate	X		
Dinoseb	X		
Diquat	X		
Endothall	X		
Endrin	X		
Ethylene Dibromide (EDB)		X	X
Ethylbenzene		X	X
Glyphosate			X
Heptachlor		X	
Heptachlor epoxide		X	
Hexachlorobenzene	X		

Chemical	gac	pta	ox
Hexachlorocyclopentadiene	X	X	
Lindane		X	
Methoxychlor		X	
Monochlorobenzene		X	X

Oxamyl (Vydate)	X		
para-Dichlorobenzene	X		
Polychlorinated biphenyls (PCB)		X	
Pentachlorophenol		X	
Picloram		X	
Simazine	X		
Styrene	X		
2,4,5-TP (Silvex)		X	X
Tetrachloroethylene		X	X
1,2,4-Trichlorobenzene	X	X	
1,1,1-Trichloroethane	X	X	
1,1,2-Trichloroethane	X	X	
Trichloroethylene		X	X
Toluene		X	
Toxaphene		X	X
2,3,7,8-TCDD (Dioxin)	X		
Vinyl chloride		X	
Xylene		X	X

B. BAT for Inorganic Contaminants Listed in Section 22.601 (A)

Chemical Name	BAT(s)
Antimony	2,7
Asbestos	2,3,8
Barium	5,6,7,9
Beryllium	1,2,5,6,7
Cadmium	2,5,6,7
Chromium	2,5,6,2,7
Cyanide	5,7,10
Mercury	21,4,61,71
Nickel	5,6,7
Nitrate	5,7,9
Nitrite	5,7
Selenium	1,23,6,7,9
Thallium	1,5

- 1 BAT only if influent Hg concentrations <10 ug/l
- 2 BAT for Chromium III only.
- 3 BAT for Selenium IV only.

Key to BATs in Table

- 1 = Activated Alumina
- 2 = Coagulation/Filtration
- 3 = Direct and Diatomite Filtration
- 4 = Granular Activated Carbon
- 5 = Ion Exchange
- 6 = Lime Softening
- 7 = Reverse Osmosis
- 8 = Corrosion Control
- 9 = Electrodialysis
- 10 = Chlorine
- 11 = Ultraviolet

C. Treatment techniques for acrylamide and epichlorohydrin.

1. Each public water system must certify annually in writing to the Division (using a third party or manufacturer's certification) that when acrylamide and epichlorohydrin are used in drinking water systems, the combination (or product) of dose and monomer level does not exceed the levels specified as follows:

- Acrylamide = 0.05% dosed at 1 PPM (or equivalent).
- Epichlorohydrin = 0.01% dosed at 20 PPM (or equivalent).

22.64 Maximum Contaminant Level (MCL) Effective Dates:

- Fluoride - October 2, 1987
- Phase I (VOCs) - January 9, 1989
- Phase II - July 30, 1992
- Phase IIB - January 1, 1993
- Phase V - January 17, 1994

SECTION 22.7 TURBIDITY AND CORROSIVITY

22.70 Turbidity MCL, Sampling and Analytical Methodology (Effective no later than June 29, 1993)

22.701 Turbidity MCL: The PMCLs for turbidity are applicable to both CWSs and NCWSs utilizing surface water sources in whole or in part. The PMCLs for turbidity in drinking water, measured at a representative entry point(s) to the distribution system are:

A. One (1) NTU, as determined by a monthly average pursuant to Section 22.702, except that five (5) or fewer NTUs may be allowed if the supplier of water can demonstrate to the Division that the higher turbidity does not do any of the following:

1. Interfere with disinfection;
2. Prevent maintenance of an effective disinfectant agent throughout the distribution system or;
3. Interfere with microbiological determinations.

B. Five (5) NTUs based on an average for two (2) consecutive days pursuant to Section 22.702.

22.702 Turbidity Sampling and Analytical Methodology:

A. Samples shall be taken by suppliers of water for both CWSs and NCWSs using surface water in whole or in part at a representative entry point(s) to the water distribution system at least once per day, for the purpose of making turbidity measurements to determine compliance with Section 22.701. The turbidity measurements shall be

made by Method 214A (Nephelometric Method-Nephelometric Turbidity Units), pp. 134-136, as set forth in Standard Methods for the Examination of Water and Wastewater, 1986, American Public Health Association et al., 16th edition, or any alternate analytical technique approved by the Division.

B. If the result of a turbidity analysis indicates that the MCL has been exceeded, the sampling and measurement shall be confirmed by resampling as soon as practicable and preferably within one (1) hour. If the repeat sample confirms that the MCL has been exceeded, the supplier of water shall report to the Division within forty-eight (48) hours. The repeat sample shall be the sample used for the purpose of calculating the monthly average. If the monthly average of the daily samples exceeds the MCL, or if the average of two (2) samples taken on consecutive days exceeds five (5) NTU, the supplier of water shall report to the Division and notify the public as directed in Section 22.40 and Section 22.41.

C. When required by the Division, samples shall be taken by suppliers of water for both CWSs and NCWSs utilizing ground water only, at representative points in the distribution system.

22.71 Corrosivity Sampling, Reporting and Analytical Methodology: Suppliers of water for community public water systems shall collect samples from a representative entry point to the water distribution system for the purpose of analyses to determine the corrosivity characteristics of the water.

22.711 Sampling Requirements: For water suppliers utilizing surface water wholly or in part, two (2) samples per plant are required, one (1) during mid-winter and one (1) during mid-summer. For water suppliers utilizing wholly ground water sources, one (1) sample per plant per year shall be required.

A. The minimum number of samples required to be taken by the system shall be based on the number of treatment plants used by the system, except that multiple wells drawing raw water from a single aquifer may be considered one (1) treatment plant for determining the minimum number of samples.

B. Determination of the corrosivity characteristics of the water shall include measurement of pH, calcium hardness, alkalinity, temperature, total dissolved solids (total filterable residue) and the calculation of the Langelier Index (LI) in accordance with Section 22.713A. The determination of corrosivity characteristics shall only include one (1) round of sampling (two (2) samples per plant for surface water and

one sample per plant for ground water sources). However, the Division may require addition or more frequent monitoring as appropriate. In addition, the Division has the discretion to require monitoring for additional parameters which may indicate corrosivity characteristics such as sulfates and chlorides. In certain cases, the Aggressive Index (AI) as described in Section 22.713B can be used instead of the LI. The Division will make this determination. Waters exhibiting a LI of less than -2.0 or an AI of less than 10.0 shall be considered highly corrosive/aggressive.

22.712 Reporting to the Division: The supplier of water shall report to the Division the results of the analyses for corrosivity characteristics pursuant to Section 22.401.

22.713 Analytical Methodology: Analyses conducted to determine the corrosivity of the water shall be made in accordance with the following methods:

A. Langelier Index -- "Standard Methods for the Examination of Water and Wastewater," 14th Edition, Method 203, pp. 61-63.

B. Aggressive Index -- "AWWA Standard for Asbestos-Cement Pipe, 4 in. through 24 in. for Water Other Liquids," AWWA C400-77, Revision of C400-75, AWWA, Denver, Colorado.

C. Total Filterable Residue -- "Standard Methods for the Examination of Water and Wastewater," 14th Edition, Method 208B, pp. 92-92; or "Methods of Chemical Analysis of Water and Wastes," Method 160.1.

D. Temperature -- "Standard Methods for the Examination of Water and Wastewater," 14th Edition, Method 212, pp 125-126.

E. Calcium -- EDTA Titrimetric Method "Standard Methods for the Examination of Water and Wastewater," 14th Edition, Method 306C, pp. 189-191; or "Annual Book of ASTM Standards," Method D-1126-67B; "Methods for Chemical Analysis of Water and Wastes," Method 215.2.

F. Alkalinity -- Methyl Orange end point pH 4.5 "Standard Methods for the Examination of Water and Wastewater," 14th Edition, Method 403, pp. 278-281; or "Annual Book of ASTM Standards," Method D1067-70B; or Methods for Chemical Analysis of Water and Wastes," Method 310.1.

G. pH -- "Standard Methods for the Examination of Water and Wastewater," 14th Edition, Method 424, pp. 460-465; or "Methods for Chemical Analysis of Water and Wastes," Method 150.1; or "Annual Book of ASTM Standards," Method D-1293-78A or B.

H. Chloride -- Potentiometric Method, "Standard Methods for the Examination of Water and Wastewater,"

14th Edition, p.306.

I. Sulfate -- Turbidimetric Method, "Methods for Chemical Analysis of Water and Wastes," pp. 277-278, EPA, Office of Technology Transfer, Washington, D.C. 20460, 1974, or "Standard Methods for the Examination of Water and Wastewater," 14th Edition, pp. 496-498.

J. Any alternate analytical technique approved by the Division.

22.714 Reporting of Construction Materials: PWSs shall identify whether the following construction materials are present in their distribution system and report to the Division:

A. Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing.

B. Copper from piping and alloys, service lines and home plumbing.

C. Galvanized piping, service lines and home plumbing.

D. Ferrous piping materials such as cast iron and steel.

E. Asbestos cement pipe.

F. Vinyl lined asbestos cement pipe.

G. Coal tar lined pipes and tanks.

H. In addition, the Division may require identification and reporting of other materials of construction present in distribution systems that may contribute contaminants to the drinking water.

SECTION 22.8 PUBLIC WATER SYSTEM CLASSIFICATION AND TREATMENT REQUIREMENTS

22.801 ~~Water System Classification:~~ Regulatory Classification:

A. Class I - All public water systems shall:

1. Meet all bacteriological requirements;
2. Meet the nitrate and nitrite requirements and;
3. Conform with provisions of Section 22.5.

B. Class II - All public water systems as defined in 22.157(A) and (B) shall: which are not community water systems that regularly serve at least twenty five (25) of the same people over six (6) months per year shall:

1. Meet all the Class I requirements and;
2. Meet all ~~Synthetic Organic requirements and other Primary Standards and;~~

3. Meet all requirements of Section 22.607.

C. Class III - All public water systems as defined in 22.157 (A) and serve more than 500 service connections within the state shall: which serve fifteen (15) or more service connections used by year round residents or

~~regularly serve twenty-five (25) or more year-round residents shall:~~

1. Meet all Class I requirements and;
2. Meet all Class II requirements and;
3. Meet all other primary and secondary standards requirements.

NOTE - All public water systems should meet all secondary MCLs.

22.802 Disinfection: When it is specifically required by these regulations, or when it is deemed to be required to ensure compliance with Section 22.304 or where it is demonstrated through bacteriological testing that there is a need for disinfection, continuous disinfection shall be provided. The disinfection shall be chlorine, unless a substitute is approved prior to installation. Plans and specifications for the disinfection system shall be approved in accordance with Section 22.211. When the disinfection is instituted, it shall be operated such that a free chlorine residual of at least 0.3 mg/L is maintained throughout the water distribution system. The supplier of water shall keep accurate records of the amount of chlorine used and shall have an approved test kit for measuring both free and total chlorine residuals. The supplier of water shall be required to conduct chlorine residual testing at least daily, and shall report these results to the Division on a monthly basis in accordance with Section 22.401. If a substitute disinfectant is approved, the operational and monitoring requirements shall be specified by the Division.

SECTION 22.9 RADIOACTIVITY

22.91 Limits

22.911 Primary MCLs for Radium 226, 228 and Gross Alpha Particles:

A. The PMCL for radium 226 and 228 combined is five (5) pCi per liter.

B. The PMCL for gross particle activity (including radium 226 but excluding radon and uranium) is fifteen (15) pCi per liter.

22.912 Beta Particle and Photon Concentration Limits: The average annual concentration of beta particle and photon radioactivity for man-made radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than four (4) millirems per year. Except for those listed in the Table below, the concentration causing four (4) millirems total body or organ dose equivalents shall be calculated on the basis of a two (2) liters

per day drinking water intake using the 168 hour data listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," NBS Handbook 69 as amended August 1963, U.S. Department of Commerce. If two (2) or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ shall not exceed four (4) millirems per year.

Average Annual Concentrations Assumed to Produce a Total Body or Organ dose of 4 Millirems/Year

Radionuclide	Critical Organ	pCi/L
Tritium	Total Body	20,000
Strontium	Bone Marrow	8

22.92 Sampling-Monitoring Frequency:

22.921 Monitoring Frequency: Compliance with Section 22.911 shall be based on the analyses of an annual composite of four (4) consecutive quarterly samples or the average of the analyses of four samples obtained at quarterly intervals. At the discretion of the Division, when an annual record taken in accordance with Section 22.911 has established that the average annual concentration is less than one (1) half of the PMCL under 22.911, analyses of a single sample may be substituted for the quarterly sampling procedure specified herein. A gross alpha particle activity measurement may be substituted for the required radium 226 and 228 analysis provided that the measured gross alpha particle activity does not exceed five (5) pCi/liter. If this limit is exceeded, the same or an equivalent sample shall be analyzed for radium 226. If the concentration of radium 226 exceeds three (3) pCi/L, the same or an equivalent sample shall be analyzed for radium 228. The water supply shall be monitored at least once every four (4) years. More frequent monitoring may be required by the Division if it is deemed necessary. A CWS using two (2) or more sources, having different concentrations or radioactivity, shall monitor source water, in addition to water from a free flowing tap, when ordered by the Division. If the average annual PMCL for gross alpha particle activity or total radium as set forth in Section 22.911 is exceeded, the supplier shall give notice to the Division pursuant to Section 22.40 and notify the public as required by Section 22.41. Monitoring at quarterly intervals shall be continued until the annual average concentration no longer exceeds the PMCL or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

22.922 Surface Water Systems Serving a Population

Greater than 100,000: Surface water systems serving a population greater than 100,000 and such other CWSs are designated by the Division shall be monitored for compliance with Section 22.912 by analyses of four (4) consecutive quarterly samples or analyses of a composite of four (4) consecutive quarterly samples. Compliance with Section 22.912 may be assumed without further analysis if the average annual concentration of gross beta particle activity is less than fifty (50) pCi/liter and if the average annual concentrations of tritium and strontium-90 are less than those listed in the table shown above, provided that if both radionuclides are present, the sum of their annual dose equivalents to bone marrow shall not exceed four (4) millirem/year. If the gross beta particle activity exceeds fifty (50) pCi/liter, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses shall be calculated to determine compliance with Section 22.912. Supplies shall be monitored at least once every four (4) years and more often if deemed necessary by the Division.

22.923 Utilizing Water Contaminated By Effluents from Nuclear Facilities: Any CWS designated by the Division as utilizing waters contaminated by effluents from nuclear facilities shall initiate quarterly monitoring for gross beta particles and iodine-131 radioactivity and annual monitoring for strontium-90 and tritium. Quarterly monitoring for gross beta particle activity shall be based on the analyses of monthly samples. If the gross beta particle activity in a sample exceeds fifteen (15) pCi/liter, the same or an equivalent sample shall be analyzed for Sr-89 and Cs-134. If the gross beta particle activity exceeds fifty (50) pCi/liter, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ or total body doses shall be calculated to determine compliance with Section 22.912. For I-131, a composite of five (5) consecutive daily samples shall be analyzed for each quarter. As ordered by the Division, more frequent monitoring shall be conducted when iodine-131 is identified in the finished water. Annual monitoring for strontium-90 and tritium shall be conducted by means of analyses of a composite of four (4) consecutive quarterly samples. If the average annual PMCL for man-made radioactivity set forth in Section 22.912 is exceeded, the operator of the CWS shall give notice to the Division pursuant to Section 22.40 and to the public as required by Section 22.41. Monitoring at monthly intervals shall be continued until the concentration no longer exceeds the PMCL or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

22.924 Analytical Methodology:

A. The methods specified in Interim Radiochemical Methodology for Drinking Water, Environmental Monitoring and Support Laboratory, EPA-600/4-75-008, U.S. EPA, Cincinnati, Ohio 45268, or those listed below are to be used to determine compliance with Section 22.911 and 22.912:

1. Gross Alpha and Beta - Method 302 "Gross Alpha and Beta Radioactivity in Water," Standard Methods for the Examination of Water and Wastewater, 13th Edition, American Public Health Association, New York, NY, 1971.

2. Total Radium - Method 304 "Radium in Water by Precipitation" Ibid.

3. Radium-226 - Method 305 "Radium-226 by Radon in Water," Ibid.

4. Strontium-89, 90 - Method 303 "Total Strontium and Strontium-90 in Water," Ibid.

5. Tritium - Method 306 "Tritium in Water," Ibid.

6. Cesium-134 - ASTM D-2459 "Gamma Spectrometry in Water," 1975 Annual Book of ASTM Standards, Water and Atmospheric Analysis, Part 31, American Society for Testing and Materials, Philadelphia, PA, 1975.

7. Uranium - ASTM D-2907 "Microquantities of Uranium in Water by Fluorometry," Ibid.

B. When the identification and measurement of radionuclides other than those listed in paragraph A are required, the following references are to be used:

1. Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solution, H.L. Krieger and S. Gold, EPA-R4-73-074. U.S. EPA, Cincinnati, Ohio, May 1973.

2. HASL Procedure Manual, Edited by John H. Harley. HASL 300 ERDA health and Safety Laboratory, New York, NY, 1973.

C. For the purpose of monitoring radioactivity concentrations in drinking water, the required sensitivity of the radioanalyses is defined in terms of a detection limit. The detection limit shall be that concentration which can be counted with a precision of plus or minus one hundred (100) percent at the ninety-five (95) percent confidence level ($1.96 \cdot \sigma$ - where σ is the standard deviation of the net counting rate of the sample).

1. To determine compliance with Section 22.911A, the detection limit shall not exceed one (1) pCi/L. To determine compliance with Section 22.911B, the detection limit shall not exceed three (3) pCi/L.

2. To determine compliance with Section 22.912, the detection limits shall not exceed the concentrations listed in the Table below.

Detection Limits for Man-Made Beta Particle and Photon Emitters:

Radionuclide	Detection Limit	
Tritium	1,000	pCi/L
Strontium-89	10p	Ci/L
Strontium-90	2	pCi/L
Iodine-131	1	pCi/L
Cesium-134	10	pCi/L
Gross Beta	4	pCi/L
Other radionuclides	1/10 of the applicable limit	

D. To judge compliance with the PMCLs listed in Sections 22.911 and 22.912, the averages of data shall be used and shall be rounded to the same number of significant figures as the PMCL for the substance in question.

E. Any other alternate analytical technique approved by the Division may also be used.

SECTION 22.10 SURFACE WATER TREATMENT RULE

22.1001 Untreated Water: The use of untreated (without filtration and disinfection) surface water or untreated ground water under the direct influence of surface water shall be prohibited.

22.1002 General Requirements: Each public water system with a surface water source or a ground water source under the direct influence of surface water must be operated by qualified personnel who meet the requirements of the Division and must provide treatment of that source water that complies with these treatment technique requirements. The treatment technique requirements consist of installing and properly operating water treatment processes which reliably achieve:

A. At least 99.9 percent (3-log) removal and/or inactivation of *Giardia lamblia* cysts between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer; and

B. At least 99.99 percent (4-log) removal and/or inactivation of viruses between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer.

22.1003 Disinfection: Each public water system with a surface water source or a ground water source under the

direct influence of surface water must provide treatment consisting of both filtration as specified in Section 22.1004 and disinfection as follows:

A. The disinfection treatment must be sufficient to ensure that the total treatment processes of that system achieve at least 99.9 percent (3-log) inactivation and/or removal of *Giardia lamblia* cysts and at least 99.99 percent (4-log) inactivation and/or removal of viruses, as determined by the Division.

B. The residual disinfectant concentration in the water entering the distribution system, measured as specified in Section 22.1005 cannot be less than 0.3 mg/L for more than four (4) hours.

C. The residual disinfectant concentration in the distribution system, measured as total chlorine, combined chlorine, or chlorine dioxide, as specified in Section 22.1005 cannot be undetectable in more than five (5) percent of the samples each month, for any two (2) consecutive months that the system serves water to the public. Water in the distribution system with a heterotrophic bacteria concentration less than or equal to five hundred (500) per milliliter, measured as heterotrophic plate count (HPC) as specified in Section 22.1006, is deemed to have a detectable disinfectant residual for purposes of determining compliance with this requirement. Thus, the value V in the following formula cannot exceed five (5) percent in one (1) month, for any two (2) consecutive months.

$$V = \frac{c + d + e}{a + b} \times 100$$

where: a = number of instances where the residual disinfectant concentration is measured;

b = number of instances where the residual disinfectant concentration is not measured but HPC is measured;

c = number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

d = number of instances where no residual disinfectant concentration is detected and where the HPC is >500/ml; and

e = number of instances where the residual disinfectant concentration is not measured and HPC is >500/ml.

If the Division determines, based on site specific considerations, that a system has no means for having a sample transported and analyzed for HPC by an approved laboratory under the requisite time and temperature

conditions specified in Section 22.1006, and that the system is providing adequate disinfection in the distribution system, the requirements of this Subsection do not apply.

22.1004 Filtration: Each public water system with a surface water source or a ground water source under the direct influence of surface water must provide treatment consisting of both disinfection as specified in Section 22.1003 and filtration that complies with any one (1) of the following by June 29, 1993:

A. Conventional Filtration or Direct Filtration - For systems using conventional filtration or direct filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to 0.5 NTU in at least ninety-five (95) percent of the measurements taken each month, measured as specified in Section 22.1006, except that if the Division determines that the system is capable of achieving at least 99.9 percent removal and/or inactivation of Giardia lamblia cysts at some turbidity level higher than 0.5 NTU in at least ninety-five (95) percent of the measurements taken each month, the Division may substitute this higher turbidity limit for that system. However, in no case may the Division approve a turbidity limit that allows more than one (1) NTU in more than five (5) percent of the samples taken each month, measured as specified in Section 22.1006. The turbidity level of representative samples of a system's filtered water must at no time exceed five (5) NTU, measured as specified in Section 22.1006.

B. Slow Sand Filtration - For systems using slow sand filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to one (1) NTU in at least ninety-five (95) percent of the measurements taken each month, measured as specified in Section 22.1006, except that if the Division determines there is no significant interference with disinfection at a higher turbidity level, the Division may substitute the higher turbidity limit for that system.

C. Diatomaceous Earth Filtration - For systems using diatomaceous earth filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to one (1) NTU in at least ninety-five (95) percent of the measurements taken each month, measured as specified in Section 22.1006. The turbidity level of representative samples of a system's filtered water must at no time exceed five (5) NTU, measured as specified in Section 22.1006.

D. Other Filtration Technologies - A public water system may use a filtration technology not listed in this Section if it demonstrates to the Division, using pilot plant

studies or other means, that the alternative filtration technology, in combination with disinfection treatment that meets the requirements of Section 22.1003, consistently achieves 99.9 percent removal and/or inactivation of Giardia lamblia cysts and 99.99 percent removal and/or inactivation of viruses. For a system that makes this demonstration, the requirements of paragraph B of this Section apply.

22.1005 Monitoring Requirements: - A public water system that uses a surface water source or a ground water source under the direct influence of surface water must monitor in accordance with the following by June 29, 1993:

A. Turbidity measurements as required by Section 22.1004 must be performed on representative samples of the system's filtered water at least every four (4) hours that the system serves water to the public. A public water system may substitute continuous turbidity monitoring for grab sample monitoring if it validates the continuous measurement for accuracy on a regular basis using a protocol approved by the Division. For any systems using slow sand filtration or filtration treatment other than conventional treatment, direct filtration or diatomaceous earth filtration, the Division may reduce the sampling frequency to once per day if it determines that less frequent monitoring is sufficient to indicate effective filtration performance. For systems serving five hundred (500) or fewer persons, the Division may reduce the turbidity sampling frequency to once per day, regardless of the type of filtration treatment used, if the Division determines that less frequent monitoring is sufficient to indicate effective filtration performance.

B. The residual disinfectant concentration of the water entering the distribution system must be monitored continuously, and the lowest value must be recorded each day, except that if there is a failure in the continuous monitoring equipment, grab sampling every four (4) hours may be conducted in lieu of continuous monitoring, but for no more than five (5) working days following the failure of the equipment, and systems serving 3,300 or fewer persons may take grab samples in lieu of providing continuous monitoring on an ongoing basis at the frequencies each day prescribed below:

<u>System Population</u>	<u>Samples/Day*</u>
<500	1
501-1,000	2
 <u>System Population</u>	 <u>Samples/Day*</u>
1,001-2,500	3
2,501-3,300	4

*The day's samples cannot be taken at the same time. The sampling intervals are subject to Division review and approval.

If at any time the residual disinfectant concentration falls below 0.3 mg/L in a system using grab sampling in lieu of continuous monitoring, the system must take a grab sample every four (4) hours until the residual disinfectant concentration is equal to or greater than 0.3 mg/L.

C. The residual disinfectant concentration must be measured at least at the same points in the distribution system and at the same time as total coliforms are sampled, as specified in Section 22.5, except that the Division may allow a public water system which uses both a surface water source or a ground water source under the direct influence of surface water, and a ground water source to take disinfectant residual samples at points other than the total coliform sampling points if the Division determines that such points are more representative of treated (disinfected) water quality within the distribution system. Heterotrophic bacteria, measured as HPC as specified in Section 22.1006, may be measured in lieu of residual disinfectant concentration. If the Division determines, based on site specific considerations, that a system has no means for having a sample transported and analyzed for HPC by an approved laboratory under the requisite time and temperature conditions specified in Section 22.1006 and that the system is providing adequate disinfection in the distribution system, the requirements of this Subsection do not apply.

22.1006 Analytical Methodology - Only the analytical method(s) specified in this Section, or otherwise approved by EPA, may be used to demonstrate compliance with Sections 22.1002, 22.1003 and 22.1004. Measurement for pH, temperature, turbidity and residual disinfectant concentration must be conducted by a party approved by the Division. Measurements for total coliforms, fecal coliforms and HPC must be conducted by an approved laboratory. Until laboratory approval criteria are developed for the analysis of HPC and fecal coliforms, any laboratory approved for total coliform analysis is deemed approved for HPC and fecal coliform analysis. The following procedures shall be performed in accordance with the publications listed in the following Section. This incorporation by reference was approved by the Director of the Federal register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of the methods published in Standard Methods published in Standard Methods for the Examination of Water and Wastewater may be obtained from the American Public Health Association et al. 1015 Fifteenth Street, NW., Washington, D.C. 20005; copies of the Minimal Medium

ONPG-MUG Method as set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Enumeration of Total Coliforms and Escherichia coli from Drinking Water: Comparison with the Standard Multiple Tube Fermentation Method" (Edberg et al), Applied and Environmental Microbiology, Volume 54, pp.1595-1601, June 1988 (as amended under Erratum, Applied and Environmental Microbiology, Volume 54, p. 3197, December 1988), may be obtained from the American Water Works Association Research Foundation, 6666 West Quincy Ave., Denver, Colorado 80235; and copies of the Indigo Method as set forth in the article "Determination of Ozone in Water by the Indigo Method" (Bader and Hoigne), may be obtained from Ozone Science and Engineering, Pergammon Press Ltd., Fairview Park, Elmsford, New York 10523. Copies may be inspected at the U.S.E.P.A., Room EB15, 401 M Street SW., Washington, D.C. 20460 or at the Office of the Federal register, 1100 L Street, NW., Room 8401, Washington, D.C.

A. Total Coliform Concentration - See Section 22.52.

B. Fecal Coliform Concentration - See Section 22.52.

C. Heterotrophic Plate Count - Method 907A (Pour Plate Method), pp. 864-866, as set forth in Standard Methods for the Examination of water and Wastewater, 1986, American Public Health Association et al., 16th edition.

D. Turbidity - See Section 22.702A

E. Residual Disinfectant Concentration - Residual disinfectant concentrations for free chlorine and combined chlorine (chloramines) must be measured by Method 408C (Amperometric Titration Method), pp. 303-306, Method 408D (DPD Ferrous Titrametric Method), pp. 306-309, Method 408E (DPD Colorimetric Method), pp. 309-310, or Method 408F (Leuco Crystal Violet Method), pp. 310-313, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al., 16th edition. Residual disinfectant concentrations for free chlorine and combined chlorine may also be measured by using DPD colorimetric test kits if approved by the Division. Residual disinfectant concentration for ozone must be measured by the Indigo Method as set forth in Bader, H., Hoigne, J., "Determination of Ozone in Water by the Indigo Method; A submitted Standard Method"; Ozone Science and Engineering, Vol. 4 pp. 169-176, Pergammon Press Ltd., 1982, or automated methods which are calibrated in reference to the results obtained by the Indigo Method on a regular basis, if approved by the Division (NOTE - This method will be published in the 17th edition of Standard Methods for the Examination of Water and Wastewater, 1985, American

Public Health Association et al., the Iodometric Method in the 16th edition may not be used). Residual disinfectant concentrations for chlorine dioxide must be measured by Method 410B (Amperometric Method) or Method 410C (DPD Method), pp. 322-324, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al., 16th edition.

F. Temperature - Method 212 (Temperature), pp. 126-127, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al., 16th edition.

G. pH - Method 423 (pH Value), pp. 429-437, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al., 16th edition.

1. "Methods of Chemical analysis of Water and Wastes," EPA Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA-600/4-79-020), March 1985. Available from ORD Publications, CERL, EPA, Cincinnati, Ohio 45268

2. Annual Book of ASTM Standards, Volume 11.01, American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19013.

3. "Standard Methods for the Examination of Water and Wastewater," 16th Edition, American Public Health Association, American Water Works Association, Water Pollution Control Federation, 1985.

4. "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," Techniques of Water-Resources Investigations of the United States Geological Survey Books, Chapter A1, 1985, Open-File Report 85-495. Available from Open-File Services Section, Western Distribution Branch, U.S. Geological Survey, MS 306 Box 24525, Denver Federal Center, Denver, Colorado 80225.

5. "Fluoride in Water and Wastewater. Industrial Method #129-71 W." Technicon Industrial Systems. Tarrytown, New York 10591, December 1972.

6. "Fluoride in Water and Wastewater," Technicon Industrial Systems. Tarrytown, New York 10591, February 1976.

7. "Orion Guide to Water and Wastewater Analysis." Form WeEEG/5880, p. 5, 1985. Orion Research, Inc, Cambridge, Maryland.

8. "Inductively Coupled Plasma Atomic Emission Analysis of Drinking Water," Appendix to Method 200.7, September 1985. U.S.E.P.A. Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

9. The addition of 1 mL of 30% of H2O2 to each

100 mL of standards and samples is required before analysis.

10. Prior to dilution of the Arsenic and Selenium calibration standards, add 2 mL of 30% H2O2 for each 100 mL of standard.

11. For approved analytical procedures for metals, the technique applicable to total metals must be used.

**DEPARTMENT OF NATURAL
RESOURCES AND
ENVIRONMENTAL CONTROL**
DIVISION OF AIR AND WASTE MANAGEMENT
AIR QUALITY MANAGEMENT SECTION

Statutory Authority: 7 Delaware Code,
Section 6010 (7 **Del.C.** 6010)

Secretary's Order No. 99-A-0010

Date of Issuance: March 5, 1999

Re: **Proposed Amendments to the Regulations
Governing the Control of Air Pollution**

Effective Date of Regulatory Amendment: April 12, 1999

I. Background

On Wednesday, February 10, 1999, at approximately 6:00 p.m., a public hearing was held in the DNREC Auditorium at 89 Kings Highway, Dover. The public hearing concerned revisions to air quality standards portions of the Regulations Governing the Control of Air Pollution. Gary B. Patterson, Executive Director of the Delaware Petroleum Council was the only member of the public to attend the public hearing, and he did not submit any comments. At the close of the public hearing, the Hearing Officer closed the public hearing record.

Prior to the public hearing, a public workshop concerning the proposed regulatory changes was held on Monday, June 8, 1998, at the DNREC Auditorium. Proper public notice of the workshop was provided. Additionally, public notice of the hearing was provided as required by law including publication in the Delaware Register of Regulations. By memorandum dated March 2, 1999, the Hearing Officer submitted his report and recommendation, which is hereby explicitly incorporated into this Order by reference.

II. Findings and Conclusions

1. Proper notice of the public hearing was provided as

required by law, including publication in the Delaware Register of Regulations.

2. An informal public workshop concerning the regulatory proposal was held prior to the public hearing on Monday, June 8, 1998.

3. Only one member of the public was present at the public hearing, and he submitted no comments concerning the proposed regulatory amendments.

4. The proposed changes in these air quality standards are designed to protect public health and are based on the latest in health-based research.

5. Longer exposures at relatively high concentrations of ozone have a greater and more permanent impact on health than brief exposures to ozone at peak concentrations.

6. Addition of a PM_{2.5} standard acknowledges health-based concerns from very fine particles entering the human respiratory system.

7. The proposed changes to Regulation No. 3 § 11.2 have been withdrawn due to a mistake in publishing; however, AQM intends to re-propose and re-publish these proposed changes at a future date.

8. The only change to the proposal after it was published in the Register of Regulations is the decision not to promulgate the proposed changes in Regulation No. 3, § 11.2 because the changes were improperly published. This does not constitute a significant change with respect to republishing the regulatory proposal.

9. The record supports promulgation of the amendment to the Regulations Governing the Control of Air Pollution and contains no evidence to the contrary.

10. Promulgating these regulatory amendments will further the policies and purposes of 7 Del. C. Chapter 60 in that will protect public health and the environment.

III. Order

In view of the above findings, it is hereby ordered the proposed amendments to the Regulations Governing the Control of Air Pollution be promulgated as indicated in Exhibit 7 (except for the changes to Regulation No. 3, Section 11.2, that have been withdrawn) and now attached as Exhibit A in the manner and form provided by law.

IV. Reasons

Adoption of the proposed amendments to the *Regulations Governing the Control of Air Pollution* will further the policies and purposes of 7 Del. C. Chapter 60, in that the Regulations will protect public health and the environment. This regulatory proposal was not opposed in any way by the public or the regulated community. In addition, this regulatory proposal will work toward making state regulation in this area consistent with federal regulations.

Mary L. McKenzie, Acting Secretary

Adopted Regulation Changes to The Delaware Regulations Governing the Control of Air Pollution

Regulation No. 1 - DEFINITIONS AND ADMINISTRATIVE PRINCIPLES

PM_{2.5} - Particulate matter with an aerodynamic diameter of less than or equal to a nominal 2.5 micrometers, as determined by the appropriate reference methods.

Regulation No. 3 - AMBIENT AIR QUALITY STANDARDS

Section 1 - General Provisions

1.1 ...

1.2 ...

1.3 ...

1.4 ...

1.5 ...

1.6 The sampling and analytical procedures and techniques employed to determine ambient air concentrations of contaminants shall be consistent with methods which result in a representative evaluation of the prevailing conditions. The following methods shall be used directly or employed as reference standards against which other methods may be calibrated;

a. ...

b. ...

c. ...

d. ...

e. ...

f. ...

g. ...

h. ...

i. ...

j. Ambient concentrations of PM_{2.5} particulate shall be determined by the reference method based on 40 CFR, Part 50, Appendix L, as found in the Federal Register dated July 18, 1997, on page 38714 – 38752.

Section 6 - Ozone

6.1 1-hour primary and secondary ambient air quality standards for ozone

The average number of days per calendar year with a maximum one hour average value exceeding 235 Fg/m³ (0.12 ppm) shall be equal to or less than one, averaged over three consecutive years. This standard shall be applicable to New Castle and Kent Counties.

6.2 8-hour primary and secondary ambient air quality

standards for ozone

The average of the fourth highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm, averaged over three consecutive years. This standard applies to all Counties in Delaware.

Section 11 - PM₁₀ and PM_{2.5} Particulates

11.1 The Primary and Secondary Ambient Air Quality Standards for Particulate Matter, measured as PM₁₀ are:

a. 150 micrograms per cubic meter (Fg/m³), 24 hour average concentration. ~~The standards are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 Fg/m³, as determined in accordance with 40 CFR, Part 50, Appendix K, is equal to or less than one. the 99th percentile 24-hour concentration, as determined in accordance with 40 CFR, Part 50, Appendix N, as found in the Federal Register dated July 18, 1997, on page 38759, is less than or equal to 150 micrograms per cubic meter (Fg/m³).~~

b. 50 micrograms per cubic meter (Fg/m³), annual arithmetic mean. The standards are attained when the ~~expected~~ annual arithmetic mean concentration, as determined in accordance with 40 CFR, Part 50, Appendix ~~K~~ N, as found in the Federal Register dated July 18, 1997, on page 38759, is less than or equal to 50 Fg/m³

11.2 The Primary and Secondary Ambient Air Quality Standards for Particulate Matter, measured as PM_{2.5} are:

a. ~~[50 micrograms per cubic meter (µg/m³) 24-hour average concentration. The 24-hour primary and secondary PM_{2.5} standards are met when the 98th percentile 24-hour concentration, as determined in accordance with 40 CFR, Part 50, Appendix N, as found in the Federal Register dated July 18, 1997, on page 38757 - 38758, is less than or equal to 50 µg/m³] [Reserved]~~

b. ~~[15.0 micrograms per cubic meter (µg/m³) annual arithmetic mean concentration. The annual primary and secondary PM_{2.5} standards are met when the annual arithmetic mean concentration, as determined in accordance with 40 CFR, Part 50, Appendix N, as found in the Federal Register dated July 18, 1997, on page 38756 - 38757, is less than or equal to 15.0 µg/m³.] [Reserved]~~

**DIVISION OF AIR AND WASTE MANAGEMENT
AIR QUALITY MANAGEMENT SECTION**

Statutory Authority: 7 Delaware Code,
Section 6010 (7 Del.C. 6010)

Secretary's Order No. 99-A-0014

Date of Issuance: March 17, 1999

Re: Regulation No. 37 — NO_x Budget Program

Regulations Governing the Control of Air Pollution

Effective Date of Regulatory Amendments: April 11, 1999

I. Background

A public hearing was held on January 21, 1999, to receive comment on the Department's proposed NO_x Budget Program, Regulation No. 37, after a similar proposal was vacated in December of 1998 by the Superior Court on an appeal by industries that would be affected by the rule.

In this effort, the Department offered essentially the same regulation but with some modifications and more documentation and analysis to address the deficiencies noted by the Court. In addition, the various potentially-affected parties provided extensive comments, and the Department submitted a Response Document to address the major comments. Industry comments were received by February 12, 1999, and the Response Document was submitted on February 22, 1999, in accordance with a schedule mutually agreed upon by the various parties after it was determined that the tentative schedule announced at the hearing did not allow enough time for a fully-developed record.

II. Findings

1. Proper notice of the hearing was provided as required by law.

2. The industries potentially affected by this rulemaking submitted extensive comments for the record, both at the hearing and during the post-hearing phase.

3. The Department prepared a Response Document dated February 22, 1999, to address industry comments and to complement its written statement introduced at the hearing. This Response Document is expressly incorporated herein.

4. The Hearing Officer submitted a report dated March 15, 1999, which addresses the relevant comments from all parties and makes findings, conclusions and recommendations based on the record. For purposes of this Order, the Hearing Officer's Report including its findings, conclusions and recommendations are expressly incorporated herein and adopted as my findings, conclusions and recommendations.

III. Order

In view of the above findings, it is hereby ordered that Regulation No. 37, as repropounded by the Department at a public hearing on January 21, 1999, be promulgated in final form in accordance with the customary rulemaking procedure. It is further ordered that one minor change regarding test notices and protocols be incorporated into the regulation as recommended by the Hearing Officer.

IV. Reasons

Regulation No. 37 is an essential element in Delaware's overall effort to reduce Ozone levels and to achieve compliance with the Federal and State Ambient Air Quality Standards. In repropounding this regulation, the Department has addressed shortcomings in the previous rulemaking so as to be consistent with the Superior Court's guidelines. The record shows that Delaware's air resources are severely overburdened by industrial emissions of NO_x which threaten the environment and future industrial growth if not remedied. The present record demonstrates that Delaware's NO_x Budget Program is the most cost-effective means of achieving compliance with the health-based ozone standard while preserving air resource supplies for all statutory beneficial uses in furtherance of the policies and purposes of 7 Del. C. Chapter 60.

Mary L. McKenzie, Acting Secretary

Section 1 - General Provisions

a. The purpose of this regulation is to reduce nitrogen oxides (NO_x) emissions in Delaware through implementation of Delaware's portion of the Ozone Transport Commission's (OTC) September 27, 1994 Memorandum of Understanding (MOU) by establishing in the State of Delaware a NO_x Budget Program.

b. A NO_x allowance is an authorization to emit NO_x, valid only for the purposes of meeting the requirements of this regulation.

1. All applicable state and federal requirements remain applicable.

2. A NO_x allowance does not constitute a security or other form of property.

c. On or after May 1, 1999, the owner or operator of each budget source shall, not later than December 31 of each calendar year, hold a quantity of NO_x allowances in the budget source's current year NATS account that is equal to or greater than the total NO_x emitted from that budget source during the period May 1 through September 30 of the subject year.

d. Allowance transfers between budget sources sharing a common owner or operator and/or authorized account representative are subject to all applicable requirements of

this regulation, including the allowance transfer requirements identified in Section 11 of this regulation.

e. Offsets required for new or modified sources subject to non-attainment new source review must be obtained in accordance with Regulation 25 of Delaware's "Regulations Governing the Control of Air Pollution" and Section 173 of the Clean Air Act. Allowances are not considered offsets within the context of this regulation.

f. Nothing in this regulation shall be construed to limit the authority of the Department to condition, limit, suspend, or terminate any allowances or authorization to emit.

g. The Department shall maintain an up to date listing of the NO_x sources subject to this regulation.

1. The listing shall identify the name of each NO_x budget source and its annual allowance allocation, if any.

2. The Department shall submit a copy of the listing to the NATS Administrator by January 1 of each year, commencing in 1999.

Section 2 - Applicability

a. The NO_x Budget Program applies to any owner or operator of a budget source where that source is located in the State of Delaware.

b. Any person who owns, operates, leases, or controls a stationary NO_x source in Delaware not subject to this program, by definition, may choose to opt into the NO_x Budget Program in accordance with the requirements of Section 8 of this regulation. Upon approval of the opt-in application by the Department, the person shall be subject to all terms and conditions of this regulation.

c. A general account may be established in accordance with Section 7 of this regulation. The person responsible for the general account shall be responsible for meeting the requirements for an Authorized Account Representative and applicable account maintenance fees.

Section 3 - Definitions

For the purposes of this regulation, the following definitions apply. All terms not defined herein shall have the meaning given them in the Clean Air Act and Regulation 1 of the State of Delaware "Regulations Governing the Control of Air Pollution".

a. Account means the place in the NO_x Allowance Tracking System where allowances held by a budget source (compliance account), or allowances held by any person (general account), are recorded.

b. Account number means the identification number assigned by the NO_x Allowance Tracking System (NATS) Administrator to a compliance or general account pursuant to Section 10 of this regulation.

c. Administrator means the Administrator of the U.S. EPA. The Administrator of the U.S. EPA or his designee(s)

shall manage and operate the *NO_x Allowance Tracking System* and the *NO_x Emissions Tracking System*.

d. *Allocate* or *Allocation* means the assignment of *allowances* to a *budget source* through this regulation; and as recorded by the Administrator in a *NO_x Allowance Tracking System compliance account*.

e. *Allowance* means the limited authorization to emit one ton of NO_x during a specified *control period*, or any *control period* thereafter subject to the terms and conditions for use of *banked allowance* as defined by this regulation. All *allowances* shall be allocated, transferred, or used as whole allowances. To determine the number of whole allowances, the number of allowances shall be rounded down for decimals less than 0.50 and rounded up for decimals of 0.50 or greater.

f. *Allowance deduction* means the withdrawal of allowances for permanent retirement by the NATS Administrator from a *NO_x Allowance Tracking System account* pursuant to Section 16 of this regulation.

g. *Allowance transfer* means the conveyance to another *account* of one or more *allowances* from one account to another by whatever means, including but not limited to purchase, trade, auction, or gift in accordance with the procedures established in Section 11 of this regulation, effected by the submission of an *allowance transfer* request to the NATS Administrator.

h. *Alternative monitoring system* means a system or component of a system, designed to provide direct or indirect data of mass emissions per time period, pollutant concentrations, or volumetric flow as provided for in Section 13 of this regulation.

i. *Authorized Account Representative (AAR)* means the responsible person who is authorized, in writing, to transfer and otherwise manage *allowances* as well as certify reports to the NATS and the NETS.

j. *Banked Allowance* means an *allowance* which is not used to reconcile emissions in the designated year of *allocation* but which is carried forward into the next year and flagged in the *compliance* or *general account* as "banked".

k. *Banking* means the retention of unused *allowances* from one *control period* for use in a future *control period*.

l. *Baseline* means, except for the purposes of Section 12(d) (Early Reductions) of this regulation, the NO_x emission inventory approved by the Ozone Transport Commission on June 13, 1995, and revised thereafter, as the official 1990 baseline emissions of May 1 through September 30 for purposes of the NO_x Budget Program.

m. *Boiler* means a unit which combusts *fossil fuel* to produce steam or to heat water, or any other heat transfer medium.

n. *Budget* or *Emission Budget* means the numerical result in tons per *control period* of NO_x emissions which

results from the application of the emission reduction requirement of the *OTC MOU* dated September 27, 1994, and which is the maximum amount of NO_x emissions which may be released from the *budget sources* collectively during a given *control period*.

o. *Budget source* means a *fossil fuel fired boiler* or *indirect heat exchanger* with a *maximum heat input capacity* of 250 MMBTU/Hour, or more; and all *electric generating units* with a *generator nameplate capacity* of 15 MW, or greater. (Although not a *budget source* by definition, any person who applies to *opt into* the NO_x Budget Program shall be considered a *budget source* and subject to applicable program requirements upon approval of the application for *opt-in*.)

p. *Clean Air Act* means the federal Clean Air Act (42 U.S.C. 7401- 7626).

q. *Compliance account* means the *account* for a particular *budget source* in the *NO_x Allowance Tracking System*, in which are held current and/or future year allowances.

r. *Continuous Emissions Monitoring System (CEMS)* means the equipment required by this regulation used to sample, analyze, and measure which will provide a permanent record of emissions expressed in pounds per million British Thermal Units (Btu) and tons per day. The following systems are component parts included in a continuous emissions monitoring system: nitrogen oxides pollutant concentration monitor, diluent gas monitor (oxygen or carbon dioxide), a data acquisition and handling system, and flow monitoring systems (where appropriate).

s. *Control period* means the period beginning May 1 of each year and ending on September 30 of the same year, inclusive.

t. *Current year* means the calendar year in which the action takes place or for which an *allocation* is designated. For example, an *allowance allocated* for use in 1999 which goes unused and becomes a *banked allowance* on January 1, 2000 can be used in the "Current Year" 2000 subject to the conditions for *banked allowance* use as stated in this regulation.

u. *Early Reduction Allowance* means an *allowance* credited for a NO_x emission reduction achieved during the *control periods* of either 1997 or 1998, or both.

v. *Electric generating unit* means any *fossil fuel fired* combustion unit which provides electricity for sale or use.

w. *Excess emissions* means emissions of nitrogen oxides reported by a *budget source* during a particular *control period*, rounded to the nearest whole ton, which is greater than the number of *allowances* which are available in that *budget source's NO_x Allowance Tracking System compliance account* on December 31 of the calendar year for the subject NO_x control season. For the purpose of determining whole tons on *excess emissions*, the number of

tons of *excess emissions* shall be rounded down for decimals less than 0.50 and rounded up for decimals of 0.50 or greater.

x. *Existing budget source* means a *budget source* that operated at any time during the period beginning May 1, 1990 through September 30, 1990.

y. *Fossil fuel* means natural gas, petroleum, coal or any form of solid, liquid or gaseous fuel derived wholly, or in part, from such material. For the purposes of this regulation only, this definition does not include CO derived from any source.

z. *Fossil fuel fired* means the combustion of *fossil fuel* or any derivative of *fossil fuel* alone, or, if in combination with any other fuel, where *fossil fuel* comprises 51% or greater of the annual *heat input* on a BTU basis.

aa. *General Account* means an *account* in the *NATS* that is not a *compliance account*.

bb. *Heat input* means heat derived from the combustion of any fuel in a *budget source*. *Heat input* does not include the heat derived from preheated combustion air, recirculated flue gas, or exhaust from other sources.

cc. *Indirect heat exchanger* means combustion equipment in which the flame and/or products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls, which includes, but is not limited to, steam boilers, vaporizers, melting pots, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, and fuel-fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.

dd. *Maximum heat input capacity* means the ability of a *budget source* to combust a stated maximum amount of fuel on a steady state basis, as determined by the greater of the physical design rating or the actual maximum operating capacity of the *budget source*. *Maximum heat input capacity* is expressed in millions of British Thermal Units (MMBTU) per unit of time which is the product of the gross caloric value of the fuel (expressed in MMBTU/pound) multiplied by the fuel feed rate in the combustion device (expressed in pounds of fuel/time).

ee. *Nameplate capacity* means the maximum electrical generating output that a generator can sustain when not restricted by seasonal or other deratings.

ff. *New budget source* means a NO_x source that is a *budget source*, by definition, that did not operate between May 1, 1990 and September 30, 1990, inclusive. A NO_x source, that is a *budget source* by definition, that was constructed prior to or during the period May 1, 1990 through September 30, 1990, but did not operate during the period May 1, 1990 through September 30, 1990, shall be treated as a *new budget source*.

gg. *NO_x Allowance Tracking System (NATS)* means the computerized system established and used by the

Administrator to track the number of *allowances* held and used by any person.

hh. *NO_x Emissions Tracking System (NETS)* means the computerized system established and used by the *Administrator* to track and provide a permanent record of NO_x emissions from each *budget source*.

ii. *Non-Part 75 Budget Source* means any *budget source* not subject to the requirements for emissions monitoring adopted pursuant to Regulation 36 of the State of Delaware "Regulations Governing the Control of Air Pollution".

jj. *Off budget* means not subject to this regulation.

kk. *Off budget source* means any source of NO_x emissions that is not included in the NO_x Budget Program as either a *budget source*, by definition, or as an *opt in source*.

ll. *Opt in* means to choose to voluntarily participate in the NO_x Budget Program, and comply with the terms and conditions of this regulation.

mm. *Opt-in-baseline* means the Department approved *heat input* and/or NO_x emissions for use as a basis for *allowance allocation* and deduction.

nn. *OTC* means the Ozone Transport Commission.

oo. *OTC MOU* means the Memorandum of Understanding that was signed by representatives of eleven states and the District of Columbia on September 27, 1994.

pp. *OTR* means the Ozone Transport Region as designated by Section 184(a) of the Clean Air Act.

qq. *Owner or Operator* means any person who is an owner or who operates, controls or supervises a *budget source* and shall include, but not be limited to, any holding company, utility system or plant manager of a *budget source*.

rr. *Quantifiable* means a reliable and replicable basis for calculating the amount of an emission reduction that is acceptable to both the Department and to the Administrator of the U.S. EPA.

ss. *Part 75 Budget Source* means any *budget source* subject to the requirements for emissions monitoring adopted pursuant to Regulation 36 of the State of Delaware "Regulations Governing the Control of Air Pollution".

tt. *Real* means a reduction in the rate of emissions, quantified retrospectively, net of any consequential increase in actual emissions due to shifting demand.

uu. *Recorded* with regard to an *allowance transfer* or *deduction* means that an *account* in the *NATS* has been updated by the *Administrator* with the particulars of an *allowance transfer* or *deduction*.

vv. *Regional NO_x budget* means the maximum amount of NO_x emissions which may be released from all *budget sources*, collectively throughout the *OTR*, during a given *control period*.

ww. *Repowering*, for the purpose of *early reduction credit* means either: 1) Qualifying Repowering Technology as defined by 40 CFR, Part 72 or; 2) the replacement of a

budget source by either a new combustion source or the purchase of heat or power from the owner of a new combustion source, provided that: a) The replacement source (regardless of owner) is on the same, or contiguous property as the *budget source* being replaced; b) The replacement source has a maximum heat output rate that is equal to or greater than the maximum heat output rate of the *budget source* being replaced; or, c) The replacement source has a power output rate that is equal to or greater than the power output rate of the combustion source being replaced; and d) The replacement source incorporates technology capable of controlling multiple combustion pollutants simultaneously with improved fuel efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

xx. *Submitted* means sent to the appropriate authority under the signature of the *authorized account representative* or alternate *authorized account representative*. An official U.S. Postal Service postmark, or electronic time stamp, shall establish the date of submittal.

yy. *Surplus* means that, at the time the reduction was made, the emission reduction was not required by Delaware's SIP, was not relied upon in an applicable attainment demonstration, was not required by state or federal permit or order, and was made enforceable in a permit that was issued after the date of the *OTC MOU* (September 27, 1994).

zz. *Use* means, for purposes of emission reductions moved off budget, that approval of the Department has been obtained to apply the emission reduction at a source.

Section 4 - Allowance Allocation

a. This program establishes NO_x emission *allowances* for each NO_x *control period* beginning May 1, 1999 through the NO_x *control period* ending September 30, 2002. *Allowance allocation* levels for each of these annual NO_x *control periods* are based on actual May 1, 1990 to September 30, 1990 actual NO_x mass emissions.

b. The NO_x Budget Program does not establish NO_x emission *allowances* for any NO_x *control period* subsequent to the year 2002 NO_x *control period*. NO_x emission *allowances* for each NO_x *control period* subsequent to the year 2002 NO_x *control period* will be established through amendment of this regulation.

c. NO_x *allowance allocations* to *budget sources* may be made only by the Department in accordance with Section 4, Section 8, and Section 12 of this regulation.

d. Appendix A of this regulation identifies the *budget sources* and identifies the number of *allowances* each *budget source* is *allocated*. *Allowance allocations* to each of the *budget sources* was determined as follows:

1. Unless otherwise noted in Appendix A of this regulation, the document EPA-454/R-95-013, "1990 OTC NO_x Baseline Emission Inventory" served as the basis for determination of the number of *OTC MOU Allowances allocated* to each *existing budget source*.

i. Each *existing budget source's OTC MOU Allowance allocation* for NO_x *control periods* during the period May 1, 1999 to September 30, 2002, inclusive, was identified in the referenced document, Appendix B, Final OTC NO_x Baseline Inventory, Delaware, Point-Segment Level Data, Phase II Target (Point Level).

ii. The identified values were rounded to the nearest whole *allowance* by rounding down for *allowances* less than 0.5 and rounding up for decimals of 0.5 or greater.

2. *Exceptional Circumstances Allowances*, as granted by the *OTC* and as identified in the document EPA-454/R-95-013, "1990 OTC NO_x Baseline Emission Inventory" for the *existing budget sources*, are identified in Appendix A. These *Exceptional Circumstance Allowances* were adjusted for the appropriate NO_x emission rate reduction requirement prior to inclusion in Appendix A.

3. The *OTC* allocated to the state of Delaware an additional 86 *allowances*, referred to as *reserve allowances*, prior to application of NO_x emission rate reduction requirements, as its share of a total 10,000 ton reserve. Application of *OTC* required emission reductions resulted in a total of 35 *Reserve Allowances* available for distribution, as identified in the document EPA-454/R-95-013, "1990 OTC NO_x Baseline Emission Inventory".

i. Each of the 28 *existing budget sources* identified in Appendix A as the *existing budget sources* were allocated one (1) *reserve allowance*.

ii. One (1) additional *reserve allowance* was allocated to each of the four organizations with *existing budget sources*. The additional *reserve allowance* for each of the four organizations was added to the respective *existing budget source* with the greatest *heat input* rating.

iii. The remaining three (3) *reserve allowances* shall be held by the Department unused for the NO_x *control periods* between May 1, 1999 and September 30, 2002.

iv. *Reserve Allowances* are applicable only for the NO_x *control periods* during the period May 1, 1999 to September 30, 2002, inclusive. *Reserve Allowances* do not exist for NO_x *control periods* subsequent to the year 2002.

4. The final NO_x *allowance allocation* for each of the 28 *existing budget sources*, for each of the NO_x *control periods* during the period of May 1, 1999 and September 30, 2002, is the sum of the values determined in Sections 4(d)(1) - (3) and is identified in Appendix A. For the *existing budget sources* that were not identified in the document "1990 OTC NO_x Baseline Emissions Inventory", the final *allowance allocation* includes an *allowance allocation* determined in

accordance with the procedures identified in Section 4(f)(2)(i) - (ii) of this regulation.

5. Known operating NO_x sources, that are *budget sources by definition*, that did not operate in the May 1, 1990 to September 30, 1990 period are identified in Appendix A with a final *allowance allocation* of zero (0) *allowances*.

e. *Budget sources* that receive a NO_x emission *allowance allocation* and subsequently cease to operate shall continue to receive *allowances* for each *control period* unless the *allowances* are reduced under Section 4(g) of this regulation or a request to reallocate *allowances* has been approved in accordance with Section 11 of this regulation.

f. Any NO_x source, that is a *budget source* by definition, and that is not included in Attachment A of this regulation and which operated at any time between May 1, 1990 and September 30, 1990, inclusive, shall comply with the requirements of this regulation prior to operating in any NO_x *control period*.

1. The *owner or operator* shall submit to the Department an application including, as a minimum, the following information:

i. Identification of the source by plant name, address, and plant combustion unit number or equipment identification number.

ii. The name, address, telephone and facsimile number of the *authorized account representative* and, if desired, of an alternative authorized account representative.

iii. A list of the owners and operators of the source.

iv. A description of the source, including fuel type(s), maximum rated heat input capacity and electrical output rating where applicable.

v. Documentation of the May 1, 1990 - September 30, 1990 mass emissions (in tons), including:

A. Quantification of the mass emissions (in tons).

B. A description of the method used to determine the NO_x emissions.

C. Under no circumstances shall the emissions exceed any applicable federal or state emission limit.

vi. Documentation of the May 1, 1990 - September 30, 1990 *heat input* (in MMBTU), including:

A. Quantification of the *heat input* (in MMBTU/hr).

B. A description of the method used to determine the *heat input*.

C. The *heat input* shall be consistent with the *baseline control period* NO_x mass emissions determined in Section 4(f)(1)(v) of this regulation.

vii. Determination of the May 1, 1990 - September 30, 1990 NO_x emission rate, consistent with the guidelines of the "Procedures for Development of the OTC

NO_x Baseline Emission Inventory", using the mass emissions identified in Section 4(f)(1)(v) of this regulation and the *heat input* identified in Section 4(f)(1)(vi) of this regulation. viii. An emission monitoring plan in accordance with Section 13 of this regulation.

ix. A statement that the *submitted* information is representative of the true emissions during the May 1, 1990 - September 30, 1990 and that the source was operated in accordance with all applicable requirements during that time.

x. The following statement: "*I am authorized to make this submission on behalf of the owners and operators of the budget source for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.*"

xi. Signature of the *authorized account representative* or alternate *authorized account representative* and date of signature.

2. For sources that notify the Department that they are subject to this regulation no later than April 30, 1999, the Department shall *allocate* NO_x emissions *allowances* to the source as follows:

i. For *fossil fuel fired boilers* and *indirect heat exchangers* with a maximum *heat input* capacity of 250 MMBTU/hr or more, *allowance allocations* shall be determined as follows:

A. For sources located in New Castle and Kent counties, *allowance allocations* shall be based on the more stringent of the following:

1. The less stringent of:

a. The actual May 1, 1990 to September 30, 1990 mass emissions reduced by 65%; or,

b. The mass emissions resulting from the multiplication of the actual May 1, 1990 to September 30, 1990 heat input by a NO_x emissions rate of 0.20 lb/MMBTU.

2. If an approved RACT emissions limit results in emissions that are lower than the less stringent of the limits calculated in Sections 4(f)(2)(i)(A)(1)(a) and 4(f)(2)(i)(A)(1)(b), then the RACT value shall be the emissions limit for the NO_x Budget Program.

B. For sources located in Sussex county, *allowance allocations* shall be based on the more stringent of

the following:

1. The less stringent of:

- a. The actual May 1, 1990 to September 30, 1990 mass emissions reduced by 55%; or,
- b. The mass emissions resulting from the multiplication of the actual May 1, 1990 to September 30, 1990 heat input by a NO_x emissions rate of 0.20 lb/MMBTU.

2. If an approved RACT emissions limit results in emissions that are lower than the less stringent of the limits calculated in Sections 4(f)(2)(i)(B)(1)(a) and 4(f)(2)(i)(B)(1)(b), then the RACT value shall be the emissions limit for the NO_x Budget Program.

ii. For *electric generating units* with a rated output of 15 MW or more that is not affected by Section 4(f)(2)(i) of this regulation, *allowance allocations* shall equal the more stringent of the May 1, 1990 to September 30, 1990 actual emissions or that derived from the application of an approved RACT limit to the actual May 1, 1990 to September 30, 1990 heat input value.

3. Within 60 days of receipt of the submittal, the Department shall review the submittal and take the following actions:

i. If the Department does not approve the submittal, the *authorized account representative* identified in the submittal shall be notified in writing of the finding and the reason(s) for the finding.

ii. If the Department approves the submittal, the Department shall:

A. Notify in writing the *authorized account representative* identified in the submittal.

B. The Department shall notify the *OTC* of the *allowance allocation* and authorize the *NATS Administrator* to open a *compliance account* for the subject source.

4. Any subject source that does not notify the Department prior to May 1, 1999, or that can not quantify its May 1, 1990 - September 30, 1990 emissions rate or heat input, shall be treated as a new *budget source* in accordance with Section 9 of this regulation.

5. Compliance with Section 4(f) of this regulation does not imply compliance nor sanction noncompliance with this regulation for prior NO_x *control period* operation.

g. If, after the effective date of this regulation, a *budget source* reduces *control period* emissions and said emission reductions are to be *used* by a source that is not a *budget source* (i.e. the emissions are moved off *budget*), that *budget source* shall request that the Department reduce its current year and future year allocation.

1. The request shall be *submitted* to the Department not later than the date that the request to *use* the emissions reduction at the *off budget source* is *submitted*, and shall

include the following information, as a minimum:

i. The *compliance account* number of the *budget source* providing the emissions reduction.

ii. Identification of the NO_x source that is to *use* the emissions reduction, including:

A. Name and mailing address of the source.

B. Name, mailing address, and telephone number of a knowledgeable representative from that source.

iii. Identification of the calendar date for which the reduction of *current year* and future year allocations is to be effective, which shall not be later than the effective date of the *use* of the emissions reduction.

iv. A statement documenting the physical changes to the *budget source* or changes in the methods of operating the *budget source* which resulted in the reduction of NO_x emissions.

v. Quantification and justifying documentation of the NO_x emissions reduction, including a description of the methodology used to verify the emissions reduction.

vi. The quantity of *current year* and future year allocations to be reduced, which is the portion of the *control period* emissions reduction that is to move off budget.

vii. Certification by the *authorized account representative* or alternate *authorized account representative* including the following statement in verbatim: “*I am authorized to make this submission on behalf of the owners or operators of the NO_x source and I hereby certify under penalty of law, that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment.*”

viii. Signature of the *authorized account representative* or alternate *authorized account representative* of the *budget source* providing the emissions reduction and the date of signature.

2. Within 30 days of receipt of the submittal, the Department shall review the submittal and take the following actions:

i. If the Department does not approve the request, the *authorized account representative* identified on the submittal shall be notified in writing of the finding and the reason(s) for the finding.

ii. If the Department approves the request, the Department shall notify in writing the *authorized account representative* identified on the request and the following provisions apply:

A. The Department shall authorize the *NATS Administrator* to deduct from the *compliance account*

of the *budget source* providing the emissions reduction the quantity of *current year* and future year *allowances* to be reduced.

B. The deducted *current year* and future year *allowances* shall be permanently retired from the NO_x Budget Program.

Section 5 - Permits

a. No later than the effective date of this regulation, the *owner or operator* of an *existing budget source* shall request amendment of any applicable construction or operating permit issued, or application for any permit submitted, in accordance with the State of Delaware "Regulations Governing the Control of Air Pollution". The amendment request shall include the following:

1. A condition(s) that requires the establishment of a *compliance account* in accordance with Section 6 of this regulation.

2. A condition(s) that requires NO_x mass emission monitoring during NO_x *control periods* in accordance with Section 13 of this regulation.

3. A condition(s) that requires NO_x mass emission reporting and other reporting requirements in accordance with Section 15 of this regulation.

4. A condition(s) that requires end-of-season *compliance account* reconciliation in accordance with Section 16 of this regulation.

5. A condition(s) that requires compliance certification in accordance with Section 17 of this regulation.

6. A condition(s) that prohibits the source from emitting NO_x during each NO_x *allowance control period* in excess of the amount of NO_x *allowances* held in the source's *compliance account* for the NO_x *allowance control period* as of December 31 of the subject year.

7. A condition(s) that authorizes the transfer of *allowances* for purposes of compliance with this regulation, containing reference to the source's *NATS* compliance account and the *authorized account representative* and alternate *authorized account representative*, if any.

b. Permit revisions/amendments shall not be required for changes in emissions that are authorized by *allowances* held in the *compliance account* provided that any transfer is in compliance with this regulation by December 31 of each year, is in compliance with the authorization for transfer contained in the permit, and does not affect any other applicable state or federal requirement.

c. Permit revisions/amendments shall not be required for changes in *allowances* held by the source which are acquired or transferred in compliance with this regulation and in compliance with the authorization for transfer in the permit.

d. Any equipment modification or change in operating practices taken to meet the requirements of this program shall be performed in accordance with all applicable state

and federal requirements.

Section 6 - Establishment of Compliance Accounts

a. The *owner or operator* of each *existing budget source*, and each *new budget source*, shall designate one *authorized account representative* and, if desired, one alternate *authorized account representative* for that *budget source*. The *authorized account representative* or alternate *authorized account representative* shall submit to the Department an "Account Certificate of Representation".

1. For *existing budget sources*, initial designations shall be *submitted* no later than the effective date of this regulation.

2. For *new budget sources* that began operation prior to May 1, 1999, initial designations shall be *submitted* no later than April 30, 1999. For *new budget sources* that begin operation on or after May 1, 1999, initial designations shall be *submitted* no less than 30 days prior to the first hour of operation in a NO_x *control period*.

3. An *authorized account representative* or alternative account representative may be replaced at any time with the submittal of a new "Account Certificate of Representation". Notwithstanding any such change, all submissions, actions, and inactions by the previous *authorized account representative* or alternate *authorized account representative* prior to the date and time the *NATS Administrator* receives the superseding "Account Certificate of Representation" shall be binding on the new *authorized account representative*, on the new alternate *authorized account representative*, and on the *owners and operators* of the *budget source*.

4. Within 30 days following any change in *owner or operator*, *authorized account representative*, or any alternate *authorized account representative*, the *authorized account representative* or the alternate *authorized account representative* shall submit a revision to the "Account Certificate of Representation" amending the outdated information.

b. The "Account Certificate of Representation" shall be signed and dated by the *authorized account representative* or the alternate *authorized account representative* for the NO_x *budget source* and shall contain, as a minimum, the following information:

1. Identification of the NO_x *budget source* by plant name, address, and plant combustion unit number or equipment identification number for which the certification of representation is *submitted*.

2. The name, address, telephone and facsimile number of the *authorized account representative* and alternate *authorized account representative*, if applicable.

3. A list of the owners and operators of the NO_x *budget source*.

4. A description of the source, including fuel

type(s), *maximum heat input capacity*, and electrical output rating where applicable.

5. The following statement: “*I am authorized to make this submission on behalf of the owners and operators of the budget source for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.*”

6. Signature of the *authorized account representative* or alternate *authorized account representative* and date of signature.

c. The Department shall review all submitted “Account Certificate of Representation” forms. Within 30 days of receipt of the “Account Certificate of Representation”, the Department shall take one of the following actions:

1. If not approved by the Department, the Department shall notify in writing the *authorized account representative* identified in the “Account Certificate of Representation” of the reason(s) for disapproval.

2. If approved by the Department, the Department shall forward the “Account Certificate of Representation” to the *NATS Administrator* and authorize the *NATS Administrator* to open/revise a *compliance account* for the *budget source*.

d. *Authorized account representative* and alternate *authorized account representative* designations or changes become effective upon the logged date of receipt of a completed “Account Certificate of Representation” by the *NATS Administrator*. The *NATS Administrator* shall acknowledge receipt and the effective date of the designation or changes by written correspondence to the *authorized account representative*.

e. The alternate *authorized account representative* shall have the same authority as the *authorized account representative*. Correspondence from the *NATS Administrator* shall be directed to the *authorized account representative*.

f. Only the *authorized account representative* or the alternate *authorized account representative* may request transfers of *NO_x allowances* in a *NATS account*. The *authorized account representative* shall be responsible for all transactions and reports submitted to the *NATS*.

Section 7 - Establishment of General Accounts

a. An *authorized account representative* and alternate *authorized account representative*, if any, shall be

designated for each *general account* by the *general account* owners. Said representative shall have obligations similar to that of an *authorized account representative* of a *budget source*.

b. Any person or group of persons may open a *general account* in the *NATS* for the purpose of holding and transferring *allowances*. That person or group of persons shall submit to the Department an application to open a *general account*. The *general account* application shall include the following minimum information:

1. Organization or company name to be used for the *general account* name listed in the *NATS*, and type of organization (if applicable).

2. The name, address, telephone, and facsimile number of the *account’s authorized account representative* and alternate *authorized account representative*, if applicable.

3. A list of all persons subject to a binding agreement for the *authorized account representative* or alternate *authorized account representative* to represent their ownership interest with respect to the *allowances* held in the *general account*.

4. The following statement: “*I certify that I was selected under the terms of an agreement that is binding on all persons who have an ownership interest with respect to allowances held in the NO_x allowance tracking system (NATS) account. I certify that I have all necessary authority to carry out my duties and responsibilities on behalf of the persons with ownership interest and that they shall be fully bound by my actions, inactions, or submissions under this regulation. I shall abide by my fiduciary responsibilities assigned pursuant to the binding agreement. I am authorized to make this submission on behalf of the persons with an ownership interest for whom this submission is made. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false material information, or omitting material information, including the possibility of fine or imprisonment for violations.*”

5. Signature of the *general account’s authorized account representative* or alternate *authorized account representative* and date of signature.

c. The Department shall review all submitted *general account* and revised *general account* applications. Within 30 days of receipt of the application, the Department shall take one of the following actions:

1. If not approved by the Department, the Department shall notify in writing the *authorized account representative* identified in the *general account* application

of the reason(s) for disapproval.

2. If approved by the Department, the Department shall forward the *general account* application to the *NATS Administrator* and authorize the *NATS Administrator* to open/revise a *general account* in the organization or company name identified in the *general account* application.

d. No *allowance transfer* shall be recorded for a *general account* until the *NATS Administrator* has established the new *account*.

e. The *authorized account representative* or alternate *authorized account representative* of an established *general account* may transfer *allowances* at any time in accordance with Section 11 of this regulation.

f. An *authorized account representative* or alternative account representative of an existing *general account* may be replaced by submitting to the Department a revised *general account* application in accordance with Section 7(b) of this regulation.

g. The *authorized account representative* or alternate *authorized account representative* of a *general account* may apply to the Department to close the *general account* as follows:

1. By submitting a copy of an *allowance transfer* request to the *NATS Administrator* authorizing the transfer of all *allowances* held in the *account* to one or more other *accounts* in the *NATS* and/or retiring *allowances* held in the *account*.

2. By submitting to the Department, in writing, a request to delete the *general account* from the *NATS*. The request shall be certified by the *authorized account representative* or alternate *authorized account representative*.

3. Upon approval, the Department shall authorize the *NATS Administrator* to close the *general account* and confirm closure in writing to the *general account's authorized account representative*.

Section 8 - Opt In Provisions

Except as provided for in Section 4(g) of this regulation, the owner or operator of any stationary source in the state of Delaware that is not subject to the NO_x Budget Program by definition, may choose to *opt into* the NO_x Budget Program as follows:

a. The *owner or operator* of a stationary source who chooses to *opt into* the NO_x Budget Program shall submit to the Department an *opt-in* application. The *opt-in* application shall include, as a minimum, the following information:

1. Identification of the *opt-in* source by plant name, address, and plant combustion unit number or equipment identification number.

2. The name, address, telephone and facsimile number of the *authorized account representative* and, if desired, of an alternative authorized account representative.

3. A list of the owners and operators of the *opt-in* source.

4. A description of the *opt-in* source, including fuel type(s), maximum rated heat input capacity and electrical output rating where applicable.

5. Documentation of the *opt-in-baseline control period* mass emissions (in tons).

i. The *opt-in-baseline control period* emissions shall be the lower of the average of the mass emissions from the immediately preceding two consecutive NO_x *control periods* and the allowable emissions.

A. If the mass emissions from the preceding two *control periods* are not representative of normal operations, the Department may approve use of an alternative two consecutive NO_x *control periods* within the five years preceding the *date of the opt-in* application.

B. If the *opt-in* source does not have two consecutive years of operation, the *owner or operator* shall identify the lower of the permitted allowable NO_x emissions and any applicable Federal or State emission limitation as the *opt-in-baseline* emissions.

ii. The documentation shall include:

A. Identification of the time period represented by the emissions data.

B. Quantification of the *opt-in-baseline control period* mass emissions (in tons).

C. A description of the method used to determine the *opt-in-baseline control period* NO_x emissions.

6. Documentation of the *opt-in-baseline* NO_x *control period heat input* (in MMBTU).

i. The *opt-in-baseline control period heat input* shall be consistent with the *opt-in-baseline control period* NO_x mass emissions determined in Section 8(a)(5) of this regulation.

ii. The documentation shall include:

A. Quantification of the *opt-in-baseline control period heat input* (in MMBTU/hr).

B. A description of the method used to determine the *opt-in-baseline control period heat input*.

7. Determination of the *opt-in-baseline* NO_x emission rate, consistent with the guidelines of the "Procedures for Development of the OTC NO_x Baseline Emission Inventory", using the *opt-in-baseline control period* mass emissions identified in Section 8(a)(5) of this regulation and the *opt-in-baseline* NO_x *control period heat input* identified in Section 8(a)(6) of this regulation.

8. An emission monitoring plan in accordance with Section 13 of this regulation.

9. A statement that the source was operated in accordance with all applicable requirements during the *control periods*.

10. The following statement: "I am authorized to

make this submission on behalf of the owners and operators of the budget source for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

11. Signature of the *authorized account representative* or alternate *authorized account representative* and date of signature.

b. Within 60 days of receipt of any *opt-in* application, the Department shall take the following actions:

1. The Department shall review the application for completeness and accuracy and:

i. Verify that the monitoring methods used to determine the *opt-in-baseline control period* NO_x mass emissions and the *opt-in-baseline* NO_x *control period heat input* are consistent with those described in Section 13 of this regulation.

ii. Verify that the *opt-in-baseline* emissions were calculated in accordance with the guidelines in the "Procedures for Development of the OTC NO_x Baseline Emission Inventory".

2. If the Department disapproves the *opt-in* application, the *authorized account representative* identified in the *opt-in* application shall be notified in writing of the determination and the reason(s) for the application not being approved.

3. If the Department determines that the *opt-in* application is acceptable, the Department shall request the OTC Stationary/Area Source Committee to review the application. Within 30 days of receiving the OTC Stationary/Area Source Committee comments, the Department shall consider the comments and take the following action:

i. If it is determined that the *opt-in* application does not properly justify opting the source into the NO_x Budget Program, the Department shall notify the *authorized account representative* in writing of the determination and the reason(s) for the application not being accepted.

ii. If it is determined that the *opt-in* application justifies opting the source into the NO_x Budget Program, the Department shall notify the *authorized account representative* in writing of that determination.

c. The Department shall assign an *allowance allocation* to any *owner or operator* that has been approved by the Department to *opt into* the NO_x Budget Program.

1. The *allowance allocation* for an *opt-in* source, that is not considered a *budget source* by definition, shall be equal to the more stringent of the *opt-in-baseline control period* emissions or the allowable NO_x emissions from the source.

2. The *allowance allocation* for an *opt-in* source that has a maximum *heat input* rating of 250 MMBTU/hr shall be determined as follows:

i. For sources located in New Castle and Kent counties, *allowance allocations* shall be based on the more stringent of the following:

A. The less stringent of:

1. The *opt-in-baseline* actual mass emissions reduced by 65%; or,

2. The mass emissions resulting from the multiplication of the actual *opt-in-baseline* heat input by a NO_x emissions rate of 0.20 lb/MMBTU.

B. If any permitted NO_x emissions limit results in emissions that are lower than the less stringent of the limits calculated in Sections 8(c)(2)(i)(A)(1) and 8(c)(2)(i)(A)(2), then the permitted emissions limit shall be used to determine the emissions limitation for the NO_x Budget Program.

ii. For sources located in Sussex county, *allowance allocations* shall be based on the more stringent of the following:

A. The less stringent of:

1. The *opt-in-baseline* actual mass emissions reduced by 55%; or,

2. The mass emissions resulting from the multiplication of the actual *opt-in-baseline* heat input by a NO_x emissions rate of 0.20 lb/MMBTU.

B. If any permitted NO_x emissions limit results in emissions that are lower than the less stringent of the limits calculated in Sections 8(c)(2)(ii)(A)(1) and 8(c)(2)(ii)(A)(2), then the permitted emissions limit shall be used to determine the emissions limitation for the NO_x Budget Program.

3. If the *owner or operator* of an *opt-in* source is required to obtain NO_x emissions offsets in accordance with Regulation 25 of the State of Delaware "Regulations Governing the Control of Air Pollution", the *allowance allocation* calculated under Section 8(c)(1) or (2) of this regulation shall be reduced by the portion of the *control period* emission reduction that is associated with any *budget source*.

4. The *allowance allocation* associated with the *opt-in* source shall be added to Delaware's NO_x *budget* prior to *allocation* of *allowances* to the *opt-in* source. This regulation shall be revised to reflect changes in the number of *allowances* in the NO_x Budget Program.

5. Under no circumstances shall the *allocation* of

allowances to a source which chooses to *opt into* the program require adjustments to the *allocation of allowances to budget sources* in the NO_x Budget Program.

d. Upon the approval of the *opt-in* application and assignment of an *allowance allocation*, the Department shall authorize the *NATS Administrator* to open a *compliance account* for the *opt-in* source in accordance with Section 10 of this regulation.

e. Within 30 days of approval to *opt into* the NO_x Budget Program, any *owner or operator* shall apply for a permit, or the modification of applicable permits, in accordance with Section 5 of this regulation.

f. Upon approval of the *opt-in* application and establishment of the *compliance account*, the *owner or operator* of the source shall be subject to all applicable requirements of this regulation including the requirements for *allowance transfer* or deduction, emissions monitoring, record keeping, reporting, and penalties.

1. A certification test notice and test protocol shall be *submitted* to the Department no later than 90 days prior to anticipated performance of the certification testing.

2. Certification testing shall be completed prior to operation in the next NO_x *control period* following approval of the source to *opt into* the NO_x Budget Program.

3. A certification test report meeting the requirements of the *OTC* document "NO_x Budget Program Monitoring Certification and Reporting Instructions" shall be *submitted* to the Department no later than 45 days following the performance of the certification testing.

g. Any *owner or operator* approved to *opt into* the NO_x Budget Program that did not have two consecutive years of operation upon initial application and determined *opt-in-baseline* emissions in accordance with Section 8(a)(5)(i)(B) of this regulation shall submit to the Department a revised *opt-in* application.

1. The revised *opt-in* application shall be *submitted* no more than 60 days following first completion of operation in two consecutive NO_x *control periods*.

2. The revised *opt-in* application shall provide actual operating information, including NO_x mass emissions and *heat input*, for each of the two NO_x *control periods*.

3. Within 60 days of receipt on any revised *opt-in* application, the Department shall review the revised *opt-in* application and take the following actions:

i. If the Department does not approve the revised *opt-in* application:

A. The Department shall notify the *opt-in source's authorized account representative* of the determination in writing and indicate the reason(s) for the determination.

B. The *opt-in source's authorized account representative* shall resolve the Department's comments and

an updated revised *opt-in* application shall be submitted to the Department no more than 60 days from the Department's request.

C. Upon approval of any updated revised *opt-in* application, the Department shall process the application in accordance with Section 8(g)(3)(ii) of this regulation.

ii. If the Department is in concurrence with the revised *opt-in* application, the following actions shall be taken:

A. The Department shall request the *OTC* Stationary/Area Source Committee to comment on the revised *opt-in* application. Within 30 days of receiving the *OTC* Stationary/Area Source Committee comments, the Department shall consider the comments and take action in accordance with Section 8(g)(3)(ii)(B) or Section 8(g)(3)(ii)(C) of this regulation.

B. If it is determined that the revised *opt-in* application shall not be approved:

1. The Department shall notify the *opt-in source's authorized account representative* of the determination in writing and indicate the reason(s) for the determination.

2. The *opt-in source's authorized account representative* or alternate *authorized account representative* shall resolve the Department's comments and an updated revised *opt-in* application shall be submitted to the Department no more than 60 days from the Department's request.

3. Upon approval of any updated revised *opt-in* application, the Department shall process the application in accordance with Section 8(g)(3)(ii)(C) of this regulation.

C. If it is determined that the revised *opt-in* shall be approved, the following actions shall be taken:

1. If the initial *allocation* was lower than that indicated in the revised application:

a. The Department shall revise the NO_x *budget* to reflect the *allocation* determination identified in the revised *opt-in* application.

b. The Department shall authorize the *NATS Administrator* to revise the *allocation* to the subject source's *compliance account*.

c. The Department shall not authorize any additional allowances to cover any shortfall in the two *opt-in-baseline* NO_x *control periods*. Any violation of a permit condition or of this regulation may result in an enforcement action.

2. If the initial *allocation* was higher than that indicated in the revised application:

a. The Department shall revise the NO_x *budget* to reflect the *allocation* determination identified in the revised *opt-in* application.

b. The Department shall authorize the *NATS Administrator* to revise the *allocation* to the subject source's *compliance account*.

c. The Department shall authorize the *NATS Administrator* to deduct the excess *allowances allocated* to the *opt-in* source, calculated as the difference between the actual *allocated allowances* and the *allowances allocated* on the basis of the revised *opt-in* application for the years of operation in *NO_x control periods*.

h. Any *owner or operator* who chooses to *opt into* the *NO_x Budget Program* can not *opt-out* of the program unless *NO_x emitting operations* at the *opt-in* source have ceased, and the *allowance* adjustment provisions of Section 8(i) of this regulation apply.

i. Any *owner or operator* who chooses to *opt into* the *NO_x Budget Program* and who subsequently chooses to cease or curtail operations during any *NO_x allowance control period* after *opting-in* shall be subject to an *allowance* adjustment equivalent to the *NO_x emissions decrease* that results from the shut down or curtailment.

1. The *NETS Administrator* shall compare actual *heat input* data following each *NO_x control period* with the *opt-in-baseline heat input* for each *opt-in* source.

2. The *NATS Administrator* shall calculate and deduct *allowances* equivalent to any decrease in the *opt-in* source's *heat input* below its *opt-in-baseline heat input*. This deduction shall be calculated using the average of the two most recent years *heat input* compared to the *heat input* used in the *opt-in-baseline* calculation.

3. The *NATS Administrator* shall notify the *NO_x budget source's authorized account representative* and the Department of any such deductions.

4. This adjustment affects only the *current year allocation* and shall not effect the *NO_x budget source's allocations* for future years.

5. No deduction shall result from reducing *NO_x emission rates* below the rate used in the *opt-in allowance* calculation.

6. A source that is to be repowered or replaced can be *opted into* the *NO_x Budget Program* without the shutdown/curtailment deductions. The *heat input* for the repowered or replaced source can be substituted for the present year's activity for the *opt-in NO_x allowance* adjustment calculation.

j. For replacement sources, all sources under common control in the State of Delaware to which production may be shifted shall be *opted-in* together.

k. When an *opt-in* source undergoes reconstruction or modification such that the source becomes a *budget source* by definition:

1. The *opt-in* source's *authorized account representative* or alternate *authorized account representative*

shall notify the Department within 30 days of completion of the modification or reconstruction.

2. The Department shall authorize the *NATS Administrator* to deduct *allowances* equal to those allocated to the *opt-in* source in the *NO_x control period* for the calendar year in which the *opt-in* source becomes a *budget source* by definition.

3. The Department shall authorize the *NATS Administrator* to deduct all *allowances* that were allocated pursuant to Section 8(c) of this regulation to the *opt-in* source, for all future years following the calendar year in which the *opt-in* source becomes a *budget source* by definition. This regulation shall be revised to reflect changes in the number of allowances in the *NO_x Budget Program*.

4. The reconstructed or modified source shall be treated as a *new budget source* in accordance with Section 9 of this Regulation.

Section 9 - New Budget Source Provisions

a. *NO_x allowances* shall not be created for new *NO_x sources* that are *budget sources* by definition. The *owner or operator* is responsible to acquire any required *NO_x allowances* from the *NATS*.

b. The *owner or operator* of a *new budget source* shall establish a compliance account and be in compliance with all applicable requirements of this regulation prior to the commencement of operation in any *NO_x control period*. *New budget sources* shall:

1. Request a permit/permit amendment meeting the requirements of Section 5 of this regulation no less than 90 days prior to operation in any *NO_x control period*.

2. Submit a monitoring plan to the Department, in accordance with Section 13 of this regulation, no later than 90 days prior to the anticipated performance of monitoring system certification.

3. Install and operate an approved monitoring system(s) to measure, record, and report hourly and cumulative *NO_x mass emissions*.

4. *Submit* to the Department a certification test notice and protocol no later than 90 days prior to the anticipated performance of the certification testing.

5. Complete the monitoring system certification prior to operation in any *NO_x control period*.

6. *Submit* to the Department a certification test report meeting the requirements of the *OTC* document "NO_x Budget Program Monitoring Certification and Reporting Instructions" no later than 45 days following the performance of the certification testing.

Section 10 - NO_x Allowance Tracking System (NATS)

a. The *NO_x allowance tracking system* is an electronic recordkeeping and reporting system which is the official

database for all NO_x allowance deduction and transfer within this program. The NATS shall track:

1. The allowances allocated to each budget source.
2. The allowances held in each account.
3. The allowances deducted from each budget source during each control period, as requested by a transfer request submitted by the budget source's authorized account representative or alternate authorized account representative in accordance with Section 16(b) of this regulation.

4. Compliance accounts established for each budget source to determine the compliance for the source, including the following information:

- i. The account number of the compliance account.
- ii. The name(s), address(es), and telephone number(s) of the account owner(s).
- iii. The name, address, and telephone number of the authorized account representative and alternate authorized account representative, as applicable.
- iv. The name and street address of the associated budget source, and the state in which the budget source is located.

v. The number of allowances held in the account.

5. General accounts opened by individuals or entities, upon request, which are not used to determine compliance, including the following information:

- i. The account number of the general account.
- ii. The name(s), address(es) and telephone number(s) of the account owner(s).
- iii. The name, address, and telephone number of the authorized account representative and alternate authorized account representative, as applicable.
- iv. The number of allowances held in the account.

6. Allowance transfers.

7. Deductions of allowances by the NATS Administrator for compliance purposes, in accordance with Section 16(d) of this regulation.

b. The NATS Administrator shall establish compliance and general accounts when authorized to do so by the Department pursuant to Sections 6, 7, and 8 of this regulation.

c. Each compliance account and general account shall have a unique identification number and each allowance shall be assigned a unique serial number. Each allowance serial number shall indicate the year of allocation.

Section 11 - Allowance Transfer

a. Allowances may be transferred at any time during any year, not just the current year.

b. The transfer of allowances between budget sources in different states for purposes of compliance is contingent upon the adoption and implementation by those states of

NO_x budget program regulations and their participation in the NATS.

c. Transfer requests shall be submitted to the NATS Administrator on a form or electronic media, as directed by the NATS Administrator, and shall include the following information:

1. The account number of the originating account and the acquiring account.

2. The name(s) and address(s) of the owner(s) of the originating account and the acquiring account.

3. The serial number of each allowance being transferred.

4. The following statement from the authorized account representative or alternate authorized account representative of the originating account, in verbatim: "I am authorized to make this submission on behalf of the owners or operators of the budget source and I hereby certify under penalty of law, that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

5. Signature of the authorized account representative or alternate authorized account representative of the originating account and the date of signature.

d. The Authorized account representative or alternate authorized account representative for the originating account shall further provide a copy of the transfer request to each owner or operator of the budget source.

e. Transfer requests shall be processed by the NATS Administrator in order of receipt.

f. A transfer request shall be determined to be valid by the NATS Administrator if:

1. Each allowance listed in the transfer request is held by the originating account at the time the transfer is to be recorded.

2. The acquiring party has an account in the NATS.

3. The transfer request has been certified by the person named as authorized account representative or alternate authorized account representative for the originating account.

g. Transfer requests judged valid by the NATS Administrator shall be completed and recorded in the NATS by deducting the specified allowances from the originating account and adding them to the acquiring account.

h. Transfer requests judged to be invalid by the NATS Administrator shall be returned to the authorized account representative indicated on the transfer request along with documentation why the transfer request was judged to be invalid.

i. The NATS Administrator shall provide notification of

an *allowance* transfer to the *authorized account representatives* of the originating *account*, the *authorized account representative* of the acquiring *account*, and the Department, including the following information:

1. The effective date of transfer.
2. Identification of the originating *account* and acquiring *account* by name as well as by *account number*.
3. The number of *allowances* transferred and their serial numbers.
- j. The *authorized account representative* or alternate *authorized account representative* of a *compliance account* or a *general account* may request that some or all allocated *allowances* be transferred to another *compliance account* or to a *general account* for the current year, any future year, block of years, or for the duration of the program. The *authorized account representative* or alternate *authorized account representative* of the originating *account* shall submit a request for transfer that states this intent to the *NATS Administrator*, and the transfer request shall conform to the requirements of this Section. In addition, the request for transfer shall be *submitted* to the Department with a letter requesting that the *budget* be revised to reflect the change in *allowance* allocations.
- k. Upon request by the Department any *authorized account representative* or alternate *authorized account representative* shall make available to the Department information regarding transaction cost and *allowance* price.

Section 12 - Allowance Banking

- a. The *banking* of *allowances* is permitted to allow retention of unused *allowances* from one year to a future year in either a *compliance account* or a *general account*.
- b. Except for *allowances* created under Section 12(d) of this regulation, *allowances* not used under Section 16 of this regulation shall be held in a *compliance account* or *general account* and designated as “*banked*” *allowances* by the *NATS Administrator*.
- c. The use of *banked allowances* shall be restricted as follows:
 1. By March 1 of each year the *NATS Administrator* shall divide the total number of *banked allowances* by the regional *NO_x budget*.
 - i. If the total number of *banked allowances* in the *NATS* is less than or equal to 10% of the regional *NO_x budget* for the *current year control period*, all *banked allowances* can be deducted in the *current year* on a 1-for-1 basis.
 - ii. If the total number of *banked allowances* in the *NATS* exceeds 10% of the regional *NO_x budget* for the *current year control period*, *budget sources* shall be notified by the *NATS Administrator* of the *allowance* ratio which must be applied to *banked allowance* in each *compliance account* and *general account* to determine the number of

allowances available for deduction in the *current year control period* on a 1-for-1 basis and the number of *allowances* available for deduction on a 2-for-1 basis.

2. Where a finding has been made by the *NATS Administrator* that *banked allowances* exceed 10% of the *current year regional NO_x budget*, each *NATS compliance account* and *general account* of *banked allowances* shall be subject to the following *banked allowance* deduction protocol:

i. A ratio shall be established according to the following formula:

$$\frac{0.10 \times \text{the regional NO}_x \text{ Budget}}{\text{the total number of banked allowances in the region}}$$

ii. The ratio calculated in Section 12(c)(2)(i) of this regulation shall be applied to the *banked allowances* in each *account*. The resulting number is the number of *banked allowances* in the *account* which can be used in the *current year control period* on a 1-for-1 basis. *Banked allowances* in excess of this number, if used, shall be used on a 2-for-1 basis.

d. The *owner or operator* of an *existing budget source* may apply to the Department to receive *early reduction allowances* for actual *NO_x reductions* occurring in 1997 and/or 1998.

1. No later than the effective date of this regulation, the *authorized account representative* or alternate *authorized account representative* from any *budget source* seeking *early reduction allowances* shall submit to the Department an application that includes, at a minimum, the following information:

- i. Identification of the *budget source*.
- ii. Identification of the calendar time period for which *early reduction allowances* are being sought (i.e., May 1 - September 30, 1997, May 1 - September 30, 1998, or both).
- iii. Identification of the *baseline NO_x control period* emission limit (tons), which shall be the more stringent of the following:
 - A. The level of control required by the *OTC MOU*;
 - B. The lower of the permitted allowable emissions for the source and the allowable emissions identified in the state implementation plan (SIP);
 - C. The actual emissions for the 1990 *control period*, or;
 - D. The actual emissions for the average of two representative year *control periods* within the first five years of operation if the *budget source* did not commence operation until after 1990.

iv. The *baseline NO_x control period heat input* (MMBTU) corresponding to the *baseline NO_x control*

period emission limit (tons) determined in Section 12(d)(1)(iii) of this regulation.

v. The actual NO_x *control period* NO_x emissions (tons) occurring in 1997 and/or 1998, as applicable.

vi. The actual NO_x *control period heat input* (MMBTU) occurring in 1997 and/or 1998, as applicable.

vii. The calculated NO_x *control period* emissions rate (lb/MMBTU), as determined using the *control period* NO_x emissions identified in Section 12(d)(1)(v) of this regulation multiplied by 2000 to obtain actual emissions in pounds (lbs), divided by the *control period heat input* (MMBTU) identified in Section 12(d)(1)(vi) of this regulation.

viii. The amount of NO_x emissions *early reduction allowances* shall be calculated by subtracting the actual *control period* NO_x emissions (in tons), identified in Section 12(d)(1)(v) of this regulation, from the *baseline* NO_x emissions limit (in tons) identified in Section 12(d)(1)(iii) of this regulation.

ix. If the actual *control period heat input*, as identified in Section 12(d)(1)(vi) of this regulation, is less than the *baseline* NO_x *control period heat input*, as identified in Section 12(d)(1)(iv) of this regulation, the NO_x emissions *early reduction allowances* determined in Section 12(d)(1)(viii) of this regulation shall be corrected as follows:

A. The actual *control period heat input* (MMBTU), as identified in Section 12(d)(1)(vi) of this regulation, shall be subtracted from the *baseline* NO_x *control period heat input* (MMBTU), as identified in Section 12(d)(1)(iv) of this regulation, to obtain the *heat input* correction.

B. The *heat input* correction (MMBTU) is multiplied by the calculated NO_x *control period* emissions rate (lb/MMBTU) determined in Section 12(d)(1)(vii) of this regulation. The resulting value is divided by 2000 to obtain tons of NO_x .

C. The corrected NO_x emissions *early reduction allowance* is the result of subtracting the results of Section 12(d)(1)(ix)(B) of this regulation from the NO_x emissions *early reduction allowances* calculated in Section 12(d)(1)(viii) of this regulation.

x. A statement indicating the *budget source* was operating in accordance with all applicable requirements during the applicable NO_x *control period* including:

A. Whether the monitoring plan that was *submitted* in accordance with Section 13 of this regulation was maintained to reflect the actual operation and monitoring of the unit and contains all information necessary to attribute monitored emissions to the *budget source*. If *early reduction allowances* are being sought for a *control*

period prior to the implementation of monitoring in accordance with Section 13(a) of this regulation, a monitoring plan prepared in accordance with Section 13(a) of this regulation shall be *submitted* describing the monitoring method in use during the *control period* for which *early reduction allowances* are being sought.

B. Whether all the emissions from the *budget source* were monitored, or accounted for, throughout the NO_x *control period* and reported.

C. Whether the information that formed the basis for certification of the emissions monitoring plan has changed affecting the certification of the monitoring.

D. If a change in the monitoring method is reported under Section 12(d)(1)(x)(C) of this regulation, specify the nature of the change, the reason for the change, when the change occurred, and what method was used to determine emissions during the period mandated by the change.

xi. A statement documenting the specific physical changes to the *budget source* or changes in the methods of operating the *budget source* which resulted in the reduction of emissions.

xii. The following statement: “*I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.*”

xiii. Signature of the *authorized account representative* or alternate *authorized account representative* and date of signature.

2. *Early reduction allowance* requests shall be reviewed by the Department.

i. If the Department determines that the emissions reductions were not enforceable, *real*, *quantifiable*, or *surplus*, the Department shall notify the *budget source's authorized account representative* in writing, indicating the reason(s) the request for *early reduction allowances* is being denied.

ii. If the Department determines that the emissions reductions are enforceable, *real*, *quantifiable*, and *surplus*:

A. The Department shall request the *OTC Stationary/Area Source Committee* to comment on the generation of potential *early reduction allowances*.

B. The Department shall consider the *OTC Stationary/Area Source Committee* comments and either:

1. Notify the *budget source's authorized account representative* in writing denying the

request for *early reduction allowances* and indicate the reason(s) for the determination; or

2. Notify the *budget source's authorized account representative* in writing that the requested emissions reduction *allowances* shall be added to the *budget source's account*; and

3. Authorize the *NATS Administrator* to add the *allowances* to the *budget source's account* as 1999 *allowances*.

3. Reductions associated with *repowering* of a *budget source* are eligible for *early reduction credit* provided that the permit for construction of the replacement source was issued after the date of the *OTC MOU* (September 27, 1994), and the *budget source* being replaced ceases operation in 1997 or 1998.

4. No later than October 1, 1999, the Department shall publish a report which documents the applicable sources and the number of *early reduction credits* awarded.

Section 13 - Emission Monitoring

a. NO_x emissions from each *budget source* shall be monitored in accordance with this section and in accordance with the requirements of the *OTC* documents titled "Guidance for Implementation of Emissions Monitoring Requirements for the NO_x Budget Program", dated January 28, 1997, and "NO_x Budget Program Monitoring Certification and Reporting Instructions", dated July 3, 1997. The provisions of these documents are hereby adopted by reference.

b. Monitoring systems are subject to initial performance testing and periodic calibration, accuracy testing, and quality assurance/quality control testing as specified in the *OTC* document titled "Guidance for Implementation of Emissions Monitoring Requirements for the NO_x Budget Program". If an *owner or operator* uses certified monitoring systems under Part 75 to meet the requirements of this program and maintains and operates those monitoring systems according to the requirements of Part 75, it is not necessary to re-perform initial certification tests to ensure the accuracy of these components under the NO_x Budget Program.

c. During a period when valid data is not being recorded by devices approved for use to demonstrate compliance with the requirements of this section, the *owner or operator* shall provide substitute data in accordance with the requirements of:

1. For *Part 75 budget sources*, the procedures of 40 CFR Part 75, Subpart D, and Part 1 of the *OTC* document titled "Guidance for Implementation of Emissions Monitoring Requirements for the NO_x Budget Program".

2. For *non-Part 75 budget sources*, the procedures of Part 2 of the *OTC* document "Guidance for Implementation of Emission Monitoring Requirements for the NO_x Budget Program" except for those provisions in this

document that allow alternative methods or procedures. Any alternative methods or procedures must be reviewed and approved by the Department and EPA.

d. The *owner or operator* of a NO_x *budget source* shall meet the following emissions monitoring deadlines:

1. All existing *Part 75* NO_x *budget sources* not required by the NO_x Budget Program to install additional monitoring equipment, or required to only make software changes to implement the additional requirements of this program, shall meet the monitoring requirements of the NO_x Budget Program as follows:

i. By meeting all current Part 75 monitoring requirements during the NO_x *control period* during each calendar year.

ii. By monitoring hourly and cumulative NO_x mass emissions for the NO_x *control period* in each calendar year starting in 1999 in accordance with the *OTC* documents "Guidance for Implementation of Emissions Monitoring Requirements for the NO_x Budget Program" and "NO_x Budget Program Monitoring Certification and Reporting Instructions".

2. All existing *Part 75 budget sources* required to install and certify new monitoring systems to meet the requirements of the NO_x Budget Program shall meet the monitoring requirements of this program as follows:

i. By meeting all current Part 75 monitoring requirements during the NO_x *control period* during each calendar year.

ii. Reserved

iii. By monitoring hourly and cumulative NO_x mass emissions using certified monitoring systems for each NO_x *control period* each calendar year starting in 1999 in accordance with the *OTC* documents "Guidance for Implementation of Emissions Monitoring Requirements for the NO_x Budget Program" and "NO_x Budget Program Monitoring Certification and Reporting Instructions".

3. All existing *non-Part 75 budget sources* shall meet the monitoring requirements of the NO_x Budget Program as follows:

i. Reserved

ii. By monitoring hourly and cumulative NO_x mass emissions using certified monitoring systems for each NO_x *control period* of each calendar year starting in 1999 in accordance with the *OTC* documents "Guidance for Implementation of Emissions Monitoring Requirements for the NO_x Budget Program" and "NO_x Budget Program Monitoring Certification and Reporting Instructions".

e. The *owner or operator* of a *budget source* subject to 40 CFR Part 75 shall demonstrate compliance with this section with a certified Part 75 monitoring system.

1. The *authorized account representative* or

alternate *authorized account representative* shall submit to the Department a monitoring plan prepared in accordance with 40 CFR Part 75 and the additional requirements of the *OTC* document "Guidance for the Implementation of Emission Monitoring Requirements for the NO_x Budget Program" and the *OTC* document "NO_x Budget Program Monitoring Certification and Reporting Instructions".

i. All existing *Part 75 budget sources* not required to install additional monitoring equipment shall submit to the Department a complete hardcopy monitoring plan containing monitoring plan changes and additions required by the NO_x Budget Program no later than the effective date of this regulation. These *Part 75 budget sources* shall also submit to the Department a complete electronic monitoring plan upon request by the Department.

ii. For any *Part 75 budget source* required to install and certify new monitoring systems, submit to the Department a complete hardcopy monitoring plan acceptable to the Department at least 45 days prior to the initiation of certification tests for the new system(s). These *Part 75 budget sources* shall also submit to the Department a complete electronic monitoring plan upon request by the Department.

iii. For *new budget sources* under 40 CFR Part 75, submit to the Department the NO_x Budget Program information with the hardcopy Acid Rain Program monitoring plan no later than 90 days prior to the projected Acid Rain Program participation date. These *new Part 75 budget sources* shall also submit to the Department a complete electronic monitoring plan upon request by the Department.

2. The *authorized account representative* or alternate *authorized account representative* shall obtain certification of the NO_x emissions monitoring system in accordance with 40 CFR Part 75 and the additional requirements of the *OTC* document "Guidance for the Implementation of Emission Monitoring Requirements for the NO_x Budget Program" and the *OTC* document "NO_x Budget Program Monitoring Certification and Reporting Instructions".

i. If the *Part 75 budget source* uses certified monitoring systems under Part 75 to meet the requirements of the NO_x Budget Program and maintains and operates those monitoring systems according to the requirements of Part 75, it is not necessary to re-perform initial certification tests to ensure the accuracy of the monitoring systems under the NO_x Budget Program.

A. Formula verifications must be performed to demonstrate that the data acquisition system accurately calculates and reports NO_x mass emissions (lb/hr) based on hourly *heat input* (MMBTU/hr) and NO_x emission rate (lb/MMBTU).

B. Formula verifications shall be *submitted* to the Department no later than the effective date of this regulation.

ii. If it is necessary for the *owner or operator* of a *Part 75 budget source* to install and operate additional NO_x or flow systems or fuel flow systems because of stack and unit configuration, the *owner or operator* must certify the monitoring systems using the procedures of 40 CFR Part 75.

A. Successful certification testing of the monitoring system in accordance with the requirements of 40 CFR Part 75 shall be completed no later than April 30, 1999.

B. A certification test notice and protocol shall be *submitted* to the Department for approval [~~no later than 90 days~~] prior to the anticipated performance of the certification testing, [**but no later than the effective date of this regulation**].

C. A certification report meeting the requirements of the *OTC* document "NO_x Budget Program Monitoring Certification and Reporting Instructions" shall be *submitted* to the Department no later than 45 days following the performance of the certification testing.

3. If the *Part 75 budget source* has a flow monitor certified under Part 75, NO_x emissions in pounds per hour shall be determined using the Part 75 NO_x *CEMS* and the flow monitor. The NO_x emission rate in pounds per million BTU shall be determined using the procedure in 40 CFR Part 75, Appendix F, Section 3. The hourly *heat input* shall be determined by using the procedures in 40 CFR Part 75, Appendix F, Section 5. The NO_x emissions in pounds per hour shall be determined by multiplying the NO_x emissions rate (in pounds per million BTU) by the *heat input* rate (in million BTU per hour).

4. If the *Part 75 budget source* does not have a certified flow monitor, but does have a certified NO_x *CEMS*, the NO_x emissions rate in pounds per hour shall be determined by using the NO_x *CEMS* to determine the NO_x emission rate in pounds per million BTU and the *heat input* shall be determined by using the procedures in 40 CFR Part 75, Appendix D. The NO_x emissions rate (in pounds per hour) shall be determined by multiplying the NO_x emissions rate (in pounds per million BTU) by the *heat input* rate (in million BTU per hour).

5. If the *Part 75 budget source* uses the procedures in 40 CFR Part 75, Appendix E, to determine the NO_x emission rate, the NO_x emissions in pounds per hour shall be determined by multiplying the NO_x emissions rate (in pounds per million BTU) determined using the Appendix E procedures times the *heat input* (in million BTU per hour) determined using the procedures in 40 CFR Part 75,

Appendix D.

6. If the *Part 75 budget source* uses the procedures in 40 CFR Part 75, Subpart E, to determine NO_x emission rate, the NO_x emissions in pounds per hour shall be determined using the alternative monitoring method approved under 40 CFR Part 75, Subpart E, and the procedures contained in the *OTC* document titled "Guidance for Implementation of Emission Monitoring Requirements for the NO_x Budget Program".

7. The relevant procedures of the *OTC* document "Guidance for the Implementation of Emission Monitoring Requirements for the NO_x Budget Program" shall be employed for unusual or complicated stack configurations.

f. The *owner or operator* of a *budget source* not subject to 40 CFR Part 75 shall seek the use of a NO_x monitoring method to comply with this regulation as follows:

1. The *authorized account representative* or alternate *authorized account representative* shall prepare and submit to the Department for approval a hardcopy monitoring plan for each NO_x *budget source*. Upon request by the Department, the *authorized account representative* or alternate *authorized account representative* shall also submit to the Department a complete electronic monitoring plan. Sources subject to the program on the effective date of this regulation shall submit the complete monitoring plan no later than the effective date of this regulation. Sources becoming subject to the *budget* program after the effective date of this regulation must submit a complete monitoring plan no later than 90 days prior to projected initial participation date. The monitoring plan shall be prepared in accordance with the requirements of the *OTC* documents "Guidance for the Implementation of the Emission Monitoring Requirements for the NO_x Budget Program" and "NO_x Budget Program Monitoring and Certification and Reporting Instructions", and shall contain the following information, as a minimum:

i. A description of the monitoring method to be used.

ii. A description of the major components of the monitoring system including the manufacturer, serial number of the component, the measurement span of the component and documentation to demonstrate that the measurement span of each component is appropriate to measure all of the expected values. This requirement applies to all monitoring systems including NO_x *CEMS* which have not been certified pursuant to 40 CFR Part 75.

iii. An estimate of the accuracy of the system and documentation to demonstrate how the estimate of accuracy was determined. This requirement applies to all monitoring systems that are not installed/being installed in accordance with the requirements of 40 CFR Part 75.

iv. A description of the tests that will be used for initial certification, initial quality assurance, periodic

quality assurance, and relative accuracy.

v. If the monitoring method of determining *heat input* involves *boiler* efficiency testing, a description of the tests to determine *boiler* efficiency.

vi. If the monitoring method uses fuel sampling, a description of the test to be used in the fuel sampling program.

vii. If the monitoring method utilizes a generic default emission rate factor, the monitoring plan shall identify the generic default emission rate factor and provide documentation of the applicability of the generic default emission rate factor to the *non-Part 75 budget source*.

viii. If the monitoring method utilizes a unit specific default emission rate factor the monitoring plan shall include the following:

A. All necessary information to support the emission rate including:

1. Historical fuel use data and historical emissions test data if previous testing has been performed prior to May 1, 1997 to meet other state or federal requirements and the testing was performed using Department approved methods and protocols; or

2. If emissions testing is performed to determine the emission rate, include a test protocol explaining the test to be conducted. All test performed on or after May 1, 1997 must meet the requirements of 40 CFR Part 75, Appendix E, and the requirements of the *OTC* document "Guidance for Implementation of Emission Monitoring Requirements for the NO_x Budget Program".

B. Procedures which will be utilized to demonstrate that any control equipment in operation during the testing to develop source specific emission factors, or during development of load-based emission curves, are in use when those emission factors are applied to estimate NO_x emissions.

C. Alternative uncontrolled emission rates to be used to estimate NO_x emissions during periods when control equipment is not being used or is inoperable.

ix. If the monitoring method utilizes fuel flow meters to determine *heat input* and said meters have not been certified pursuant to 40 CFR Part 75, the monitoring plan shall include a description of all components of the fuel flow meter, the estimated accuracy of the fuel flow meter, the most recent calibration of each of the components and the original accuracy specifications from the manufacturer of the fuel flow meter.

x. The *submitted* complete monitoring plan shall meet all of the provisions of Part 2, Section II of the *OTC* document "Guidance for the Implementation of the Emission Monitoring Requirements for the NO_x Budget Program" and the *OTC* document "NO_x Budget Program Monitoring Certification and Reporting Instructions".

2. The *authorized account representative* or

alternate *authorized account representative* shall obtain certification of the NO_x emissions monitoring system in accordance with the requirements of the *OTC* documents "Guidance for the Implementation of the Emission Monitoring Requirements for the NO_x Budget Program" and "NO_x Budget Program Monitoring Certification and Reporting Instructions".

i. The certification testing shall be successfully completed no later than April 30, 1999.

ii. A certification test notice and protocol shall be *submitted* to the Department no later than 90 days prior to the anticipated performance of the certification testing.

iii. A certification report meeting the requirements of the *OTC* document "NO_x Budget Program Monitoring Certification and Reporting Instructions" shall be *submitted* to the Department no later than 45 days following the performance of the certification testing.

3. The *owner or operator* of a *non-Part 75 budget source* shall monitor NO_x emissions in accordance with one of the following requirements:

i. Any *non-Part 75 budget source* that has a maximum rated *heat input* capacity of 250 MMBTU/hr or greater which is not a peaking unit as defined in 40 CFR 72.2, or whose operating permit allows for the combustion of any solid fossil fuel, or is required to install a NO_x *CEMS* for the purposes of meeting either the requirements of 40 CFR Part 60 or any other Department or Federal requirement, shall install, certify, and operate a NO_x *CEMS*. Any *budget source* that has previously installed a NO_x *CEMS* for the purposes of meeting either the requirements of 40 CFR Part 60 or any other Department or Federal requirement shall certify and operate the NO_x *CEMS*.

A. The NO_x *CEMS* shall be used to measure stack gas NO_x concentration and the NO_x emissions rate in lb/MMBTU calculated in accordance with the procedures in 40 CFR Part 75, Appendix F.

B. Any *non-Part 75 budget source* utilizing a NO_x *CEMS* shall meet the following requirements from the *OTC* document "Guidance for the Implementation of Emission Monitoring Requirements for the NO_x Budget Program":

1. Initial certification requirements identified in Part 2, Section III.

2. Quality assurance requirements identified in Part 2, Section IV.

3. Re-certification requirements identified in Part 2, Section V.

ii. The *owner or operator* of a *non-Part 75 budget source* not required to install a NO_x *CEMS* in accordance with Section 13(f)(3)(i) of this regulation may elect to install a NO_x *CEMS* meeting the requirements of 40

CFR Part 75 or Section 13(f)(3)(i) of this regulation.

iii. The *owner or operator* of a *non-Part 75 budget source* that is not required to have a NO_x *CEMS* may request approval from the Department to use any of the following methodologies to determine the NO_x emission rate:

A. The *owner or operator* of a *non-Part 75 budget source* may request the use of an alternative monitoring methodology meeting the requirements of 40 CFR Part 75, Subpart E. The Department must approve the use of an *alternative monitoring system* before such system is operated to meet the requirements of the NO_x Budget Program. If the methodology must be incorporated into a permit pursuant to Regulation 30 of Delaware's "Regulations Governing the Control of Air Pollution", the methodology must also be approved by the EPA.

B. The *owner or operator* of a *boiler or combustion turbine non-Part 75 budget source* may request the use of the procedures contained in 40 CFR Part 75, Appendix E, to measure the NO_x emission rate, in lb/MMBTU, consistent with the requirements identified in Part 2 of the *OTC* document "Guidance for the Implementation of Emission Monitoring Requirements for the NO_x Budget Program".

C. The *owner or operator* of a combustion turbine *non-Part 75 budget source* may request the use of default emission factors to determine NO_x emissions, in pounds per MMBTU, as follows:

1. For oil-fired combustion turbines, the generic default emission factor is 1.2 pounds of NO_x per MMBTU.

2. For gas-fired combustion turbines, the generic default emission factor is 0.7 pound of NO_x per MMBTU.

3. The *owner or operator* of oil-fired and gas-fired combustion turbines may perform testing, in accordance with Department approved methods, to determine unit specific maximum potential NO_x emission rates in accordance with the requirements of Part 2 of the *OTC* document "Guidance for Implementation of Emission Monitoring Requirements for the NO_x Budget Program."

D. The *owner or operator* of a *boiler non-Part 75 budget source* may request the use of default emission factors to determine NO_x emissions, in pound per MMBTU, as follows:

1. For oil-fired *boilers*, the generic default emission factor is 2.0 pounds of NO_x per MMBTU.

2. For gas-fired *boilers*, the generic default emission factor is 1.5 pound of NO_x per MMBTU.

3. The *owner or operator* of oil-fired and gas-fired *boilers* may perform testing, in accordance with Department approved methods, to determine unit

specific maximum potential NO_x emission rates in accordance with the requirements of the *OTC* document “Guidance for Implementation of Emission Monitoring Requirements for the NO_x Budget Program.

4. The *owner or operator* of a *non-Part 75 budget source* may determine *heat input* in accordance with the following guidelines:

i. The *owner or operator* of a *non-Part 75 budget source* using a NO_x CEMS to measure NO_x emission rate may elect to measure stack flow and diluent (O₂ or CO₂) concentration and use the procedures of 40 CFR Part 75, Appendix F, to determine the hourly *heat input*. For flow monitoring systems, the *non-Part 75 budget source* must meet all applicable requirements of 40 CFR Part 75.

ii. The *owner or operator* of a *non-Part 75 budget source* combusting only oil and/or natural gas may determine hourly *heat input* rate by monitoring fuel flow and conducting fuel sampling.

A. The *owner or operator* of a *non-Part 75 budget source* may monitor fuel flow by using fuel flow meter systems certified under 40 CFR Part 75, Appendix D, or as defined in Part 2, Section III of the *OTC* document “Guidance for Implementation of Emissions Monitoring Requirements for the NO_x Budget Program”.

B. The *owner or operator* of a *non-Part 75 budget source* combusting oil may perform oil sampling and testing in accordance with the requirements of 40 CFR Part 75 or Part 2, Section I(C)(2) of the *OTC* document “Guidance for the Implementation of Emissions Monitoring Requirements for the NO_x Budget Program”.

C. The *owner or operator* of a *non-Part 75 budget source* combusting gas must determine the heating value of the gas in accordance with the requirements of 40 CFR Part 75 or the methodologies approved in Part 2, Section I(C)(2) of the *OTC* document “Guidance for the Implementation of Emissions Monitoring Requirements for the NO_x Budget Program”.

iii. The *owner or operator* of a *non-Part 75 budget source* electrical generating unit less than 25 megawatts rated capacity that combusts only oil or gas may petition the Department to determine *heat input* by measuring fuel used on a frequency of greater than one hour but no less than weekly.

A. The fuel usage must be reported on an hourly basis by apportioning the fuel based on electrical load in accordance with the following formula:

$$\text{Hourly fuel usage} = \frac{\text{Hourly electrical load}}{\text{Total electrical load}} \times \text{total fuel usage}$$

B. The *owner or operator* of a *non-Part 75 budget source* combusting oil may perform oil sampling and

testing in accordance with the requirements of 40 CFR Part 75 or Part 2, Section I(C)(2) of the *OTC* document “Guidance for the Implementation of Emissions Monitoring Requirements for the NO_x Budget Program”.

C. The *owner or operator* of a *non-Part 75 budget source* combusting gas must determine the heating value of the gas in accordance with the requirements of 40 CFR Part 75 or the methodologies approved in Part 2, Section I(C)(2) of the *OTC* document “Guidance for the Implementation of Emissions Monitoring Requirements for the NO_x Budget Program”.

iv. The *owner or operator* of a *non-Part 75 budget source* that combusts only oil and/or gas and has elected to use a unit-specific or generic default NO_x emission rate, may petition the Department to determine hourly *heat input* based on fuel use measurements for a specified period that is longer than one hour.

A. The petition must include a description of the periodic measurement methodology, including an assessment of its accuracy.

B. Each time period must begin on or after May 1 and conclude on or before September 30 of each calendar year.

C. To determine hourly input, the *owner or operator* shall apportion the long term fuel measurements to operating hours during the *control period*.

D. Fuel sampling and analysis must conform to the requirements of Part 2, Section I(C)(2) of the *OTC* document “Guidance for Implementation of Emission Monitoring Requirements for the NO_x Budget Program”.

v. The *owner or operator* of a *non-Part 75 budget source* that combusts any fuel other than oil or natural gas may petition the Department to use an alternative method of determining *heat input*, including:

A. Conducting fuel sampling and analysis and monitoring fuel usage.

B. Using *boiler* efficiency curves and other monitored information such as *boiler* steam output.

C. Any other method approved by the Department and which meets the requirements identified in Part 2, Section I, of the *OTC* document “Guidance for the Implementation of Emission Monitoring Requirements for the NO_x Budget Program”.

vi. The *owner or operator* of a *non-Part 75 budget source* may petition the Department to use a unit-specific maximum hourly *heat input* based on the higher of the manufacturer’s rated capacity or the highest observed hourly *heat input* in the period beginning five years prior to the program participation date. The Department may approve a lower maximum *heat input* if an *owner or operator* demonstrates that the highest observed hourly *heat input* in the last five years is not representative of the unit’s current capabilities because modifications have been made

limiting its capacity permanently.

vii. Methods used for determination of *heat input* are subject to both applicable initial and periodic relative accuracy and quality assurance testing requirements in accordance with the following provisions of the *OTC* document "Guidance for Implementation of Emissions Monitoring Requirements for the NO_x Budget Program":

A. Initial certification requirements identified in Part 2, Section III.

B. Quality assurance requirements identified in Part 2, Section IV.

C. Re-certification requirements identified in Part 2, Section V.

5. Once the NO_x emission rate in pounds per million BTU has been determined in accordance with Section 13(f)(3) of this regulation and the *heat input* rate in MMBTU per hour has been determined in accordance with Section 13(f)(4) of this regulation, the two values shall be multiplied together to result in NO_x emissions in pounds per hour and reported to the *NETS* in accordance with Section 15 of this regulation.

6. The relevant procedures of the *OTC* document "Guidance for Implementation of Emission Monitoring Requirements for the NO_x Budget Program" shall be employed for unusual or complicated stack configurations.

Section 14 - Recordkeeping

The *owner or operator* of any *budget source* shall maintain, for a period of at least five years, copies of all measurements, tests, reports, data, and other information required by this regulation.

Section 15 - Emissions Reporting

a. The *Authorized account representative* or alternate *authorized account representative* for each *budget source* shall submit to the *NETS Administrator*, electronically in a format which meets the requirements of the EPA's Electronic Data Reporting (EDR) convention, emissions and operating information in accordance with the *OTC* documents "Guidance for the Implementation of Emission Monitoring Requirements for the NO_x Budget Program" and "NO_x Budget Program Monitoring Certification and Reporting Instructions".

1. All *existing Part 75 budget sources* not required to install additional monitoring equipment shall meet the reporting requirements of the NO_x Budget Program as follows:

i. By meeting all current Part 75 reporting requirements and reporting the additional unit identification information as required by the NO_x Budget Program (100 and 500 level records) beginning no later than with the submittal of the quarterly report for the second calendar

quarter of 1999.

ii. Reserved

iii. Beginning with the quarterly report for the second quarter of 1999, report all Part 75 required information and all additional information required by the NO_x Budget Program including:

A. Additional unit identification information.

B. Hourly NO_x mass emissions in pounds per hour based on reported hourly *heat input* and hourly NO_x emission rate.

C. Cumulative NO_x *control period* NO_x mass emissions in tons per NO_x *control period*.

D. Additional monitoring plan information related to the NO_x Budget Program.

E. Certification status information as required by the NO_x Budget Program.

2. Beginning no later than with the quarterly report for the second quarter of 1999 all *Part 75 budget sources*, that are required to install and certify new monitoring systems to meet the requirements of the NO_x Budget Program, shall meet the reporting requirements of the NO_x Budget Program by meeting all current Part 75 reporting requirements and the additional reporting requirements of the NO_x Budget Program including *submittal* of the following information:

i. Additional unit identification information.

ii. Hourly NO_x mass emissions in pounds per hour based on reported hourly *heat input* and hourly NO_x emission rate.

iii. Cumulative NO_x *control period* NO_x mass emissions in tons per NO_x *control period*.

iv. Additional monitoring plan information related to the NO_x Budget Program.

v. Certification status information as required by the NO_x Budget Program.

3. All *non-Part 75 budget sources* shall meet the reporting requirements of the NO_x Budget Program by reporting all information required by the NO_x Budget Program as well as reporting hourly and cumulative NO_x mass emissions beginning no later than with the quarterly report for the second quarter of 1999.

b. The *authorized account representative* or alternate *authorized account representative* of a *budget source* subject to 40 CFR Part 75 shall submit NO_x Budget Program quarterly data to the U.S. EPA as part of the quarterly reports *submitted* for the compliance with 40 CFR Part 75.

c. The *authorized account representative* or alternate *authorized account representative* of a *budget source* not subject to 40 CFR Part 75 shall submit NO_x budget program

quarterly data to the U.S. EPA as follows:

1. For *non-Part 75 budget sources* not utilizing NO_x CEMS, submit two quarterly reports each year, one for the second quarter and one for the third quarter.

2. For *non-Part 75 budget sources* using any NO_x CEMS based measurement methodology, submit a complete quarterly report for each quarter in the year.

3. The submission deadline is thirty days after the end of the calendar quarter. If the thirtieth day falls on a weekend or federal holiday, the reporting deadline is midnight of the first day following the holiday or weekend.

d. Should a *budget source* be permanently shutdown, the *authorized account representative* or alternate *authorized account representative* may submit a written request the Department for an exemption from the requirements of Sections 13 and 14 of this regulation. The shutdown exemption request shall identify the *budget source* being shutdown and the date of permanent shutdown. Within 30 days of receipt of the shutdown exemption request, the Department shall:

1. If the Department does not approve the shutdown exemption request, the *authorized account representative* shall be notified in writing, including the reason(s) for not approving the request.

2. If the Department approves the shutdown exemption request:

i. The *authorized account representative* shall be notified in writing.

ii. The Department shall notify the *NATS Administrator* of the approved shutdown request.

Section 16 - End-of Season Reconciliation

a. *Allowances* may be used for compliance with this program in a designated compliance year by being in a *compliance account* as of December 31 of the subject year, or by being identified in an *allowance transfer* request that is *submitted* by December 31 of the subject year.

b. Each year during the period November 1 through December 31, inclusive, the *authorized account representative* or alternate *authorized account representative* shall request the *NATS Administrator* to deduct *current year allowances* from the *compliance account* equivalent to the NO_x emissions from the *budget source* in the most recent *control period*. This request shall be *submitted* by the *authorized account representative* or alternate *authorized account representative* to the *NATS Administrator* by not later than December 31. This request shall identify the *compliance account* of the *budget source* and the serial number of each of the *allowances* to be deducted.

1. *Allowances* allocated for the current NO_x *control period* may be used without restriction.

2. *Allowances* allocated for future NO_x *control periods* may not be used.

3. *Allowances* which were allocated for any preceding NO_x *control period* which were banked may be used in the current *control period*. *Banked allowance* shall be deducted against NO_x emissions in accordance with the ratio of NO_x *allowances* to emissions as specified in Section 12 of this regulation.

c. If the emissions from a *budget source* in the current *control period* exceed the *allowances* held in that *budget source's compliance account* for that *control period*:

1. The *budget source* shall obtain additional *allowances* by December 31 of the subject year so that the total number of *allowances* in the *compliance account* meeting the criteria of Section 16(b)(1) through (3) of this regulation, including *allowances* identified in any *allowance transfer* request properly *submitted* to the *NATS Administrator* by December 31 of the subject year, equals or exceeds the *control period* emissions of NO_x rounded to the nearest whole ton.

2. If there is an insufficient number of NO_x *allowances* available for NO_x *allowance deduction*, the source is out of compliance with this regulation and subject to enforcement action and penalties pursuant to Section 18 of this regulation.

d. If by the December 31 compliance deadline the *authorized account representative* or alternate *authorized account representative* either makes no NO_x *allowance deduction* request, or a NO_x *allowance deduction* request insufficient to meet the *allowances* required by the actual emissions, a violation of this regulation may have occurred and the *NATS Administrator* may deduct the necessary number of NO_x *allowances* from the *budget source's compliance account*. The *NATS Administrator* shall provide written notice to the *authorized account representative* that NO_x *allowances* were deducted from the source's *account*.

e. The *authorized account representative* or alternate *authorized account representative* may notify the *NATS Administrator* of any claim that the *NATS Administrator* made an error in recording transfer information that was *submitted* in accordance with Section 11 of this regulation, provided that such claim of error notification is *submitted* to the *NATS Administrator* by no later than 15 business days following the date of the notification by the *NATS Administrator* pursuant to actions taken in accordance with Section 16(d) of this regulation.

1. Such claim of error notification shall be in writing and shall include:

i. A description of the error alleged to have been made by the *NATS Administrator*.

ii. A proposed correction of the alleged error.

iii. Any supporting documentation or other information concerning the alleged error and proposed corrective action.

iv. The following statement: *“I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”*

v. Signature of the *authorized account representative* or alternate *authorized account representative* and date of signature.

2. The *NATS Administrator*, at the *NATS Administrator's* sole discretion based on the documentation provided, shall determine what changes, if any, shall be made to the *account(s)* subject to the alleged error. Not later than 20 business days after receipt of a claim of error notification, the *NATS Administrator* shall submit to the *authorized account representative* and to the Department a written response stating the determination made, any action taken by the *NATS Administrator*, and the reason(s) for the determination and actions.

3. The *NATS Administrator* may, without prior notice of a claim of error and at the *NATS Administrator's* sole discretion, correct any errors in any account on the *NATS Administrator's* own motion. The *NATS Administrator* shall notify the *authorized account representative* and the Department no later than 20 business days following any such corrections.

Section 17 - Compliance Certification

a. For each *NO_x allowance control period*, the *authorized account representative* or alternate *authorized account representative* of each *budget source* shall submit to the Department an annual compliance certification.

b. The compliance certification shall be *submitted* no later than December 31 of each year.

c. The compliance certification shall contain, at a minimum, the following information:

1. Identification of the *budget source*, including the *budget source's* name and address, the name of the *authorized account representative* and alternate *authorized account representative*, if any, and the *NATS account number*.

2. A statement indicating whether or not emissions data was *submitted* to the *NETS Administrator* pursuant to Section 15 of this regulation.

3. A statement indicating whether or not the *budget source* held sufficient *NO_x allowances*, as determined in Section 16 of this regulation, in its *compliance account* for the *NO_x allowance control period* as of December 31 of the

subject year, or by being identified in an *allowance transfer* request that was *submitted* by December 31 of the subject year, to equal or exceed the *budget source's* actual emissions as reported to the *NETS Administrator* for the *control period*.

4. A statement of certification whether the monitoring plan which governs the *budget source* was maintained to reflect actual operation and monitoring of the *budget source* and contains all information necessary to attribute monitored emissions to the *budget source*.

5. A statement of certification that all emissions from the *budget source* were accounted for, either through the applicable monitoring or through application of the appropriate missing data procedures.

6. A statement whether the facts that form the basis for certification of each monitor or monitoring method approved in accordance with Section 13 of this regulation have changed.

7. If a change is required to be reported in accordance with Section 17(c)(6) of this regulation, specify the nature of the change, when the change occurred, and how the *budget source's* compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

8. The following statement in verbatim, *“I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fines or imprisonment.”*

9. Signature of the *budget source's authorized account representative* or alternate *authorized account representative* and the date of signature.

d. The Department may verify compliance by whatever means necessary, including but not limited to:

1. Inspection of facility operating records.

2. Obtaining information on *allowance deduction* and transfers from the *NATS Administrator*.

3. Obtaining information on emissions from the *NETS Administrator*.

4. Testing emission monitoring devices.

5. Requiring the *budget source* to conduct emissions testing using testing methods approved by the Department.

Section 18 - Failure to Meet Compliance Requirements

a. If the emissions from a *budget source* exceed *allowances* held in the *budget source's compliance account*

for the *control period* as of December 31 of the subject year, the *NATS Administrator* shall deduct *allowances* from the *budget source's compliance account* for the next *control period* at a rate of three (3) *allowances* for every one (1) ton of *excess emissions*.

1. The *NATS Administrator* shall provide written notice to the *budget source's authorized account representative* that NO_x *allowances* were deducted from the *budget source's account*.

2. The *authorized account representative* or alternate *authorized account representative* may notify the *NATS Administrator* of any claim that the *NATS Administrator* made an error in recording *submitted* transfer information in accordance with Section 16(e) of this regulation.

b. In addition to NO_x *allowance deduction* penalties under Section 18(a) of this regulation, the Department may enforce the provisions of this regulation under 7 Del. C. Chapter 60. ~~For the purposes of determining~~ **[In the determination of]** the number of days of violation **[for the purposes of calculating the maximum penalty under the provisions of 7 Del.C. Chapter 60]**, any *excess emissions* for the *control period* shall constitute daily violations for the *control period*, 153 violations.

Section 19 - Program Audit

a. The Department shall conduct an audit of the NO_x Budget Program prior to May 1, 2002, and at a minimum every three years thereafter. The audit shall include the following:

1. Confirmation of emissions reporting accuracy through validation of NO_x *allowance* monitoring and data acquisition systems at the *budget source*.

2. Examination of the extent to which *banked*

allowances have, or have not, contributed to emissions in excess of the *budget* for each *control period* covered by the audit.

3. An analysis of the geographic distribution of emissions as well as hourly and daily emission totals in the context of ozone control.

4. An assessment of whether the program is providing the level of emissions reductions anticipated and include in the SIP.

b. The Department shall prepare a report on the results of the audit. The Department shall seek public input on the conclusions contained in the audit report and provide for a public notice, public comment period, and allow for the request to hold a public hearing on the conclusions contained in the report.

c. In addition to the Department audit, the Department may seek a third party audit of the program. Such an audit could be implemented by the Department or could be performed on a region-wide basis under the supervision of the *OTC*.

d. Should an audit result in recommendations for program revisions at the state level, the Department shall consider the audit recommendations, in consultation with the *OTC*, and if found necessary, propose the appropriate program revisions as changes to current procedures or modifications to this regulation.

Section 20 - Program Fees

The *authorized account representative* or alternate *authorized account representative* of each *compliance account* and each *general account* shall pay fees to the Department consistent with the fee schedule established from time to time by the Delaware General Assembly, should a fee schedule be established.

NO_x BUDGET PROGRAM --- APPENDIX "A"

COMPANY	FACILITY and PLANT POINT	OTC IDENTIFIED ALLOWANCES	EXCEPTIONAL CIRCUMSTANCES ALLOWANCES	RESERVE ALLOWANCES	FINAL ALLOWANCES	SOURCE TYPE
DELMARVA POWER	Christiana Sub 001	6	-0-	1	7	Non-Part 75
	Christiana Sub 002	6	-0-	1	7	Non-Part 75
	Delaware City 002	1	-0-	1	2	Non-Part 75
	Edge Moor 001	1	-0-	1	2	Non-Part 75
	Edge Moor 002	241	-0-	1	242	Part 75
	Edge Moor 003	345	-0-	1	346	Part 75
	Edge Moor 004	621	28	1	650	Part 75
	Hay Road 001	49	-0-	1	50	Non-Part 75
	Hay Road 002	34	-0-	1	35	Non-Part 75
	Hay Road 3*	-0-	-0-	-0-	-0-	Part 75
	Indian River 001	340	-0-	1	341	Part 75
	Indian River 002	397	-0-	1	398	Part 75
	Indian River 003	834***	-0-	1	835	Part 75
	Indian River 004	1,652	-0-	2	1,654	Part 75
	Indian River 10**	-0-	-0-	1	2	Non-Part 75
	Madison Str. 001	-0-	-0-	1	1	Non-Part 75
	West Sub 001	2	-0-	1	3	Non-Part 75
DFD Operating Services	McKee Run 001	72***	-0-	1	73	Non-Part 75
	McKee Run 002	44***	-0-	1	45	Non-Part 75
	McKee Run 003	184	-0-	2	186	Part 75
	VanSant 1*	-0-	-0-	-0-	-0-	Part 75
FIRST STATE STAR ENTERPRISE	Co-Gen 1**	-0-	-0-	2	203	Non-Part 75
	DelawareCity 006****	-0-	-0-	1	105	Non-Part 75
	Delaware City 019	20	-0-	1	21	Non-Part 75
	Delaware City 034	70	-0-	1	71	Non-Part 75
	Delaware City 067	93	-0-	1	94	Non-Part 75
	Delaware City 068	206	-0-	1	207	Non-Part 75
	Delaware City 069	227	-0-	1	228	Non-Part 75
	Delaware City 070	214	-0-	2	216	Non-Part 75
	Delaware City 072	-0-	-0-	-0-	-0-	Non-Part 75
	Delaware City 074	117	-0-	1	118	Non-Part 75
	Delaware City 105	-0-	-0-	-0-	-0-	Non-Part 75
TOTAL		5,776	28	32	6,142	

NOTES:

(*) These Units did not start operation until after 1990.

(**) Units operated in the 1990 NO_x control period but were not included in the "1990 OTC Baseline Emissions Inventory".

(***) OTC MOU allowances corrected from "1990 OTC Baseline Emissions Inventory" due to use of incorrect RACT factor.

(****) OTC MOU allowances corrected from "1990 OTC Baseline Emissions Inventory" due to incorrect reporting of 1990 fuel use information.

NO _x BUDGET PROGRAM --- APPENDIX "B"					
COMPANY	FACILITY or PLANT POINT	1990 BASELINE HEAT INPUT (10 ⁶ BTU)	1990 BASELINE NO _x EMISSIONS (Tons)	1990 BASELINE EMISSION RATE (lb/mmBTU)	RACT NO _x EMISSIONS (Tons)
DELMARVA POWER	Christiana Sub 001	16,243	5.8	0.709	5.8
	Christiana Sub 002	15,447	5.5	0.709	5.5
	Delaware City 002	1,612	0.6	0.703	0.6
	Edge Moor 001	1,835	0.7	0.708	0.7
	Edge Moor 002	2,409,836	655.8	0.545	648.1
	Edge Moor 003	3,451,182	928.7	0.540	516.0
	Edge Moor 004	6,213,944	1,436.8	0.463	1,147.3
	Hay Road 001	938,341	49.0	0.105	49.0
	Hay Road 002	631,111	33.6	0.106	33.6
	Hay Road 3*	-0-	-0-	-0-	-0-
	Indian River 001	1,816,612	755.6	0.828	755.6
	Indian River 002	2,134,257	882.3	0.828	882.3
	Indian River 003	4,521,301	1,853.7	0.819	762.1
	Indian River 004	8,747,546	3,671.6	0.838	1,830.8
	Indian River 10**	-0-	-0-	-0-	-0-
	Madison Street 001	1,079	0.4	0.706	0.4
	West Sub 001	6,105	2.2	0.709	2.2
DFD	McKee Run 001	344,472	91.6	0.524	55.0
	McKee Run 002	211,742	56.3	0.505	33.8
	McKee Run 003	1,724,601	411.7	0.447	321.8
	VanSant 1*	-0-	-0-	-0-	-0-
FIRST STATE	Co-Gen 1**	-0-	-0-	-0-	-0-
STAR ENTERPRISE	Delaware City 006**	-0-	-0-	-0-	-0-
	Delaware City 019	318,601	20.1	0.126	20.1
	Delaware City 034	1,100,470	69.5	0.126	69.5
	Delaware City 067	931,712	229.0	0.486	116.5
	Delaware City 068	1,820,133	588.5	0.647	345.8
	Delaware City 069	2,002,309	647.4	0.647	440.5
	Delaware City 070	1,888,905	610.7	0.647	368.3
	Delaware City 072	-0-	-0-	-0-	-0-
	Delaware City 074	1,847,552	116.7	0.126	116.7
	Delaware City 105	-0-	-0-	-0-	-0-

NOTES: Data as identified in "1990 OTC NO_x Baseline Emission Inventory", Final OTC NO_x Baseline Inventory, Point-Segment Level Data.

(*) These Units did not start operation until after 1990.

(**) Indian River Point 10, First State Co-Gen 1, and Delaware City 006 were not included in the Reference Document, but were operating in the 1990 NO_x control period.

DELAWARE COASTAL MANAGEMENT PROGRAM
 Statutory Authority: 15 CFR Part 930,
 15 CFR 923.84(a)

Secretary's Order No. 99-S-0008

Re: Proposed Routine Program Change Delaware Coastal Management Federal Consistency Policy Document

Date of Issuance: February 25, 1999

Effective Date of the Routine Program Change: April 10, 1999

I. BACKGROUND

On Wednesday, October 14, 1998, a public hearing was held in the Secretary's Conference Room of the Richardson

and Robinson Building at 89 Kings Highway, Dover, Delaware, beginning at approximately 7:02 p.m. The public hearing concerned a Routine Program Change to the Delaware Coastal Management Federal Consistency Policy Document. This Policy Document is undertaken to update and revise the DCMP 1993 Policy Document. Many Delaware environmental laws and regulations have been established since 1993, and others have been amended. As a result, the DCMP has updated and/or deleted the 1993 policies and incorporated all applicable environmental laws or regulations promulgated since 1993. This Routine Program Change updates and revises the DCMP Policies as well as the Federal Consistency Procedures. The result is a new working document containing policies and procedures for utilization during federal consistency reviews.

Notice of the hearing was provided, including publication in the Delaware Register of Regulations, as required by 7 Del. C. Chapter 60 and 29 Del. C. Chapter 100

for a regulatory proceeding. Absolutely no members of the public testified or offered written comments at the public hearing. The Hearing Officer's memorandum report and recommendation dated February 24, 1999, is expressly incorporated herein by reference.

II. FINDINGS AND CONCLUSIONS

1. Proper notice of the hearing was provided as required by law for the promulgation of regulations, including publication in the Delaware Register of Regulations.

2. No members of the public testified, offered written comments or were identified at the public hearing as parties with respect to adoption of the proposed Program Document.

3. The record was re-opened to make one insubstantive change to the Program Document which amounts to a housekeeping type clarification.

4. The record demonstrates that the Secretary of DNREC has delegated authority for decisions regarding federal consistency determinations to the Division of Soil and Water Conservation, which houses the Coastal Management Program. These decisions are considered concurrence or objections of the Secretary.

5. No substantial change exists between the public notice version of the Program Document and the version to be adopted.

6. This proposal revises the 1993 Policy Document to bring it up to date in order to effectively state the policies and procedures to be used during federal consistency reviews.

7. This Policy Document should result in a benefit to the public health, welfare and the environment by promoting compliance with environmental policies which should further the policies and purposes of 7 Del. C. Chapter 60.

III. ORDER

In view of the above findings, it is hereby ordered that the proposed Routine Program Change to the Delaware Coastal Management Federal Consistency Policy Document, with the change suggested in the Hearing Officer's Report, be adopted in the manner and form required by law for promulgating regulatory proposals.

IV. REASONS

Adoption of the proposed Routine Program Change Delaware Coastal Management Federal Consistency Policy Document will bring the 1993 Policy Document up to date in order to effectively state the policies and procedures to be used during federal consistency reviews. Thus, this Routine Program Change should result in a benefit to the public

health, welfare and the environment by promoting compliance with environmental policies which should further the policies and purposes of 7 Del. C. Chapter 60.

Mary L. McKenzie, Acting Secretary

***Please note that no changes were made to the regulation as originally proposed and published in the October 1998 issue of the Register at page 500 (2:4 Del.R. 500). Therefore, the final regulation is not being republished. Please refer to the October 1998 issue of the Register or contact the Department of Natural Resources & Environmental Control.**

DIVISION OF FISH AND WILDLIFE

Statutory Authority: 23 Delaware Code,
Sections 2113A(a), 2114
(23 Del.C. 2113A(a), 2114)

Secretary's Order No. 99-F-0013
Date of Issuance: March 15, 1999

Re: Revision of the State's Boating Regulations

I. Background

The Department of Natural Resources and Environmental Control, Division of Fish and Wildlife initiated proceedings to amend existing regulations governing the operation of recreational and commercial vessels on the waters of this State. The proceedings were initiated pursuant to the Administrative Procedures Act and the Department's authority as prescribed by 23 Del. C. §§ 2113A(a) and 2114.

On January 1, 1999, the notice of proposed regulation changes was published in the Delaware Register of Regulations (pages 1197-1213). On February 1, 1999, at 7:30 p.m., a public hearing was held in the auditorium of the Richardson and Robbins Building at 89 Kings Highway, Dover, Delaware. At the public hearing, the Hearing Officer stated that the record of this proceeding would remain open until 4:30 p.m. on February 8, 1999, to allow additional time for submission of written comments. No additional comments were received during this time period. By memorandum dated March 12, 1999, the Hearing Officer submitted his report and recommendation, which is hereby explicitly incorporated into this Order by reference.

II. Findings

1) Proper notice of the public hearing was provided as required by law.

2) A public workshop concerning the process for designating new licensing agents for the purpose of issuing boat registrations was held in August, 1998.

3) To circumvent 7 Del. C. Chapter 72 (relating to the use of subaqueous lands), "boat docking facilities" have been registered as vessels.

4) The proposed regulations were discussed with the Delaware Marine Trade Association and the Delaware Boating Council in November, 1998.

5) Instead of mandating compliance with 7 Del. C. Chapter 72, the regulations should require owners of vessels used as boat docking facilities to contact the Division of Water Resources for a determination as to whether compliance is necessary.

6) The minor changes made to the proposal after it was published in the Delaware Register of Regulations do not constitute significant changes with respect to republishing this regulatory proposal.

7) The proposed changes should be made in the best interest of the general public of the State of Delaware.

III. Order

In view of the above findings, it is hereby ordered that Boating Regulations BR-1 through BR-12 be amended in the manner and form provided by law. This order shall become effective on April 30, 1999.

Mary L. McKenzie
Acting Secretary

BOATING REGULATIONS

BR-1. GENERAL.

Section 1. Code of Federal Regulations.

These regulations reference provisions from the Code of Federal Regulations (CFR), revised as of July 1, 1997, and October 1, 1996, for U.S.C. Titles 33 and 46, respectively.

Section 2. Application of Regulations.

Unless otherwise specified, these regulations shall apply to all vessels used on the waters of this State.

Section 3. Obedience to Orders by Enforcement Officers.

It shall be a violation of this regulation for a person to willfully fail or refuse to comply with any lawful order or direction of an enforcement officer invested by law with authority to enforce these regulations.

BR-2. DEFINITIONS.

For purposes of BR-3 through BR-12, the following

words and phrases shall have the meaning ascribed to them unless the context clearly indicates otherwise:

(1) "All-round light" shall mean a light showing an unbroken light over an arc of the horizon of 360 degrees.

(2) "Boat" shall mean any vessel manufactured or used primarily for ~~non-commercial~~ noncommercial use; leased, rented, or chartered to another for the latter's ~~non-commercial~~ noncommercial use; or engaged in the carrying of 6 or fewer passengers for hire.

(3) "Coast Guard approved" shall mean that the equipment has been determined to be in compliance with Coast Guard specifications and regulations relating to the materials, construction, and performance.

(4) "Commercial hybrid PFD" shall mean a hybrid PFD approved for use on commercial vessels identified on the PFD label.

(5) "Division" shall mean the Division of Fish and Wildlife.

(6) "Enforcement officer" shall mean a sworn member of a police force or other law-enforcement agency of this State or of any county or municipality who is responsible for the prevention and the detection of crime and the enforcement of the laws of this State or other governmental units within the State.

(7) "Especially hazardous condition" shall mean a condition which endangers the life of a person on board a vessel.

(8) "First aid" shall mean emergency care and treatment of an injured person before definitive medical and surgical management can be secured.

~~(9) "Grossly negligent" shall mean the intentional failure to perform a manifest duty in reckless disregard of the consequences as affecting the life or property of another; such a gross want of care and regard for the rights of others as to justify the presumption of willfulness and wantonness.~~

~~(10) (9) "Issuing authority" shall mean a state where a numbering system for vessels has been approved by the Coast Guard or the Coast Guard where a numbering system has not been approved. Issuing authorities are listed in Appendix A.~~

~~(11) "Licensing agent" shall mean a qualified person authorized by the Division to distribute boat registrations pursuant to § 2113(d) of Title 23.~~

~~(12) (10) "Masthead light" shall mean a white light placed over the fore and aft centerline of a vessel showing an unbroken light over an arc of the horizon of 225 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on either side of the vessel, except that on a vessel of less than 12 meters (39.4 ft.) in length the masthead light shall be placed as nearly as practicable to the fore and~~

aft centerline of the vessel.

(13) (11) "Motorboat" shall mean any vessel 65 feet (19.8 m) in length or less equipped with propulsion machinery, including steam.

(14) (12) "Motor vessel" shall mean any vessel more than 65 feet (19.8 m) in length propelled by machinery other than steam.

(15) (13) "Navigable channel" shall mean a channel plotted on a National Oceanic and Atmospheric Administration nautical chart or a channel marked with buoys, lights, beacons, ranges, or other markers by the Coast Guard or with Coast Guard approval.

(16) (14) "Negligent" shall mean the omission to do something which a reasonable person, guided by those ordinary considerations which ordinarily regulate human affairs, would do, or the doing of something which a reasonable and prudent person would not do.

(17) (15) "Open boat" shall mean a motorboat or motor vessel with all engine and fuel tank compartments, and other spaces to which explosive or flammable gases and vapors from these compartments may flow, open to the atmosphere and so arranged as to prevent the entrapment of such gases and vapors within the vessel.

(16) "Operate" shall mean to navigate or otherwise use.

(18) (17) "Operator" shall mean that person in control or in charge of the vessel while the vessel is in use.

(19) (18) "Owner" shall mean a person who claims lawful possession of a vessel by virtue of legal title or equitable interest therein which entitles him/her to such possession.

(20) "Passenger" shall mean every person carried on board a vessel other than:

(a) The owner or the owner's representative;

(b) The operator;

(c) ~~Bona fide members of the crew engaged in the business of the vessel who have contributed no consideration for their carriage and who are paid for their services; or~~

(d) ~~Any guest on board a vessel which is being used exclusively for pleasure purposes who has not contributed any consideration, directly or indirectly, for his/her carriage.~~

(19) "Passenger for hire" shall mean a passenger for whom consideration is contributed as a condition of carriage on the vessel, whether directly or indirectly flowing to the owner, charterer, operator, agent, or any other person having an interest in the vessel.

(21) (20) "Personal flotation device" shall mean a device that is approved by the Commandant of the Coast Guard pursuant to 46 CFR Part 160.

(22) (21) "PFD" shall mean personal flotation device.

(23) (22) "Racing shell", "rowing scull", "racing canoe" or "racing shell, rowing scull, racing canoe or racing kayak" shall mean a manually propelled vessel that is recognized by national or international racing associations for use in competitive racing and one in which all occupants row, scull, or paddle, with the exception of a coxswain, if one is provided, and is not designed to carry and does not carry any equipment not solely for competitive racing.

(24) (23) "Recreational vessel" shall mean any vessel being manufactured or operated used primarily for pleasure noncommercial use; or leased, rented, or chartered to another for the latter's pleasure noncommercial use. It does not include a vessel engaged in the carrying of six or fewer passengers for hire.

(25) (24) "Restricted visibility" shall mean any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, or any other similar causes.

(25) "Ship lifeboat" shall mean a lifeboat carried aboard a vessel and used exclusively for lifesaving purposes.

(26) "Sidelights" shall mean a green light on the starboard side and a red light on the port side each showing an unbroken light over an arc of the horizon of 112.5 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on its respective side. On a vessel of less than 20 meters (65.6 ft.) in length, the sidelights may be combined in one lantern carried on the fore and aft centerline of the vessel, except that on a vessel of less than 12 meters (39.4 ft.) in length the sidelights when combined in one lantern shall be placed as nearly as practicable to the fore and aft centerline of the vessel.

(27) "Slow-No-Wake" shall mean as slow as possible without losing steerage way and so as to make the least possible wake. (This almost always means speeds of less than 5 miles per hour.)

(28) "Special flashing light" shall mean a yellow light flashing at regular intervals at a frequency of 50 to 70 flashes per minute, placed as far forward and as nearly as practicable on the fore and aft centerline of the tow and showing an unbroken light over an arc of the horizon of not less than 180 degrees nor more than 225 degrees and so fixed as to show the light from right ahead to abeam and no more than 22.5 degrees abaft the beam on either side of the vessel.

(29) "State of principal use" shall mean a state on whose waters a vessel is used or to be used most during a calendar year. It shall mean this State if the vessel is to be used, docked, or stowed on the waters of this State for over 60 consecutive days.

(30) "Sternlight" shall mean a white light placed as nearly as practicable at the stern showing an unbroken light over an arc of the horizon of 135 degrees and so fixed as to

show the light 67.5 degrees from right aft on each side of the vessel.

(31) "Towing light" shall mean a yellow light having the same characteristics as the sternlight.

(32) "Type I PFD" shall mean any Coast Guard approved wearable device designed to turn most unconscious wearers in the water from a face down position to a vertical and slightly backward position. The Type I PFD has the greatest required buoyancy: the adult size provides at least 22 pounds buoyancy, and the child size provides at least 11 pounds buoyancy.

(33) "Type II PFD" shall mean any Coast Guard approved wearable device designed to turn some unconscious wearers from a face-down position to a vertical and slightly backward position. An adult size device provides at least 15.5 pounds buoyancy, the medium child size provides at least 11 pounds, and the infant and small child sizes provide at least 7 pounds buoyancy.

(34) "Type III PFD" shall mean any Coast Guard approved wearable device designed to maintain conscious wearers in a vertical and slightly backward position. While the Type III PFD has the same minimum buoyancy as the Type II PFD, it has little or no turning ability.

(35) "Type IV PFD" shall mean any Coast Guard approved device designed to be thrown to a person in the water and grasped and held by such person until rescued. It is not designed to be worn. Type IV devices, which include buoyant cushions, ring buoys, and horseshoe buoys, are designed to have at least 16.5 pounds buoyancy.

(36) "Type V PFD" shall mean any Coast Guard approved wearable device designed for a specific and restricted use. The label on the PFD indicates the kinds of activities for which the PFD may be used and whether there are limitations on how it may be used.

(37) "Type V hybrid PFD" shall mean any Coast Guard approved wearable device designed to give additional buoyancy by inflating an air chamber. When inflated it turns the wearer similar to the action provided by a Type I, II, or III PFD (the type of performance is indicated on the label). The exact specification and performance of the PFD will vary somewhat with each device.

(38) "Use" shall mean to operate, navigate, or employ.

(39) "Water skiing" shall include any activity whereby a person is towed behind or alongside a vessel.

BR-3. REGISTRATION, NUMBERING, AND MARKING OF VESSELS.

Section 1. Applicability.

This regulation shall apply to all vessels propelled by

any form of mechanical power, including electric trolling motors, used or placed on the waters of this State, except the following:

(1) Foreign vessels temporarily using such waters;

(2) Military or public vessels of the United States, except recreational-type public vessels;

(3) A vessel whose owner is a state or subdivision thereof, other than this State, which is used principally for governmental purposes, and which is clearly identifiable as such;

(4) A vessel used exclusively as a boat docking facility, as defined ~~by § 6002(46) of Title 71~~ [in Section 24 of this regulation], or a ship's lifeboat; and

(5) Vessels which have been issued valid marine documents by the Coast Guard.

Section 2. Vessel Number Required.

(a) Except as provided in Section 3 of this regulation, no person shall use or place on the waters of this State a vessel to which this regulation applies unless:

(1) It has a number issued on a certificate of number by this State; and

(2) The number is displayed as described in Section 8 of this regulation.

(b) This regulation shall not apply to a vessel for which a valid temporary certificate has been issued to its owner by the issuing authority in the state in which the vessel is principally used.

Section 3. Reciprocity.

(a) When the state of principal use is a state other than this State and the vessel is properly numbered by that state, the vessel shall be deemed in compliance with the numbering system requirements of this State in which it is temporarily used.

(b) When this State becomes the state of principal use for a vessel numbered by another state, the vessel's current number shall be recognized as valid for a period of 60 consecutive days before numbering is required by this State.

Section 4. Other Numbers and Letters Prohibited.

No person shall use a vessel to which this regulation applies that has any letters or numbers that are not issued by an issuing authority for that vessel on its forward half.

Section 5. Certificate of Number Required (Registration Card).

(a) Except as provided in Section 3 of this regulation, no person shall use a vessel to which this regulation applies unless it has on board:

(1) A valid certificate of number or temporary certificate for that vessel issued by this State; or

(2) For rental vessels described in subsection (b) of this section, a copy of the lease or rental agreement, signed by the owner or the owner's authorized representative and by the person leasing or renting the vessel, that contains at least:

(a) The vessel number that appears on the certificate of number; and

(b) The period of time for which the vessel is leased or rented.

(b) The certificate of number for vessels less than 26 feet in length and leased or rented to another for the latter's ~~non-commercial~~ noncommercial use for less than 24 hours may be retained on shore by the vessel's owner or representative at the place from which the vessel departs or returns to the possession of the owner or the owner's representative.

Section 6. Inspection of Certificate.

Each person using a vessel to which this regulation applies shall present the certificate of number, lease, or rental agreement required by Section 5 of this regulation to any enforcement officer for inspection at the officer's request.

Section 7. Location of Certificate of Number.

No person shall use a vessel to which this regulation applies unless the certificate of number, lease, or rental agreement required by Section 5 of this regulation is carried on board in such a manner that it can be handed to a person authorized under Section 6 of this regulation to inspect it.

Section 8. Numbers: Display; Size; Color.

(a) Each number required by Section 2 of this regulation shall:

(1) Be painted on or permanently attached to each side of the forward half of the vessel, except as allowed by subsection (b) or required by subsection (c) of this section;

(2) Be in plain vertical block characters of not less than 3 inches in height;

(3) Contrast with the color of the background and be distinctly visible and legible;

(4) Have spaces or hyphens that are equal to the width of a letter other than "I" or a number other than "1" between the letter and number groupings (example: DL 5678 D or DL-5678-D); and

(5) Read from left to right.

(b) When a vessel is used by a manufacturer or by a dealer for testing or demonstrating, the number may be painted on or attached to removable plates that are

temporarily but firmly attached to each side of the forward half of the vessel.

(c) On vessels so configured that a number on the hull or superstructure would not be easily visible, the number shall be painted on or attached to a backing plate that is attached to the forward half of the vessel so that the number is visible from each side of the vessel.

(d) Expired validation decals shall be removed and only effective decals shall be displayed.

Section 9. Notification of Issuing Authority.

The person whose name appears as the owner of a vessel on a certificate of number shall, within 15 days, notify the Division of:

(1) Any change in said person's address;

(2) The theft or recovery of the vessel;

(3) The loss or destruction of a valid certificate of number;

(4) The transfer of all or part of said person's interest in the vessel; and

(5) The destruction or abandonment of the vessel.

~~Section 10. Surrender of Certificate of Number.~~

~~The person whose name appears as the owner of a vessel on a certificate of number shall surrender the certificate to the Division or a licensing agent within 15 days after it becomes invalid under subsections (b), (c), (d) or (e) of Section 14 of this regulation.~~

Section 10. Revocation, Cancellation or Suspension of Certificate of Number; Notice.

(a) The Division may revoke, cancel or suspend the certificate of number if it is determined by the Division that the certificate of number was issued unlawfully or erroneously.

(b) The Division may revoke, cancel or suspend the certificate of number for any vessel which is determined by the Division to be unsafe or unfit for use as a means of transportation on water.

(c) Whenever the Division revokes, cancels or suspends the certificate of number for a vessel, the Division shall immediately notify the owner and afford the owner an opportunity for a hearing before the Division.

Section 11. Removal of Number and Validation Decal.

The person whose name appears on a certificate of number as the owner of a vessel shall remove the number and validation sticker from the vessel when:

(1) The vessel is documented by the Coast Guard;

(2) The certificate of number is invalid under

Section 14(b)(4) or (c) of this regulation; or

- (3) This State is no longer the state of principal use.

Section 12. Application for Certificate of Number.

(a) Any person who is the owner of a vessel to which Section 1 of this regulation applies may apply for a certificate of number for that vessel by submitting the following to the Division or a licensing agent:

- (1) The application prescribed by the Division;
(2) The fee required by § 2113(a) of Title 23; and
(3) Proof of ownership as required by Section 22 of this regulation.

(b) Notwithstanding subsection (a) of this section, before the Division or a licensing agent issues or renews a certificate of number for a homemade vessel, a photograph of such vessel shall be filed with the Division and the Division, upon receipt of such photograph, may, upon reasonable cause, inspect the vessel to determine if it is safe and fit to be used as a means of transportation on water. In the event a homemade vessel is determined to be unsafe or unfit, the certificate of number shall not be issued or renewed until an endorsement is secured from the Division that such vessel is safe and fit.

Section 13. Duplicate Certificate of Number.

If a certificate of number is lost or destroyed, the person whose name appears on the certificate as the owner may apply for a duplicate certificate by submitting the following to the Division or a licensing agent:

- (1) The application prescribed by the Division; and
(2) The fee required by § 2113(b) of Title 23.

Section 14. Validity of Certificate of Number; Surrender of Certificate of Number.

(a) Except as provided in subsections (b), (c), (d) and (e) of this section, a certificate of number is valid until the date of expiration prescribed by this State.

(b) A certificate of number issued by this State is invalid after the date upon which:

- (1) The vessel is documented or required to be documented;
(2) The person whose name appears on the certificate of number as owner of the vessel transfers all of his/her ownership in the vessel; ~~or~~
(3) The vessel is destroyed or ~~abandoned~~ abandoned; or

(4) The Division revokes, cancels or suspends the certificate of number.

(c) A certificate of number issued by this State is invalid if:

(1) The application for the certificate of number contains a false or fraudulent statement; or

(2) The fees for the issuance of the certificate of number are not paid.

(d) A certificate of number is invalid 60 days after the day on which another state becomes the state of principal use.

(e) A certificate of number is invalid when the person whose name appears on the certificate involuntarily loses his/her interest in the numbered vessel by legal process.

(f) The person whose name appears as the owner of a vessel on a certificate of number shall surrender the certificate to the Division or a licensing agent within 15 days after it becomes invalid under subsection (b), (c), (d) or (e) of this section.

Section 15. Validation Stickers.

(a) No person shall use a vessel that has a number issued by this State unless a validation sticker was issued with the certificate of number and the sticker:

- (1) Is displayed within 6 inches of the number; and
(2) Meets the requirements in subsections (b) and

(c) of this section.

(b) Validation stickers shall be approximately 3 inches square.

(c) The year in which each validation sticker expires shall be indicated by the colors, blue, international orange, green, and red, in rotation beginning with green for stickers that expired in 1975 (see Appendix B).

Section 16. Contents of Application for Certificate of Number.

(a) Each application for a certificate of number shall contain the following information:

- (1) Name of each owner;
(2) Address of at least one owner, or the address of the principle place of business of an owner that is not an individual, including zip code;
(3) Mailing address, if different from the address required by paragraph (a)(2) of this section;
(4) Date of birth of the owner;
(5) Citizenship of the owner;
(6) State in which vessel is or will be principally used;
(7) The number previously issued by an issuing authority for the vessel, if any;
(8) Expiration date of certificate of number issued by the issuing authority;
(9) Official number assigned by the Coast Guard, if applicable;

(10) Whether the application is for a new number, renewal of a number, or transfer of ownership;

(11) Whether the vessel is used for pleasure, rent or lease, dealer or manufacturer demonstration, commercial passenger carrying, commercial fishing, or other commercial use;

(12) Make of vessel or name of vessel builder, if known;

(13) Year vessel was manufactured or built, or model year, if known;

(14) Manufacturer's hull identification number, if any;

(15) Overall length of vessel;

(16) Whether the hull is wood, steel, aluminum, fiberglass, plastic, or other;

(17) Type of vessel (open, cabin, house, etc.);

(18) Whether the propulsion is inboard, outboard, inboard-outdrive, jet, or sail with auxiliary engine;

(19) Whether the fuel is gasoline, diesel, or other;

(20) Social security number, or, if that number is not available, the owner's driver's license number (if the owner is other than an individual, the owner's taxpayer identification number, social security number, or driver's license number); and

(21) The signature of the owner.

(b) An application made by a manufacturer or dealer for a number that is to be temporarily affixed to a vessel for demonstration or test purposes may omit items 13 through 20 of subsection (a) of this section.

Section 17. Contents of a Certificate of Number.

(a) Except as allowed in subsection (b) of this section, each certificate of number shall contain the following information:

(1) Number issued to the vessel;

(2) Expiration date of the certificate;

(3) State of principal use;

(4) Name of the owner;

(5) Address of the owner, including zip code;

(6) Whether the vessel is used for pleasure, rent or lease, dealer or manufacturer demonstration, commercial passenger carrying, commercial fishing, or other commercial use;

(7) Manufacturer's hull identification number (or the hull identification number issued by the ~~Department~~ Division), if any;

(8) Make of vessel;

(9) Year vessel was manufactured;

(10) Overall length of vessel;

(11) Whether the vessel is an open boat, cabin

cruiser, houseboat, etc.;

(12) Whether the hull is wood, steel, aluminum, fiberglass, plastic, or other;

(13) Whether the propulsion is inboard, outboard, inboard-outdrive, jet, or sail with auxiliary engine;

(14) Whether the fuel is gasoline, diesel, or other;

and

(15) A quotation of the State regulations pertaining to change of ownership or address, documentation, loss, destruction, abandonment, theft or recovery of vessel, carriage of the certificate of number on board when the vessel is in use, rendering aid in a boat accident, and reporting of vessel casualties and accidents.

(b) A certificate of number issued to a manufacturer or dealer to be used on a vessel for test or demonstration purposes may omit items 7 through 14 of subsection (a) of this section if the word "manufacturer" or "dealer" is plainly marked on the certificate.

Section 18. Contents of Temporary Certificate.

A temporary certificate issued pending the issuance of a certificate of number shall contain the following information:

(1) Make of vessel;

(2) Length of vessel;

(3) Type of propulsion;

(4) State in which vessel is principally used;

(5) Name of owner;

(6) Address of owner, including zip code;

(7) Signature of owner;

(8) Date of issuance; and

(9) Notice to the owner that the temporary certificate is invalid after 60 days from the date of issuance.

Section 19. Form of Number.

(a) Each number shall consist of the two capital letters "DL" denoting this State as the issuing authority, followed by:

(1) Not more than four numerals followed by not more than two capital letters (example: DL 1234 BD); or

(2) Not more than three numerals followed by not more than three capital letters (example: DL 567 EFG).

(b) A number suffix shall not include the letters "I", "O", or "Q," which may be mistaken for numerals.

Section 20. Size of Certificate of Number.

Each certificate of number shall be 2½ by 3½ inches.

Section 21. Terms and Conditions for Vessel Numbering.

Except for a recreational-type public vessel of the

United States, the State shall condition the issuance of a certificate of number on title to, the original manufacturer's or importer's statement or certificate of origin, copy of notarized bill of sale, or other proof of ownership of a vessel.

Section 22. Boat Registration Records.

- (a) All valid records shall be filed alphabetically by the last names of owners and numerically by "DL" registration numbers;
- (b) Invalid records shall be maintained for three years at which time they shall be destroyed.

Section 23. Licensing Agents.

(a) Pursuant to § 2113A(a) of Title 23, the Division may authorize as many qualified persons as licensing agents as it deems necessary to effectuate the efficient distribution of boat registrations. All new licensing agents shall be engaged in both retail sales and repairs of boats as a prerequisite for the issuance of boat registrations.

(b) In reviewing applications from persons engaged in both retail sales and repairs of boats to issue boat registrations, the Division may consider the following factors:

- (1) The location of the applicant, particularly in relation to other licensing agents;
- (2) The number of new and unused boats sold annually by the applicant;
- (3) The number of used boats sold annually by the applicant;
- (4) The extent to which the applicant advertises the sale and repair of boats;
- (5) The extent to which the applicant is engaged in the repair of boats;
- (6) The criminal history of the applicant; and
- (7) Such other factors as the Division deems appropriate.

Section 24. Boat Docking Facilities.

If a vessel to which this regulation applies is used as a boat docking facility, ~~as defined by § 6002(46) of Title 7,~~ the owner shall ~~also comply with Chapter 72 of Title 7 (relating to the use of subaqueous lands) and the regulations promulgated thereunder~~ **[contact the Division of Water Resources to determine whether subaqueous lands authorization will also be required. The term "boat docking facility" shall mean a place where vessels may be secured to a fixed or floating structure or to the shoreline or shoreline structure].**

BR-4. CASUALTY REPORTING SYSTEM REQUIREMENTS.

Section 1. Administration.

The casualty reporting system of this State shall be administered by the Boating Law Administrator who shall:

- (1) Provide for the reporting of all casualties and accidents required by Section 2 of this regulation;
- (2) Receive reports of vessel casualties or accidents prescribed by Section 3 of this regulation;
- (3) Review accident and casualty reports to assure accuracy and completeness of reporting; and
- (4) Determine the cause of casualties and accidents reported.

Section 2. Report of Casualty or Accident.

(a) The operator of a vessel shall submit the casualty or accident report prescribed in 33 CFR § 173.57 to the reporting authority prescribed in Section 4 of this regulation when, as a result of an occurrence that involves the vessel or its equipment:

- (1) A person dies;
- (2) A person is injured and requires medical treatment beyond first aid;
- (3) Damage to the vessel and other property totals more than \$500.00; or
- (4) A person disappears from the vessel under circumstances that indicate death or injury.

(b) A report required by this section shall be made:

- (1) Immediately if a person dies within 24 hours of the occurrence;
- (2) Immediately if a person is injured and requires medical treatment beyond first aid, or disappears from a vessel; and
- (3) Within 5 days of the occurrence or death if an earlier report is not required by this subsection.

(c) When the operator of a vessel cannot submit the casualty or accident report required by subsection (a) of this section, the owner shall submit the casualty or accident report.

(d) The accident or casualty report completed by a Fish and Wildlife Agent may be substituted to meet the requirements of this section.

Section 3. Casualty or Accident Report.

Each report required by Section 2 of this regulation shall be in writing, dated upon completion, and signed by the person who prepared it and shall contain, if available, the information about the casualty or accident required by the Coast Guard pursuant to 33 CFR § 173.57.

Section 4. Where to Report.

The report required by Section 2 of this regulation shall be submitted to the Boating Law Administrator, Department of Natural Resources and Environmental Control, Division of Fish and Wildlife, 89 Kings Highway, Dover, Delaware 19901.

Section 5. Immediate Notification of Death, Disappearance, or Physical Injury.

(a) When, as a result of an occurrence that involves a vessel or its equipment, a person dies or disappears from a vessel or sustains an injury requiring more than first aid, the operator shall, without delay, by the quickest means available, notify the Division of Fish and Wildlife Enforcement Section, Telephone: 302-739-4580 or 1-800-523-3336, of:

- (1) The date, time, and exact location of the occurrence;
- (2) The name of each person who died, disappeared, or sustained an injury;
- (3) The number and name of the vessel; and
- (4) The names and addresses of the owner and operator.

(b) When the operator of a vessel cannot give the notice required by subsection (a) of this section, at least one of the persons on board shall notify the Division of Fish and Wildlife Enforcement Section, Telephone: 302-739-4580 or 1-800-523-3336, or determine that the notice has been given.

Section 6. Rendering of Assistance in Accidents.

The operator of a vessel involved in an accident shall:

- (1) Render necessary assistance to each individual affected to save that affected individual from danger caused by the accident, so far as the operator can do so without serious danger to the operator's or individual's vessel or to individuals on board; and
- (2) Give the operator's name and address and identification of the vessel to the operator or individual in charge of any other vessel involved in the accident, to any individual injured, and to the owner of any property damaged.

BR-5. WATER SKIING.

Section 1. Water Skiing.

(a) No person shall operate a vessel on any waters of this State for purposes of towing a person on water skis unless there is in such vessel a competent person, in addition to the operator, in a position to observe the progress of the person being towed. The observer shall be considered

competent if he/she can, in fact, observe the person being towed and relay any signals from the person being towed to the operator. This subsection shall not apply to Class A vessels operated by the person being towed and designed to be incapable of carrying the operator in or on the vessel.

(b) No person shall engage in water skiing unless such person is wearing a Type I, Type II, Type III, or Type V PFD. This provision shall not apply to a performer engaged in a professional exhibition or a person preparing to participate or participating in an official regatta, boat race, marine parade, tournament, or exhibition.

(c) No person shall engage in water skiing and no person shall operate a vessel towing a person so engaged on any waters of this State with a tow line that exceeds 75 feet.

(d) No person shall engage in water skiing and no person shall operate a vessel towing a person so engaged on any waters of this State on which water skiing is prohibited.

(e) No person shall engage in water skiing and no person shall operate a vessel towing a person so engaged between sunset and sunrise.

(f) The operator of a vessel towing a water skier shall comply with all laws and regulations as they pertain to the individual's class of vessel and shall maneuver the vessel in a careful and prudent manner, so as not to interfere with other vessels or obstruct any channel or normal shipping lane, and maintain reasonable distance from persons and property, so as not to endanger the life or property of any person.

(g) No person shall engage in water skiing in such a manner as to strike or threaten to strike any person, vessel, or property, and no person shall operate a vessel or manipulate a tow line or other towing device in such a manner as to cause a water skier to strike or threaten to strike another person, vessel, or property.

(h) No person shall engage in water skiing and no person shall operate a vessel towing a person so engaged within one hundred (100) feet of any person in the water, a pier, dock, float, wharf, or vessel anchored or adrift, or in any direction of boat launching ramps, both public and private.

Section 2. Prohibited Water Skiing Areas.

Water skiing shall be prohibited in the following areas:

- (1) The Rehoboth-Lewes Canal, in its entirety;
- (2) The channel through Masseys Landing from Buoy No. 12 off Bluff Point to Buoy No. 19A;
- (3) The Assawoman Canal, in its entirety;
- (4) The Indian River Inlet between Buoy No. 1 and the Coast Guard Station;
- (5) Roosevelt Inlet from 100 yards off jetty

entrance to the Canal;

(6) White Creek south of Marker No. 9A; and

(7) Any marked swimming areas, unless authorized by a special permit issued by the Department.

BR-6. VESSEL SPEED.

Section 1. Safe Boat Speed.

(a) Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

(b) The speed of all vessels on the waters of this State shall be limited to a Slow-No-Wake speed when within 100 feet of:

(1) Any shoreline where "Slow-No-Wake" signs have been erected by the Department;

(2) Floats;

(3) Docks;

(4) Launching ramps;

(5) Marked swimming areas;

(6) Swimmers; or

(7) Anchored, moored, or drifting vessels.

(c) No person shall operate a vessel at a rate of speed greater than is reasonable having regard to conditions and circumstances such as the closeness of the shore and shore installations, anchored or moored vessels in the vicinity, width of the channel, and if applicable, vessel traffic and water use.

Section 2. Responsibility of Operator.

The operator of any vessel on the waters of this State shall be legally responsible for injuries, damages to life, limb, or property caused by his/her vessel or vessel wake.

BR-7. ~~NEGLIGENT AND GROSSLY NEGLIGENT~~ OPERATION OF A VESSEL.

Section 1. ~~Negligent or Grossly Negligent~~ Operation.

(a) No person shall operate any vessel on the waters of this State in a negligent manner.

~~(b) No person shall operate any vessel on the waters of this State in a grossly negligent manner.~~

~~(c) (b) Depending upon the degree of negligence, the following~~ The following actions shall constitute a violation of subsection (a) ~~or (b)~~ of this section:

(1) Failure to reduce speed in areas where boating is concentrated, endangering life, limb, and/or property;

(2) Operating at excessive speed at times of restricted visibility;

(3) Operating at excessive speed when maneuvering room is restricted by narrow channels or when vision is obstructed by such things as jetties, land, or other vessels;

(4) Impeding the right-of-way of a stand-on or privileged vessel so as to endanger risk of collision;

(5) Towing a water skier in a restricted area or where an obstruction exists;

(6) Operating a vessel within swimming areas when bathers are present;

(7) Operating a vessel in areas posted as closed to vessels due to hazardous conditions;

(8) Operating a vessel through an area where a regatta or marine parade is in progress in a way that could present a hazard to participants or spectators and interfere with the safe conduct of the event;

(9) Operating a vessel with any person sitting on the bow, gunwales, or stern with legs hanging over the side, except a sailboat equipped with lifelines while engaged in a race for which a permit has been secured under § 2120 of Title 23;

(10) Operating a vessel or use any water skis while under the influence of alcohol, any narcotic drug, barbiturate, marijuana, or hallucinogen;

(11) Loading a vessel with passengers or cargo beyond its safe carrying capacity;

(12) Operating a vessel with an engine of a higher horsepower rating than the rating noted on the vessel's capacity plate or in the manufacturer's specifications; and

(13) Other actions deemed by an enforcement officer to be in violation of subsection (a) ~~or (b)~~ of this ~~regulation~~ section.

BR-8. TERMINATION OF UNSAFE USE OF A VESSEL.

Section 1. Especially Hazardous Conditions.

Especially hazardous conditions warranting termination of voyage shall include, but not be limited ~~to;~~ to:

(1) Insufficient number of Coast Guard approved PFDs;

(2) Insufficient fire-extinguishing equipment;

(3) Overloaded beyond manufacturer's recommended safe loading capacity;

(4) Failure to display required navigation lights;

(5) Fuel leakage from either the fuel system or engine;

(6) Fuel accumulation in the bilges;

(7) Failure to meet ventilation requirements for tank and engine spaces;

(8) Improper backfire flame control;

- (9) Excessive leakage or accumulation of water in bilges;
- (10) Deteriorated condition of vessel; or
- (11) Any other condition deemed hazardous by an enforcement officer.

Section 2. Enforcement.

(a) Enforcement officers shall, if a violation of this regulation is observed, and in their judgment such a deficiency creates an especially hazardous condition to the occupants of the vessel, direct the operator to take specific steps to correct the unsafe condition.

(b) Compliance by operator - Immediate compliance by the operator is required for safety purposes. Failure to comply with the directives of an enforcement officer shall result in a citation under Section 3 of BR-1 as well as for the specific violation which created the unsafe condition.

BR-9. MINIMUM REQUIRED EQUIPMENT FOR VESSELS USING STATE WATERS.

PART A - General.

Section 1. Applicability.

(a) This regulation does not apply to:

- (1) Military or public vessels of the United States, other than recreational-type public vessels; and
- (2) A vessel used exclusively as a ship's lifeboat.

(b) Part B of this regulation prescribes general provisions applicable to all vessels covered by this regulation. Part C prescribes minimum required equipment for recreational vessels used on the waters of this State. Part D prescribes minimum required equipment for vessels other than recreational vessels that are not required to be documented.

PART B - Provisions Applicable to All Vessels Covered by this Regulation.

Section 1. Fire-Extinguishing Equipment.

(a) All hand portable fire extinguishers, semiportable fire extinguishing systems, and fixed fire extinguishing systems shall be Coast Guard approved pursuant to 46 CFR § 25.30-5.

(b) All required hand portable fire extinguishers and semiportable fire extinguishing systems shall be of the "B" type; i.e., suitable for extinguishing fires involving flammable liquids such as gasoline, oil, etc., where a blanketing or smothering effect is essential. The number designations for size will start with "I" for the smallest to "V" for the largest. For the purpose of this regulation, only sizes I through III will be considered. Sizes I and II are

considered hand portable fire extinguishers and sizes III, IV, and V are considered semiportable fire extinguishing systems which shall be fitted with suitable hose and nozzle or other practicable means so that all portions of the space concerned may be covered. Examples of size graduations for some of the typical hand portable fire extinguishers and semiportable fire extinguishing systems are set forth in the following table:

TYPE	SIZE	FOAM (Gallons)	CO2 (Pounds)	DRY Chemical (Pounds)	HALON (Pounds)
B	I	1 1/4	4	2	2 1/2
B	II	2 1/2	15	10	10
B	III	12	35	20	-

(c) All hand portable fire extinguishers and semiportable fire extinguishing systems shall have permanently attached thereto a metallic name plate giving the name of the item, the rated capacity in gallons, quarts, or pounds, the name and address of the person or firm for whom approved, and the identifying mark of the actual manufacturer.

(d) Vaporizing-liquid type fire extinguishers containing carbon tetrachloride or chlorobromomethane or other toxic vaporing liquids are not acceptable as equipment required by this part.

(e) Hand portable or semiportable extinguishers which are required on their name plates to be protected from freezing shall not be located where freezing temperatures may be expected.

(f) The use of dry chemical, stored pressure, fire extinguishers not fitted with pressure gauges or indicating devices, manufactured prior to January 1, 1965, may be permitted on motorboats and other vessels so long as such extinguishers are maintained in good and serviceable condition. The following maintenance and inspections are required for such extinguishers:

(1) When the date on the inspection record tag on the extinguisher shows that 6 months have elapsed since last weight check ashore, then such extinguisher is no longer accepted as meeting required maintenance conditions until reweighed ashore and found to be in a serviceable condition and within required weight conditions;

(2) If the weight of the container is 1/4 ounce less than that stamped on the container, it shall be serviced;

(3) If the outer seal or seals (which indicate tampering or use when broken) are not intact, an enforcement officer may inspect such extinguisher to see that the frangible disc in the neck of the container is intact; and if such disc is not intact, the container shall be serviced;

and

(4) If there is evidence of damage, use, or leakage, such as dry chemical powder observed in the nozzle or elsewhere on the extinguisher, the container shall be replaced with a new one and the extinguisher shall be properly serviced or the extinguisher shall be replaced with another approved extinguisher.

(g) Fire extinguishers shall be at all times kept in a condition for immediate and effective use, and shall be so placed as to be readily accessible.

Section 2. Backfire Flame Control.

(a) Applicability. - This section applies to every gasoline engine installed in a motorboat or motor vessel after April 25, 1940, except outboard motors.

(b) Installations made before November 19, 1952, need not meet the detailed requirements of this section and may be continued in use as long as they are serviceable and in good condition. Replacements shall meet the applicable requirements of this section.

(c) Installations consisting of backfire flame arrestors or engine air and fuel induction systems bearing basic Approval Nos. 162.015 or 162.041 or engine air and fuel induction systems bearing basic Approval Nos. 162.015 or 162.042, may be continued in use as long as they are serviceable and in good condition. New installations or replacements shall meet the applicable requirements of this section.

(d) No person may use a vessel to which this section applies unless each engine is provided with an acceptable means of backfire flame control. The following are acceptable means of backfire flame control:

(1) A backfire flame ~~arrestor~~ arrestor complying with Society of Automotive Engineers (SAE) Standard J-1928 or Underwriters Laboratories (UL) Standard 1111 and marked accordingly. The flame arrestor shall be suitably secured to the air intake with a flame tight connection;

(2) An engine air and fuel induction system which provides adequate protection from propagation of backfire flame to the atmosphere equivalent to that provided by an approved backfire flame ~~arrestor~~ arrestor. A gasoline engine utilizing an air and fuel induction system, and operated without an approved backfire flame ~~arrestor~~ arrestor, shall either include a reed valve assembly or be installed in accordance with SAE Standard J-1928; and

(3) An arrangement of the carburetor or engine air induction system that will disperse any flames caused by engine backfire. The flames must be dispersed to the atmosphere outside the vessel in such a manner that the flames will not endanger the vessel, persons on board, or nearby vessels and structures. Flame dispersion may be achieved by attachments to the carburetor or location of the engine air induction system. All attachments shall be of metallic construction with flametight connections and firmly

secured to withstand vibration, shock, and engine backfire.

(e) No person may use a vessel to which this section applies unless the backfire flame ~~arrestor~~ arrestor is serviceable and in good condition.

Section 3. Ventilation.

(a) Applicability. - This section applies to motorboats, motor vessels, and boats used on the waters of this State and subject to this regulation.

(b) No person shall operate a motorboat or motor vessel, except an open boat, built after April 25, 1940, and before August 1, 1980, which uses fuel having a ~~flashpoint~~ flash point of ~~110° F.~~ 110°F. or less, without every engine and fuel tank compartment being equipped with a natural ventilation system. A natural ventilation system consists of:

(1) At least two ventilator ducts, fitted with cowls or their equivalent, for the efficient removal of explosive or flammable gases from the bilges of every engine and fuel tank compartment;

(2) At least one exhaust duct installed so as to extend from the open atmosphere to the lower portion of the bilge and at least one intake duct that is installed to extend to a point at least midway to the bilge or at least below the level of the carburetor air intake; and

(3) The cowls shall be located and trimmed for maximum effectiveness and in such a manner so as to prevent displaced fumes from being recirculated.

(c) Boats built after July 31, 1978, shall be exempt from the requirements of subsection (a) of this section for fuel tank compartments that:

(1) Contain a permanently installed fuel tank if each electrical component is ignition protected in accordance with 33 CFR § 183.410(a); and

(2) Contain fuel tanks that vent to the outside of the motorboat or motor vessel.

(d) Boats built after July 31, 1980, or which are in compliance with the Coast Guard Ventilation Standard, a manufacturer requirement (33 CFR §§ 183.610 and 183.620), shall be exempt from the requirements of subsections (b) and (d) of this section.

(e) No person shall operate a boat after July 31, 1980, that has a gasoline engine for electrical generation, mechanical power or propulsion unless it is equipped with an operable ventilation system that meets the requirements of 33 CFR §183.610(a), (b), (d), (e) and (f) and 183.6209(a).

(f) Boat owners shall maintain their boats' ventilation systems in good operating condition (regardless of the boat's date of manufacture).

Section 4. Whistles and Bells.

(a) A vessel of 12 meters (39.4 ft.) or more in length shall be equipped with a whistle and a bell. The whistle and bell shall comply with the specifications in Annex III to the Inland Navigation Rules (33 CFR Part 86). The bell may be

replaced by other equipment having the same respective sound characteristics, provided that manual sounding of the prescribed signals shall always be possible.

(b) A vessel of less than 12 meters (39.4 ft.) in length shall be equipped with a whistle or horn, or some other sounding device capable of making an efficient sound signal.

Section 5. Visual Distress Signals.

(a) **Applicability.** - This section applies to all boats operated on the coastal waters of this State and those waters connected directly to them (i.e., bays, sounds, harbors, rivers, inlets, etc.) where any entrance exceeds 2 nautical miles between opposite shorelines to the first point where the largest distance between shorelines narrows to 2 miles.

(b) **Prohibition.** - Unless exempted by subsection (c) of this section, no person may use a boat to which this section applies unless visual distress signals, approved by the Commandant of the Coast Guard under 46 CFR Part 160 or certified by the manufacturer under 46 CFR Parts 160 and 161, in the number required, are on board. Devices suitable for day use and devices suitable for night use, or devices suitable for both day and night use, shall be carried.

(c) **Exemptions.** - The following boats shall be exempt from the carriage requirements of subsection (b) of this section between sunrise and sunset, but between sunset and sunrise, visual distress signals suitable for night use, in the number required, shall be on board:

- (1) Boats less than 16 feet in length;
- (2) Boats participating in organized events such as races, regattas, or marine parades;
- (3) Open sailboats less than 26 feet in length not equipped with propulsion machinery; and
- (4) Manually propelled boats.

(d) **Launchers.** - When a visual distress signal carried to meet the requirements of this section requires a launcher to activate, then a launcher approved by the Coast Guard under 46 CFR § 160.028 shall also be carried. Launchers manufactured before January 1, 1981, which do not have approval numbers are acceptable for use with meteor or parachute signals as long as they remain in serviceable condition.

(e) **Visual distress signals accepted.** - Any of the following signals when carried in the number required, can be used to meet the requirements of this section:

- (1) An electric distress light meeting the standards of 46 CFR § 161.013. One is required to meet the night only requirement;
- (2) An orange flag meeting the standards of 46 CFR § 160.072. One is required to meet the day only requirement;
- (3) Pyrotechnics meeting the standards noted in the following table:

Approval Number Under 46 CFR	Device Description	Meets Requirements for	No. Required
160.021	Hand Held Red Flares 1	Day and Night	3
160.022	Floating Orange Smoke	Day Only	3
160.024	Parachute Red Flare 2	Day and Night	3
160.036	Hand-Held Rocket-Propelled Parachute Red Flare	Day and Night	3
160.037	Hand-Held Orange Smoke	Day Only	3
160.057	Floating Orange Smoke	Day Only	3
160.066	Red Aerial Pyrotechnic Flare 3	Day and Night	3

- 1 Must have manufacture date of October 1980 or later.
- 2 These signals require use in combination with a suitable launching device.
- 3 These devices may be either meteor or parachute assisted type. Some of these signals may require use in combination with a suitable launching device.

(f) Any combination of signal devices selected from the types noted in paragraphs (e)(1), (2) and (3) of this section, when carried in the number required, may be used to meet both day and night requirements. (The following illustrates the variety and combination of devices which can be carried to meet both day and night requirements: three hand-held red flares; one hand-held red flare and two parachute flares; or three hand-held orange smoke signals with one electric distress light.)

(g) **Stowage, serviceability, approval and marking.** - No person may use a boat unless the visual distress signals required by this section are:

- (1) Readily accessible;
- (2) In serviceable condition and the service life of the signal, if indicated by a date marked on the signal, has not expired;
- (3) Legibly marked with the approval number or certification statement as specified in 46 CFR Parts 160 and 161; and
- (4) In sufficient quantity as required by the Coast Guard.

(h) **Prohibited use.** - No person in a boat shall display a visual distress signal on waters to which this section applies under any circumstance except a situation where assistance is needed because of immediate or potential danger to the persons on board.

PART C - Minimum Required Equipment for Recreational-Type Vessels.

Section 1. Personal Flotation Devices.

(a) Except as provided in Section 2 of this part, no person may use a recreational vessel unless at least one PFD of the following types is on board for each person:

- (1) Type I PFD;
- (2) Type II PFD; or
- (3) Type III PFD.

(b) No person may use a recreational vessel 16 feet or more in length unless one Type IV PFD is on board in addition to the total number of ~~PFD's~~ PFDs required in subsection (a) of this section.

(c) A Type V PFD may be carried in lieu of any PFD required under subsections (a) and (b) of this section, provided:

(1) The approval label on the Type V PFD indicates that the device is approved:

(a) For the activity in which the vessel is being used; or

(b) As a substitute for a PFD of the Type required in the vessel in use;

(2) The PFD is used in accordance with any requirements on the approval label; and

(3) The PFD is used in accordance with requirements in its owner's manual, if the approval label makes reference to such a manual.

(d) A Type V hybrid PFD may satisfy the carriage requirements provided it is worn except when the boat is not underway or when the user is below deck.

Section 2. Exceptions.

(a) Canoes and kayaks 16 feet in length and over are exempted from the requirements for carriage of the additional Type IV PFD required under Section 1(b) of this part.

(b) Racing shells, rowing sculls, racing canoes and racing kayaks are exempted from the requirements for carriage of any Type PFD required under Section 1 of this part.

(c) Sailboards are exempted from the requirements for carriage of any Type PFD required under Section 1 of this part.

Section 3. Stowage, Condition, and Marking of PFDs.

(a) No person may use a recreational vessel unless each Type I, II, or III PFD required by Section 1(a) of this part, or equivalent Type allowed by Section 1(c) of this part, is readily accessible.

(b) No person may use a recreational vessel unless each Type IV PFD required by Section 1(b) of this part, or equivalent Type allowed by Section 1(c) of this part, is immediately available.

(c) No person may use a recreational vessel unless each PFD required by Section 2(c) of this part or allowed by Section 1(b) of this part is:

(1) In serviceable condition, as defined by 33 CFR § 175.23;

(2) Of an appropriate size and fit for the intended wearer, as marked on the approval label; and

(3) Legibly marked with its Coast Guard approval number, as specified in 46 CFR Part 160.

Section 4. Fire-Extinguishing Equipment Required.

(a) Motorboats less than 26 feet in length with no fixed fire extinguishing system installed in machinery spaces shall carry at least one Type B-I approved hand portable fire extinguisher. When an approved fixed fire extinguishing system is installed in machinery spaces, a portable fire extinguisher is not required. If the construction of the motorboat does not permit the entrapment of explosive or flammable gases or vapors, no fire extinguisher is required.

(b) Motorboats 26 feet to less than 40 feet in length shall carry at least two Type B-I approved hand portable fire extinguishers or at least one Type B-II approved portable fire extinguisher. When an approved fixed fire extinguishing system is installed, one less Type B-I extinguisher is required.

(c) Motorboats 40 feet to not more than 65 feet in length shall carry at least three Type B-I approved hand portable fire extinguishers or at least one Type B-I and one Type B-II approved portable fire extinguisher. When an approved fixed fire extinguishing system is installed, one less Type B-I extinguisher is required.

(d) Motorboats 65 feet and over used for recreational purposes shall carry fire extinguishing equipment as prescribed under Section 3(b) of Part D of this regulation.

(e) Motorboats are required to carry fire extinguishers if any one of the following conditions exist:

(1) Inboard engines;

(2) Closed compartments and compartments under seats wherein portable fuel tanks may be stored;

(3) Double bottoms not sealed to the hull or which are not completely filled with flotation material;

(4) Closed living spaces;

(5) Closed stowage compartments in which combustible or flammable materials are stowed; or

(6) Permanently installed fuel tanks. (Fuel tanks secured so they cannot be moved in case of fire or other emergency are considered permanently installed.)

(f) Motorboats contracted for prior to November 19, 1952, shall meet the applicable provisions of this section insofar as the number and general type of equipment is

concerned. Existing items of equipment and installations previously approved but not meeting the applicable requirements for type approval may be continued in service so long as they are in good condition. All new installations and replacements shall meet the requirements of this section.

PART D - Life-Saving Equipment for Commercial Vessels not Documented.

Section 1. Applicability.

This part applies to each vessel to which this regulation applies except:

- (1) Vessels used for ~~non-commercial~~ noncommercial use;
- (2) Vessels leased, rented, or chartered to another for the latter's ~~non-commercial~~ noncommercial use; or
- (3) Commercial vessels propelled by sail not carrying passengers for hire; or
- (4) Commercial barges not carrying passengers for hire.

Section 2. Life Preservers and Other Life-Saving Equipment Required.

(a) No person may operate a vessel to which Section 1 of this part applies unless it meets the requirements of this section.

(b) Each vessel not carrying passengers for hire, less than 40 feet in length, shall have at least one life preserver (Type I PFD), buoyant vest (Type II PFD), or marine buoyant device intended to be worn (Type III PFD), of a suitable size for each person on board. Kapok and fibrous glass life preservers which do not have plastic-covered pad inserts as required by 46 CFR §§ 160.062 and 160.005 are not acceptable as equipment required by this subsection.

(c) Each vessel carrying passengers for hire and each vessel 40 feet in length or longer not carrying passengers for hire shall have at least one life preserver (Type I PFD) of a suitable size for each person on board. Kapok and fibrous glass life preservers which do not have plastic-covered pad inserts as required by 46 CFR §§ 160.062 and 160.005 are not acceptable as equipment required by this subsection.

(d) In addition to the equipment required by subsection (b) or (c) of this section, each vessel 26 feet in length or longer shall have at least one Coast Guard approved ring life buoy.

(e) Each vessel not carrying passengers for hire may substitute an exposure suit (or immersion suit) for a life preserver, buoyant vest, or marine buoyant device required under subsection (b) or (c) of this section. Each exposure suit carried in accordance with this paragraph shall be Coast Guard approved.

(f) On each vessel, regardless of length and regardless of whether carrying passengers for hire, a commercial hybrid PFD may be substituted for a life preserver, buoyant vest, or marine buoyant device required under subsection (b) or (c) of this section if it is:

(1) In the case of a Type V commercial hybrid PFD, worn when the vessel is underway and the intended wearer is not within an enclosed space;

(2) Used in accordance with the conditions marked on the PFD and in the owner's manual; and

(3) Labeled for use on uninspected commercial vessels.

(g) The life-saving equipment required by this section shall be legibly marked.

(h) The life-saving equipment designed to be worn required in subsections (b), (c), and (e) of this section shall be readily accessible.

(i) The life-saving equipment designed to be thrown required by subsection (d) of this section shall be immediately available.

(j) The life-saving equipment required by this section shall be in serviceable condition.

Section 3. Fire-Extinguishing Equipment Required.

(a) Motorboats.

(1) Motorboats less than 26 feet in length shall abide by Section 4(a) of Part C of this regulation.

(2) Motorboats 26 feet in length to less than 40 feet in length shall abide by Section 4(b) of Part C of this regulation.

(3) Motorboats 40 feet in length to less than 65 feet in length shall abide by Section 4(c) of Part C of this regulation.

(b) Motor Vessels.

(1) Motor vessels less than 50 gross tonnage shall carry one Type B-II approved hand portable fire extinguisher.

(2) Motor vessels 50 and not over 100 gross tonnage shall carry two Type B-II approved hand portable fire extinguishers.

(3) Motor vessels 100 and not over 500 gross tonnage shall carry three Type B-II approved hand portable fire extinguishers.

(4) Motor vessels 500 but not over 1,000 gross tonnage shall carry six Type B-II approved hand portable fire extinguishers.

(5) Motor vessels over 1,000 gross tonnage shall carry eight Type B-II approved hand portable fire extinguishers.

(c) In addition to the hand portable fire extinguishers

required by subsection (b) of this section, the following fire-extinguishing equipment shall be fitted in the machinery space:

(1) One Type B-II hand portable fire extinguisher shall be carried for each 1,000 B. H. P. of the main engines or fraction thereof. However, not more than six such extinguishers need be carried.

(2) On motor vessels over 300 gross tons, either one Type B-III semiportable fire-extinguishing system shall be fitted, or alternatively, a fixed fire-extinguishing system shall be fitted in the machinery space.

(d) Barges carrying passengers.

(1) Every barge 65 feet in length or less while carrying passengers when towed or pushed by a motorboat, motor vessel or steam vessel shall be fitted with hand portable fire extinguishers as required by this Section 4 of Part C of this regulation, depending upon the length of the barge.

(2) Every barge over 65 feet in length while carrying passengers when towed or pushed by a motorboat, motor vessel or steam vessel shall be fitted with hand portable fire extinguishers as required by this section, depending upon the gross tonnage of the barge.

BR-10. BOAT RAMPS AND PARKING LOTS ADMINISTERED BY DIVISION.

Section 1. Applicability.

This regulation applies to boat ramps, parking lots, and seawalls or other mooring facilities administered by the Division.

Section 2. Boat Ramps and Mooring Facilities.

(a) Whoever uses a boat ramp, seawall, or other mooring facility shall do so on a first-come, first-serve basis.

(b) No person shall leave a vessel unattended at any seawall or other mooring facility. Disabled vessels shall clear the area as soon as possible.

(c) No person shall use any seawall or other mooring facility except for vessels loading and unloading and as a holding area for vessels waiting to use boat ramps.

(d) No person shall moor or conduct repairs to a vessel in any area which interferes with vessel traffic at a boat ramp. Ramp space shall be kept clear at all times for usage of vessels being launched or recovered.

(e) Vessels left abandoned at any seawall or other mooring facility or found adrift shall be removed at the owner's expense. Vessels left unattended at any seawall or other mooring facility in excess of 48 hours without contacting the Division or a Fish and Wildlife Agent shall be

deemed abandoned.

Section 3. Parking Lots.

(a) No person shall park a vehicle or boat trailer in an undesignated parking space.

(b) No person shall park, stop, or stand a vehicle or boat trailer in front of a boat ramp except in designated areas.

(c) No person shall park a vehicle or boat trailer in such a manner as to impede traffic.

(d) No person shall camp overnight in a parking lot.

(e) No person shall abandon a vehicle or boat trailer in a parking lot. If a vehicle or boat trailer is abandoned, it will be removed at the owner's expense. Vehicles or boat trailers left unattended in a parking lot for in excess of 48 hours without contacting the Division or a Fish and Wildlife Agent shall be deemed abandoned.

(f) Operators of emergency vehicles shall have priority over all other vehicles. Vessel operators shall clear passage for emergency vehicles on their approach or when directed by an enforcement officer.

BR-11. NAVIGATION LIGHTS.

Section 1. Applicability.

(a) Except for vessels used by enforcement officers for law enforcement purposes, this regulation applies to all vessels used on the waters of this State.

(b) Vessels over 20 meters (65.6 ft.) in length and vessels listed below shall display lights and exhibit shapes in accordance with the International or Inland Navigation Rules and Annexes (Commandant Instruction M16672.2C):

(1) Vessels towing, pushing, or being towed or pushed;

(2) Vessels engaged in fishing;

(3) Vessels not under command;

(4) Vessels restricted in their ability to maneuver;

(5) Pilot vessels; or

(6) Air-cushion vessels.

Section 2. Visibility of lights.

The lights required by this section shall have an intensity so as to be visible at the following ranges:

(1) In a vessel of 12 meters (39.4 ft.) or more in length but less than 50 meters (164 ft.) in length:

(a) masthead light, 5 miles; except that where the length of the vessel is less than 20 meters (65.6 ft.), 3 miles;

(b) sidelight, 2 miles;

(c) sternlight, 2 miles;

- (d) towing light, 2 miles;
 - (e) white, red, green or yellow all-round light, 2 miles; and
 - (f) special flashing light, 2 miles.
- (2) In a vessel of less than 12 meters (39.4 ft.) in length:
- (a) masthead light, 2 miles;
 - (b) sidelight, 1 mile;
 - (c) sternlight, 2 miles;
 - (d) towing light, 2 miles;
 - (e) white, red, green or yellow all-round light, 2 miles; and
 - (f) special flashing light, 2 miles.

Section 3. Prohibition.

(a) No person may use a vessel to which this regulation applies without carrying and exhibiting the lights required in Section 4 of this regulation and of the intensity required in Section 2 of this regulation:

- (1) When underway or at anchor;
- (2) In all weathers from sunset to sunrise; and
- (3) During times of restricted visibility.

(b) No person may use a vessel to which this regulation applies which exhibits other lights which may be mistaken for those required in Section 4 of this regulation during such time as navigation lights are required.

(c) No person may use a vessel to which this regulation applies unless it carries and exhibits the light or day shapes required in the International or Inland Navigational Rules and Annexes (Commandant Instruction M16672.2C) for vessels used under special circumstances defined therein.

Section 4. Navigation Lights Required.

(a) Power-driven vessels underway in international and inland waters shall exhibit:

- (1) A masthead light forward;
- (2) A second masthead light abaft of and higher than the forward one; except that in inland waters a vessel of less than 50 meters (164 ft.) in length shall not be obliged to exhibit such light but may do so;
- (3) Sidelights; and
- (4) A sternlight.

(b) Power-driven vessels underway in international waters:

- (1) Power-driven vessels of less than 12 meters (39.4 ft.) in length may in lieu of the lights prescribed in subsection (a) of this section exhibit an all-round white light and sidelights;
- (2) Power-driven vessels of less than 7 meters (23 ft.) in length whose maximum speed does not exceed 7 knots

may in lieu of the lights prescribed in subsection (a) of this section exhibit an all-round white light and shall, if practicable, also exhibit sidelights; and

(3) The masthead light or all-round white light on a power-driven vessel of less than 12 meters (39.4 ft.) in length may be displaced from the fore and aft centerline of the vessel if centerline fitting is not practicable, provided that the sidelights are combined in one lantern which shall be carried on the fore and aft centerline of the vessel or located as nearly as practicable in the same fore and aft line as the masthead light or the all-round white light.

(c) Power-driven vessels underway in inland waters shall exhibit the same light for vessels in subsection (a) of this section except:

(1) A vessel of less than 12 meters (39.4 ft.) in length may, in lieu of the lights prescribed in subsection (a) of this section, exhibit an all-round white light and sidelights.

(2) A vessel of less than 20 meters (65.6 ft.) in length need not exhibit the masthead light forward of amidships but shall exhibit it as far forward as practicable.

(d) Sailing vessels underway and vessels under oars in international and inland waters:

(1) A sailing vessel underway shall exhibit:

- (a) Sidelights; and
- (b) A sternlight.

(2) In a sailing vessel of less than 20 meters (65.6 ft.) in length, the lights prescribed in paragraph (d)(1) of this section may be combined in one lantern carried at or near the top of the mast where it can best be seen.

(3) A sailing vessel underway may, in addition to the lights prescribed in paragraph (d)(1) of this section, exhibit at or near the top of the mast, where they can best be seen, two all-round lights in a vertical line, the upper being red and the lower being green, but these lights shall not be exhibited in conjunction with the combined lantern permitted in paragraph (d)(2) of this section.

(4) A sailing vessel of less than 7 meters (23 ft.) in length shall, if practicable, exhibit the lights prescribed in paragraph (d)(1) or (2) of this section, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.

(5) A vessel under oars may exhibit the lights prescribed in this section for sailing vessels, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.

(6) A vessel proceeding under sail when also being propelled by machinery shall exhibit forward where it can

best be seen a conical shape, apex downward. When upon inland waters, a vessel of less than 12 meters (39.4 ft.) in length is not required to exhibit this shape.

(e) Anchored vessels:

(1) International and Inland. - Vessels at permanent moorings are not required to display an anchor light.

(2) International and Inland. - A vessel of less than 50 meters (164 ft.) in length at anchor shall exhibit an all-round white light where it can best be seen or:

(a) In the fore part, an all-round white light or one ball; and

(b) At or near the stern and at a lower level than the light prescribed in subparagraph (2)(a) of this subsection, an all-round white light.

(3) Inland. - A vessel of less than 7 meters (23 ft.) in length, when at anchor, not in or near a narrow channel, fairway, anchorage, or where other vessels normally navigate, shall not be required to exhibit the lights or shapes prescribed in paragraph (d)(2) of this section.

BR-12. ANCHORING AND OBSTRUCTING NAVIGATION.

Section 1. Applicability.

This regulation applies to all vessels or other objects used or placed on the waters of this State.

Section 2. Anchoring.

(a) No person shall anchor a vessel or other object in a navigable channel or allow any equipment from an anchored vessel to extend into the channel and subsequently interfere with the passage of any other vessel.

(b) No person shall anchor a vessel in such a manner as to obstruct or otherwise obscure navigation aids.

(c) No person shall anchor a vessel or allow any equipment from an anchored vessel to obstruct or otherwise interfere with the passage ~~of~~ any other vessel near:

- (1) A boat launching facility;
- (2) A marina entrance;
- (3) The entrance to any canal or waterway;
- (4) A permanent mooring facility; or
- (5) A vessel docking facility.

(d) No person shall place any item or equipment in a navigable channel so as to obstruct or otherwise impede or interfere with the passage of a vessel.

APPENDIX A ISSUING AUTHORITIES

(a) The state is the issuing authority and reporting

authority in:

Alabama	(AL)	Montana(MT)
American Samoa	(AS)	Nebraska(NB)
Arizona	(AZ)	Nevada (NV)
Arkansas	(AR)	New Hampshire(NH)
California	(CF)	New Jersey(NJ)
Colorado	(CL)	New Mexico(NM)
Connecticut	(CT)	New York(NY)
Delaware	(DL)	North Carolina(NC)
District of Columbia	(DC)	North Dakota(ND)
Florida	(FL)	Ohio(OH)
Georgia	(GA)	Oklahoma(OK)
Guam	(GM)	Oregon (OR)
Hawaii	(HA)	Pennsylvania(PA)
Idaho	(ID)	Puerto Rico(PR)
Illinois	(IL)	Rhode Island(RI)
Indiana	(IN)	South Carolina(SC)
Iowa	(IA)	South Dakota(SD)
Kansas	(KA)	Tennessee(TN)
Kentucky	(KY)	Texas (TX)
Louisiana	(LA)	Utah (UT)
Maine	(ME)	Vermont (VT)
Maryland	(MD)	Virginia (VA)
Massachusetts	(MS)	Virgin Islands(VI)
Michigan	(MC)	Washington(WN)
Minnesota	(MN)	West Virginia(WV)
Mississippi	(MI)	Wisconsin(WS)
Missouri	(MO)	Wyoming(WY)

(b) The Coast Guard is the issuing authority and reporting authority in:

Alaska (AK)

(c) The abbreviations following the names of the states listed in the paragraphs (a) and (b) are the two capital letters that must be used in the number format to denote the state of principal use.

APPENDIX B ONE YEAR CYCLE

COLOR	YEAR ISSUED	YEAR EXPIRES
Blue	1997	1997
Orange	1998	1998
Green	1999	1999
Red	2000	2000

Blue	2001	2001
Orange	2002	2002

THREE YEAR CYCLE

COLOR	YEAR ISSUED	YEAR EXPIRES
<u>Green Blue</u>	1995	1997
<u>Red Orange</u>	1996	1998
<u>Blue Green</u>	1997	1999
<u>Orange Red</u>	1998	2000
<u>Green Blue</u>	1999	2001
<u>Red Orange</u>	2000	2002

DIVISION OF FISH AND WILDLIFE

Statutory Authority: 7 Delaware Code,
Section 1902(a)(5) (7 Del.C. 1902(a)(5))

Order No. 99-F-0012**SUMMARY OF THE EVIDENCE AND INFORMATION**

Pursuant to due notice 2:8 Del. R. 1373-1377, The Department of Natural Resources and Environmental Control proposed to amend Shellfish Regulation No. S-23 to change the dimensions of a lobster pot's escape vent; to require ghost panels in all lobster pots and implement a maximum size for a lobster pot. The Department also proposed to amend Shellfish Regulation No. S-25 to implement landing limits on lobsters not taken in lobster pots in the Exclusive Economic Zone. A new Shellfish Regulation No. S-26 was proposed to protect immature female lobsters with a V-notch in one of their tail flippers.

In addition, the Department proposed to amend Tidal Finfish Regulation No. 4 to close the recreational fishing season for summer flounder for a time required to reduce the landings by 40%. The Department also proposed to amend Tidal Finfish Regulation No. 23 to drop the black sea bass closed recreational fishing season.

A public workshop was held on October 26, 1998 to discuss options on summer flounder and black sea bass. The Advisory Council on Tidal Finfisheries discussed the summer flounder and black sea bass regulations at their February 26, 1999 meeting. Lobster regulations were discussed by the Council on Shellfisheries on January 25, 1999.

A public hearing was held on proposed changes to regulations on summer flounder, black sea bass and lobsters on February 25, 1999, in Dover, Delaware, in front of Charles A. Lesser, Fisheries Administrator for the Department and the Department's designee to receive testimony and evidence. His report is attached and part of this Order.

FINDINGS OF FACT

American lobsters are managed in accordance with the Interstate Fisheries Management Plan for American Lobster. Summer flounder and black sea bass are managed in accordance with the Interstate Fisheries Management Plan for Summer Flounder, Black Sea Bass and Scup. Each of these plans is approved by the Atlantic States Marine Fisheries Commission as required by the Atlantic Coastal Fisheries Cooperative Management Act. (P.L 103-206).

LOBSTER

The goal of the Interstate Fisheries Management Plan for American Lobster is to increase egg production to increase the population. The plan requires states to implement rules to allow lobster pots to release undersized lobsters through an escape vent and to release all lobsters through a ghost panel if the pot is lost. A maximum size limit is required for lobster pots to prevent larger pots from capturing excessive amounts of lobsters. Trip limits on the number of lobsters allowed to be landed if they are taken in the Exclusive Economic Zone with fishing gear other than pots are required to reduce the number of lobsters harvested in other fisheries. Mature female lobsters carrying eggs are marked and released by New England lobster fishermen by cutting a V-shaped notch in a tail flipper. These V-notched mature female lobsters are thereafter not allowed to be possessed by any one.

Delaware is located near the southern boundary of the American lobster range. In the 1980's, when the lobster population was more abundant, Delaware had an inshore lobster fishery. Lobsters inhabited the rock walls that make up Breakwater Harbor at the south of Delaware Bay.

SUMMER FLOUNDER

The Interstate Fisheries Management Plan for Summer Flounder requires states to commercially land no more than an assigned quota. Delaware is assigned a de minimis commercial quota of 0.1% of the coastwide quota. This is 11,100 pounds. In 1998, Delaware exceeded its commercial quota.

Eighty-five percent of Delaware's commercial landings of summer flounder is by-catch from other gill net fisheries. Increasing the minimum commercial size limit from 14

inches to 15 inches should reduce these by-catch landings of summer flounder to below the 1999 quota of 11,100 pounds.

The coastwide recreational landings of summer flounder have exceeded the plan's harvest cap during the past three years. In 1999, the plan requires states to reduce their summer flounder recreational landings by 40%, relative to 1997 landings based on data from the Marine Recreational Fisheries Statistical Survey conducted by the National Marine Fisheries Service.

Delaware can reduce its recreational landings of summer flounder by 40% with a combination of a minimum size limit, a creel limit and a seasonal closure, using a mathematical model known as the Weibull function.

The estimated age structure of the summer flounder in Delaware in 1999 will only be 10-20% three year old fish which measures 16+ inches. An increase in the current minimum size limit from 15 inches to 16 inches would reduce the harvest but increase the discard mortality of summer flounder smaller than 16 inches. Relatively few 16 inch or larger summer flounder would be harvested.

The average angler harvested less than 3 summer flounder per day in 1997. Decreasing the current creel limit from 8 to any lesser number will not significantly increase the reduction in harvest.

A seasonal closure will reduce the recreational harvest by 40%. The most reduction for the shortest closure would be a closure occurs when the catch rate is the highest in July and August.

Most anglers prefer to retain the current minimum size limit of 15 inches and daily creel limit of 8 on summer flounder with a closed season of July 16 through August 7.

SEA BASS

The Interstate Fisheries Management Plan for Black Sea Bass has a coastwide recreational harvest cap of 3,148,000 pounds for both 1998 and 1999. In 1998, this harvest cap was not landed. In 1999, the two week recreational fishing closure is no longer necessary to keep the recreational landings under the cap.

CONCLUSIONS

LOBSTER

The requirements in the Interstate Fisheries Management Plan for American Lobster for pot design, trip limits and protection of mature female lobsters implemented in Delaware in order to increase the egg supply of American lobsters and expand the stock into Delaware's waters.

SUMMER FLOUNDER

The requirements in the Interstate Fisheries

Management Plan for Summer Flounder to keep commercial landings within Delaware's assigned quota and to reduce the 1999 recreational landings of summer flounder 40% relative to the 1997 landings are necessary to allow the population of summer flounder to recover. The commercial minimum size limit should be raised from 14 inches to 15 inches. The recreational and commercial hook and line minimum size limit of 15 inches should remain unchanged in order to afford anglers the most reasonable expectation of landing a legal size summer flounder. The current creel limit of 8 summer flounder a day for recreational and commercial hook and line fishermen should remain unchanged. A fishing season closure for recreational and commercial hook and line fishermen starting on July 16 through August 7 will reduce the landings of summer flounder by 40%. This three week closure is preferred by most anglers.

BLACK SEA BASS

The recreational fishing season closure can be eliminated without increasing the probability of exceeding the recreational harvest cap in 1999.

ORDER

It is hereby ordered, this day of March, 1999 that amendments to Shellfish Regulation Nos. S-23 and S-25, a new Shellfish Regulation No.S-26, and amendments to Tidal Finfish Regulation Nos. 4 and 23, copies of which are attached hereto, are adopted pursuant to 7 Del.C. § 903(e)(2)(a) and are supported by the Department's findings on the evidence and testimony received. This Order shall become effective on April 10, 1999.

Mary L. McKenzie, Acting Secretary
Department of Natural Resources Environmental Control

Be it adopted by the Department of Natural Resources and Environmental Control the following amendments to Tidal Finfish Regulation Nos. 4 and 23.

Section 1.Amend Tidal Finfish Regulation No. 4 SUMMER FLOUNDER SIZE LIMITS; POSSESSION LIMITS; SEASONS in subsection (a) by striking it in its entirety and substituting in lieu thereof the following: "(a) It shall be unlawful for any recreational fisherman or any commercial hook and line fisherman to take and reduce to possession or to land any summer flounder during the period beginning at 12:01 AM on July 16 and ending at midnight on August 7."

Further amend Tidal Finfish Regulation No. 4 in subsection (d) by striking the words "other than a licensed commercial finfisherman with a gill net permit."

Further amend Tidal Finfish Regulation No. 4 in subsection (e) by striking it in its entirety.

Further amend Tidal Finfish Regulation No. 4 in subsection (g) by striking it in its entirety.

Section 2. Amend Tidal Finfish Regulation No. 23 BLACK SEA BASS SIZE LIMIT; TRIP LIMITS; SEASONS; QUOTAS by striking subsection (b) in its entirety.

Section 3. Effective Date

These amendments to Tidal Finfish Regulation Nos. 4 and 23 shall become effective on April 10, 1999.

Tidal Finfish Regulation No. 4

Tidal Finfish Regulation No. 4 Summer Flounder Size Limits; Possession Limits; Seasons.

a) ~~[It shall be lawful for any person to take and reduce to possession summer flounder from the tidal waters of this State at any time except as otherwise set forth in this regulation. It shall be unlawful for any recreational fisherman or any commercial hook and line fisherman to take and reduce to possession or to land any summer flounder during the period beginning at 12:01 AM on July 16 and ending at midnight on August 7.]~~

b) It shall be unlawful for any recreational fisherman to have in possession more than eight (8) summer flounder at or between the place where said summer flounder were caught and said recreational fisherman's personal abode or temporary or transient place of lodging.

c) It shall be unlawful for any person, other than qualified persons as set forth in paragraph (f) of this regulation, to possess any summer flounder that measure less than fifteen (15) inches between the tip of the snout and the furthest tip of the tail.

d) It shall be unlawful for any person, ~~[other than a licensed commercial fisherman with a gill net permit,]~~ while on board a vessel, to have in possession any part of a summer flounder that measures less than fifteen (15) inches between said part's two most distant points unless said person also has in possession the head, backbone and tail intact from which said part was removed.

~~[e) It shall be unlawful for any licensed commercial finfisherman with a gill net permit to have in possession any part of a summer flounder that measures less than fourteen (14) inches between said part's two most distant points unless said person also has in possession the head, backbone and tail intact from which said part was removed.]~~

f) Notwithstanding the size limits and possession limits in this regulation, a person may possess a summer flounder that measures no less than fourteen (14) inches between the tip of the snout and the furthest tip of the tail and a quantity of summer flounder in excess of the possession limit set forth in this regulation, provided said person has one of the following:

1) A valid bill-of-sale or receipt indicating the date said summer flounder were received, the amount of said summer flounder received and the name, address and signature of the person who had landed said summer flounder;

2) A receipt from a licensed or permitted fish dealer who obtained said summer flounder; or

3) A bill of lading while transporting fresh or frozen summer flounder.

~~[g) Notwithstanding the size limits in this regulation, a person may possess a summer flounder that measures no less than fourteen (14) inches between the tip of the snout and the furthest tip of the tail, provided said person has one of the following:~~

~~1) A valid commercial finfishing license and gill net permit issued by the Department; or~~

~~2) A valid vessel permit issued by the Regional director, NMFS, to fish for and retain summer flounder in the EEZ or a dealer permit issued by the Regional Director or NMFS, as set forth in 50CFR, Part 625.]~~

h) It shall be unlawful for any commercial finfisherman to sell, trade and or barter or attempt to sell, trade and or barter any summer flounder or part thereof that is landed in this State by said commercial fisherman after a date when the de minimis amount of commercial landings of summer flounder is determined to have been landed in this State by the Department. The de minimis amount of summer flounder shall be 0.1% of the coast wide commercial quota as set forth in the Summer Flounder Fishery Management Plan approved by the Atlantic States Marine Fisheries Commission.

i) It shall be unlawful for any vessel to land more than 200 pounds of summer flounder in any one day in this State.

j) It shall be unlawful for any person, who has been issued a commercial foodfishing license and fishes for summer flounder with any food fishing equipment other than a gill net, to have in possession more than eight (8) summer flounder at or between the place where said summer flounder were caught and said persons personal abode or temporary or transient place of lodging.

~~[k) It shall be unlawful for any recreational fisherman or any commercial hook and line fisherman to take and reduce to possession any summer flounder or to land any summer flounder during the periods beginning at 12:01 AM on January 1 and ending at midnight on May 28 and beginning at 12:01 AM on September 12 and ending at midnight on December 31. To land shall mean to bring on shore.]~~

Tidal Finfish Regulation No. 23

Tidal Finfish Regulation No. 23 Black Sea Bass Size Limit; Trip Limits; Seasons; Quotas

a) It shall be unlawful for any person to have in

possession any black sea bass Centropritis striata that measures less than ten (10) inches, total length.

b) ~~It shall be unlawful for any recreational fisherman to take and reduce to possession any black sea bass or to land any black sea bass during the period beginning at 12:01 a.m. on August 1 and ending at midnight on August 15.~~

c) It shall be unlawful for any person to possess on board a vessel at any time or to land after one trip more than on the following quantities of black sea bass during the quarter listed:

First Quarter (January, February and March) – 11,000 lbs.

Second Quarter (April, May and June) – 7,000 lbs.

Third Quarter (July, August and September) – 3,000 lbs.

Fourth Quarter (October, November and December) – 4,000 lbs.

“One trip” shall mean the time between a vessel leaving its home port and the next time said vessel returns to any port in Delaware.”

d) It shall be unlawful for any person to fish for black sea bass for commercial purposes or to land any black sea bass for commercial purposes during any quarter indicated in subsection (c) after the date in said quarter that the National Marine Fisheries Services determines that quarter’s quota is filled.”

Be it adopted by the Department of Natural Resources and Environmental Control the following amendments to Shellfish Regulation Nos. S-23 and S-25 and new Shellfish Regulation No. S-26.

Section 1. Amend Shellfish Regulation No. S-23, LOBSTER-POT DESIGN in subsection (a) by striking the words “one (1) ¾ x 6” and substitute in lieu there of the words “1 15/16 inches by 5 ¾ inches.”

Further amend Shellfish Regulation No. S-23, LOBSTER-POT DESIGN by adding a new subsection (b) to read as follows:

“(b) It shall be unlawful for any person to set, tend or conduct shellfishing for lobsters with any pot or trap, not constructed entirely of wood, excluding heading or parlor twine and the escape vent, that does not contain a ghost panel covering an opening that measures at least 3 ¾ inches by 3 ¾ inches. A ghost panel means a panel, or other mechanism, designed to allow the escapement of lobsters after a period of time if the pot or trap has been abandoned or lost. The panel must be constructed of, or fastened to the pot or trap with, one of the following untreated materials: wood lath, cotton, hemp, sisal or jute twine not greater than 3/16 inch in diameter,

or non-stainless, uncoated ferrous metal not greater than 3/32 inch in diameter. The door of the pot or trap may serve as the ghost panel, if fastened with a material specified in this subsection. The ghost panel must be located in the outer parlor(s) of the pot or trap and not the bottom of the pot or trap.”

Further amend Shellfish Regulation No. S-23, LOBSTER-POT DESIGN by adding a new subsection (c) to read as follows:

“(c) It shall be unlawful for any recreational or commercial lobster pot fisherman to set, tend or conduct shellfishing for lobsters with a lobster pot or trap with a volume larger than 22,950 cubic inches.”

Section 2. Amend Shellfish Regulation No. S-25, LOBSTER-POT SEASON AND LIMITS FOR COMMERCIAL LOBSTER POT LICENSE by adding a new subsection (c) to read as follows:

“(c) It shall be unlawful for any person, licensed to catch or land lobsters for commercial purposes in this State, who uses gear or methods other than pots or traps outside the jurisdiction of this State, to land more than 100 lobsters per day for each day at sea during the same trip up to a maximum of 500 lobsters per trip for trips 5 days or longer.”

Section 3. Add a new Shellfish Regulation No. S-26 to read as follows:

“S-26 POSSESSION OF V-NOTCHED LOBSTERS PROHIBITED

It shall be unlawful for any person to possess a V-notched female lobster. V-notched female lobster means any female lobster bearing a V-notch, a straight-sided triangular cut without setal hairs at least ¼ inch in depth and tapering to a sharp point, in the flipper next to the right of center flipper as viewed from the rear of the female lobster. V-notched female lobster also means any female lobster which is mutilated in a manner which could hide, obscure or obliterate such a mark. The right flipper will be examined when the underside of the lobster is down and its tail is toward the person making the determination.”

Section 4. These amendments to Shellfish Regulation Nos. S-23 and S-25 and new Shellfish Regulation No. S-26 shall become effective on April 10, 1999.

SHELLFISH REGULATION NO. S-23

S-23 LOBSTER-POT DESIGN

(a) It shall be unlawful for any person to set, tend or conduct shellfishing for lobsters with any pot or trap in the waters under the jurisdiction of the State unless said pot or trap has an escape vent, slot or port of not less than ~~one (1) 3/4" x 6"~~ 1 15/16 inches by 5 3/4 inches located in the parlor section of each pot or trap.

"(b) It shall be unlawful for any person to set, tend or conduct shellfishing for lobsters with any pot or trap, not constructed entirely of wood, excluding heading or parlor twine and the escape vent, ~~in the waters under the jurisdiction of this State~~ that does not contain a ghost panel covering an opening that measures at least 3 3/4 inches by 3 3/4 inches. A ghost panel means a panel, or other mechanism, designed to allow the escapement of lobster[s] after a period of time if the pot or trap has been abandoned or lost. The panel must be constructed of, or fastened to the pot or trap with, one of the following untreated materials: wood lath, cotton, hemp, sisal or jute twine not greater than 3/16 inch in diameter, or non-stainless, uncoated ferrous metal not greater than 3/32 inch in diameter. The door of the pot or trap may serve as the ghost panel, if fastened with a material specified in this subsection. The ghost panel must be located in the outer parlor(s) of the pot or trap and not the bottom of the pot or trap."

"(c) It shall be unlawful for any recreational or commercial lobster pot fisherman to [set, tend or conduct shellfishing for lobsters with ~~possess~~] a lobster pot or trap with a volume larger than 22,950 cubic inches."

SHELLFISH REGULATION S-25

S-25 LOBSTERS-POT, SEASON AND LIMITS FOR COMMERCIAL LOBSTER POT LICENSE

(a) It shall be lawful for any person who has a valid Commercial Lobster Pot License to harvest lobsters in the waters under the jurisdiction of the State at any time as permitted by law on any date except Sunday.

(b) It shall be unlawful for any person who has a valid Commercial Lobster Pot License to harvest lobsters in the waters under the jurisdiction of the State at any time as permitted by law on any date except Sunday.

"(c) It shall be unlawful for any person, licensed to catch or land lobsters for commercial purposes in this State, who uses gear or methods other than pots or traps outside the jurisdiction of this State, to land more than 100 lobsters per day for each day at sea during the same trip, up to a maximum of 500 lobsters per trip for trips 5 days or longer."

SHELLFISH REGULATION S-26

S-26 POSSESSION OF V-NOTCHED LOBSTERS PROHIBITED

It shall be unlawful for any person to possess a V-notched female lobster. V-notched female lobster means any female lobster bearing a V-notch, a straight-sided triangular cut without setal hairs at least 1/4 inch in depth and tapering to a sharp point, in the flipper next to the right of center flipper as viewed from the rear of the female lobster. V-notched female lobster also means any female lobster which is mutilated in a manner which could hide, obscure or obliterate such a mark. The right flipper will be examined when the underside of the lobster is down and its tail is toward the person making the determination."

DIVISION OF FISH AND WILDLIFE

Statutory Authority: 7 Delaware Code,
Section 1902(a)(5) (7 Del.C. 1902(a)(5))

Order No. 99-F-0009

SUMMARY OF THE EVIDENCE AND INFORMATION

Pursuant to due notice 2:7 Del. R. 1213-1216, the Department of Natural Resources and Environmental Control proposed to amend Tidal Finfish Regulation No. 10 to increase the minimum size limit and daily creel limit on weakfish for all recreational fishermen from 13 inches and 6 per day to 14 inches and 14 per day. The minimum size limit on weakfish for commercial hook and line fishermen also was proposed to increase from 13 inches to 14 inches. The Department also proposed to add a new Tidal Finfish Regulation No. 26 to establish a 10 fish aggregate daily creel limit on American shad and hickory shad for recreational fishermen. In addition, the Department proposed to amend Tidal Finfish Regulation No. 24 to allow commercial crab pot fishermen and blue crab dredge fishermen to keep foodfish caught in their crab pots and crab dredges.

A public workshop was held on October 26, 1998 to discuss options on the above proposals. A public hearing was held on the preferred options on February 2, 1999 in Dover, Delaware, in front of Charles A. Lesser, Fisheries Administrator for the Department and the Department's designee to receive testimony and evidence. His report is attached and part of this order.

FINDINGS OF FACT

Weakfish are managed in accordance with the Interstate Fisheries Management Plan for weakfish approved by the

Atlantic States Marine Fisheries Commission. This is required by the Atlantic Coastal Fisheries Cooperative Management Act (P.L. 103-206). Amendment 3 to this plan requires each state to reduce the weakfish fishing mortality rate to 0.76 in 1999. The plan's goal is to reduce the fishing mortality rate to 0.5 by 2000. This five year plan is effective and the recovery of the weakfish population is on schedule. The age structure of the current weakfish population has a significant number of 14 inch fish.

In order to remain on schedule for reducing the fishing mortality rate in 1999 to 0.76, the recreational fishing mortality rate must be reduced 30% relative to that of 1998. The commercial hook and line fishing mortality rate for weakfish also must be reduced by 30%. These percent reductions are realized by a combination of minimum size and creel limits for recreational fishermen and a combination of minimum size limits and seasonal closure dates for the commercial hook and line fishery.

The combination of a minimum size limit and daily creel limits of 12 and 4; 13 and 6 and 14 and 14 are equivalent to reduce the rate of recreational fishing mortality on weakfish by 30%. The combination of a minimum size limit of 14 inches and a three day per week closure during May through October for commercial hook and line fishermen will reduce the rate of fishing mortality by 30%.

The minimum size limit in New Jersey for weakfish is 14 inches. Delaware should have the same minimum size as New Jersey since fishermen may routinely fish in each state during the same boat fishing trip.

Delaware recreational anglers and commercial hook and line fishermen are indistinguishable while fishing. If they do not have the same minimum size limit, conflict escalates between them and enforcement is compromised.

Commercial hook and line fishermen offered no economic evidence to substantiate their claim of needing to harvest weakfish less than 14 inches in total length.

Most recreational fishermen support a 14 inch minimum size limit and a 14 fish per day creel limit for weakfish in 1999.

The closed season (days) on weakfish for all gear, except a hook and line, in the Ocean and Delaware Bay should remain at 34 days in 1999, similar to the same days closed in May and June in 1998. This will meet the plan's requirements to reduce the fishing mortality rate by 30% for all fishing gear.

FOODFISH IN CRAB POTS AND DREDGES

Commercial blue crab gear, namely crab pots and dredges, occasionally capture foodfish. These foodfish are routinely kept for consumption or sale. The market for oyster toadfish has increased greatly in the last decade. Oyster toadfish are now targeted by pot and dredge fishermen. Other bottom dwelling foodfish, i.e. black

seabass, summer flounder and tautog are readily captured in crab pots. Black seabass, summer flounder and tautog populations are depressed, while the oyster toadfish population is not known to be depressed at this time.

No one objected to allowing commercial crab pot fishermen and commercial blue crab dredge fishermen to retain oyster toadfish and other foodfish not known to have a depressed population.

SHAD

American shad and hickory shad are managed in accordance with the Interstate Fisheries Management Plan for American Shad and River Herring, approved by the Atlantic States Marine Fisheries Commission. This is required by the Atlantic Coastal Fisheries Cooperative Management Act (P.L. 103-206). Amendment 1 to this plan requires each state to implement a recreational creel limit on American Shad and hickory shad, in aggregate, of 10 per day.

No one objected to an aggregate daily creel limit of 10 American shad and river herring.

CONCLUSIONS

WEAKFISH

The minimum size limit on weakfish for all recreational fishermen and commercial hook and line fishermen should be the same. The size limit in Delaware should be the same as New Jersey, provided there is an ample number of weakfish above the minimum size limit to harvest. This minimum size limit should be 14 inches which allows for a larger creel limit for recreational fishermen. The 34 closed days for all fishing gear, except a hook and line, should be similar to the 1998 closure on weakfish.

FOODFISH IN CRAB POT AND DREDGES

Oyster toadfish and other foodfish which are not known to have depressed populations should be allowed to be harvested when captured in crab pots and blue crab dredges.

SHAD

American shad and hickory shad should have an aggregated daily creel limit of 10 for recreational fishermen.

ORDER

It is hereby ordered, this 23rd day of February, 1999 that Tidal Finfish Regulations and amendments thereto for Nos. 10, 24 and 26, copies of which are attached hereto, are

adopted pursuant to 7 Del. §903 (e)(2)(a) and 7 Del. C §903 (e)(1)(c) and are supported by the Department's findings on the evidence and testimony received. This Order shall become effective on April 10, 1999.

Mary L. McKenzie, Acting Secretary
Department of Natural Resources and Environmental Control

Be it adopted by the Department of Natural Resources and Environmental Control the following amendments to Tidal Finfish Regulation Nos. 10 and 24 and new Tidal Finfish Regulation No. 26.

Section 1. Amend TIDAL FINFISH REGULATION NO. 10, WEAKFISH SIZE LIMITS; POSSESSION LIMITS; SEASONS in subsection (a) by striking the words "thirteen (13)" as they appear therein and substitute in lieu thereof the words "fourteen (14)."

Further amend TIDAL FINFISH REGULATION NO. 10 in subsections (b),(d),(f) and (g) by striking the words "six (6)" as they appear therein and substitute in lieu thereof the words "fourteen (14)."

Further amend TIDAL FINFISH REGULATION NO. 10 in subsection (e) by striking the words,

"Beginning at 12:01 AM on May 1, 1998 and ending at midnight on May 10, 1998;
beginning at 12:01 AM on May 15, 1998 and ending at midnight on May 17, 1998;
beginning at 12:01 AM on May 22, 1998 and ending at midnight on May 24, 1998;
beginning at 12:01 AM on May 29, 1998 and ending at midnight on May 31, 1998;
beginning at 12:01 AM on June 5, 1998 and ending at midnight on June 7, 1998;
beginning at 12:01 AM on June 12, 1998 and ending at midnight on June 14, 1998;
beginning at 12:01 AM on June 19, 1998 and ending at midnight on June 21, 1998;
and beginning at 12:01 AM on June 25, 1998 and ending at midnight on June 30, 1998." and substitute in lieu thereof the words,

"Beginning at 12:01 AM on May 1, 1999 and ending at midnight on May 9, 1999,
beginning at 12:01 AM on May 14, 1999 and ending at midnight on May 16, 1999,
beginning at 12:01 AM on May 21, 1999 and ending at midnight on May 23, 1999,
beginning at 12:01 AM on May 28, 1999 and ending at midnight on May 30, 1999,
beginning at 12:01 AM on June 4, 1999 and ending at midnight on June 6, 1999,
beginning at 12:01 AM on June 11, 1999 and ending at

midnight on June 13, 1999,
beginning at 12:01 AM on June 18, 1999 and ending at midnight on June 20, 1999,
beginning at 12:01 AM on June 24, 1999 and ending at midnight on June 30, 1999."

Section 2. Amend TIDAL FINFISH REGULATION No. 24, FISH POT REQUIREMENTS by adding new subsections to read as follows:

"(c) It shall be lawful for any person to take and reduce to possession any foodfish, except tautog, black seabass or summer flounder, when said foodfish is caught in his/her crab pot provided said foodfish is not otherwise illegal to possess at that time.

(d) It shall be lawful for any person to take and reduce to possession any foodfish, except tautog, black seabass or summer flounder, when said foodfish is caught in his/her blue crab dredge provided said foodfish is not otherwise illegal to possess at that time."

Section 3. Enact a new TIDAL FINFISH REGULATION to read as follows:

"TIDAL FINFISH REGULATION NO. 26, AMERICAN SHAD AND HICKORY SHAD CREEL LIMITS"

(a) It shall be unlawful for any person who does not have a valid commercial foodfishing license to have in possession more than an aggregate of ten (10) American shad and hickory shad at or between the place caught and his/her personal abode or transient place of lodging."

TIDAL FINFISH REGULATION NO. 10

TIDAL FINFISH REGULATION 10. WEAKFISH SIZE LIMITS; POSSESSION LIMITS; SEASONS.

a) It shall be unlawful for any person to possess weakfish *Cynoscion regalis* taken with a hook and line, that measure less than ~~thirteen (13)~~ fourteen (14) inches total length.

b) It shall be unlawful for any person to whom the Department has issued a commercial food fishing license and a food fishing equipment permit for hook and line to have more than ~~six (6)~~ fourteen (14) weakfish in possession during the period beginning at 12:01 AM on May 1 and ending at midnight on October 31 except on four specific days of the week as indicated by the Department on said person's food fishing equipment permit for hook and line.

c) It shall be unlawful for any person, who has been issued a valid commercial food fishing license and a valid food fishing equipment permit for equipment other than a

hook and line to possess weakfish, lawfully taken by use of such permitted food fishing equipment, that measure less than twelve (12) inches, total length.

d) It shall be unlawful for any person, except a person with a valid commercial food fishing license, to have in possession more than ~~six (6)~~ fourteen (14) weakfish, not to include weakfish in one's personal abode or temporary or transient place of lodging. A person may have weakfish in possession that measure no less than twelve (12) inches, total length, and in excess of ~~six (6)~~ fourteen (14) if said person has a valid bill-of-sale or receipt for said weakfish that indicates the date said weakfish were received, the number of said weakfish received and the name, address and signature of the commercial food fisherman who legally caught said weakfish or a bill-of-sale or receipt from a person who is a licensed retailer and legally obtained said weakfish for resale.

e) It shall be unlawful for any person to fish with any gill net in the Delaware Bay or Atlantic Ocean or to take and reduce to possession any weakfish from the Delaware Bay or the Atlantic Ocean with any fishing equipment other than a hook and line during the following periods of time:

~~“Beginning at 12:01 AM on May 1, 1998 and ending at midnight on May 10, 1998;
beginning at 12:01 AM on May 15, 1998 and ending at midnight on May 17, 1998;
beginning at 12:01 AM on May 22, 1998 and ending at midnight on May 24, 1998;
beginning at 12:01 AM on May 29, 1998 and ending at midnight on May 31, 1998;
beginning at 12:01 AM on June 5, 1998 and ending at midnight on June 7, 1998;
beginning at 12:01 AM on June 12, 1998 and ending at midnight on June 14, 1998;
beginning at 12:01 AM on June 19, 1998 and ending at midnight on June 21, 1998;
and beginning 12:01 AM on June 25, 1998 and ending at midnight on June 30, 1998.”~~

“Beginning at 12:01 AM on May 1, 1999 and ending at midnight on May 9, 1999,
beginning at 12:01 AM on May 14, 1999 and ending at midnight on May 16, 1999,
beginning at 12:01 AM on May 21, 1999 and ending at midnight on May 23, 1999,
beginning at 12:01 AM on May 28, 1999 and ending at midnight on May 30, 1999,
beginning at 12:01 AM on June 4, 1999 and ending at midnight on June 6, 1999,
beginning at 12:01 AM on June 11, 1999 and ending at midnight on June 13, 1999,
beginning at 12: 01 AM on June 18, 1999 and ending at midnight on June 20, 1999,

beginning at 12:01 AM on June 24, 1999 and ending at midnight on June 30, 1999.”

f) The Department shall indicate on a persons food fishing equipment permit for hook and line four (4) specific days of the week during the period May 1 through October 31, selected by said person when applying for said permit, as to when said permit is valid to take in excess of ~~six (6)~~ fourteen (14) weakfish per day. These four days of the week shall not be changed at any time during the remainder of the calendar year.

g) It shall be unlawful for any person with a food fishing equipment permit for hook and line to possess more than ~~six (6)~~ fourteen (14) weakfish while on the same vessel with another person who also has a food fishing equipment permit for hook and line unless each person's food fishing equipment permit for hook and line specifies the same day of the week in question for taking in excess of ~~six (6)~~ fourteen (14) weakfish.

TIDAL FINFISH REGULATION NO. 24

TIDAL FINFISH REGULATION NO. 24 FISH POT REQUIREMENTS.

a) It shall be unlawful for any person to fish, set, place, use or tend any fish pot in the tidal waters of this state unless said fish pot has an escape vent placed in a lower corner of the parlor portion of said pot which complies with one of the following minimum sizes: 1.125 inches by 5.75 inches; or a circular vent 2 inches in diameter; or a square vent with sides of 1.5 inches, inside measure. Pots constructed of wooden lathes must have spacing of at least 1.125 inches between one set of lathes.

b) It shall be unlawful for any person to fish, set, place, use or tend any fish pot in the tidal waters of this state unless said fish pot contains a panel (ghost panel) measuring at least 3.0 inches by 6.0 inches affixed to said pot with one of the following degradable materials:

- 1.) Untreated hemp, jute or cotton string of 3/16 inches diameter or smaller; or
- 2.) Magnesium alloy timed float release (pop-up devices) or similar magnesium alloy fasteners; or
- 3.) Ungalvanized or uncoated iron wire of 0.094 inches diameter or smaller.

c) It shall be lawful for a person ~~fwith a valid commercial crab pot license~~ to take and reduce to possession any food fish [except tautog, black seabass or summer flounder, when said foodfish is] caught in his/her ~~fcommercial~~ crab pot~~f~~ provided said food fish is [not] otherwise [illegal ~~legal~~] to possess at that time].

d) It shall be lawful for a person ~~fwith a valid commercial crab dredgers license~~ to take and reduce to possession any food fish [except tautog, black seabass or

summer flounder, when said foodfish is] caught in his/her [blue] crab dredge provided said food fish is [not] otherwise [illegal ~~legal~~ to possess at that time].

TIDAL FINFISH REGULATION NO. 26 AMERICAN SHAD AND HICKORY SHAD CREEL LIMITS.

(a) It shall be unlawful for any person who does not have a valid commercial foodfishing license to have in possession more than an aggregate of ten (10) American shad and hickory shad at or between the place caught and his/her personal abode or transient place of lodging.

PUBLIC SERVICE COMMISSION

**IN THE MATTER OF THE
PROMULGATION OF RULES
REGARDING THE DISCOUNTS
FOR INTRASTATE
TELECOMMUNICATIONS
AND INFORMATION SERVICES
PROVIDED TO SCHOOLS AND
LIBRARIES
(OPENED JUNE 17, 1997)**

PSC
REGULATION
DOCKET NO. 47

ORDER NO. 5034

This 9th day of March, 1999, the Commission finds, determines, and Orders the following:

I. INTRODUCTION and BACKGROUND

1. By this Order, the Commission amends Rule 1.2 of its "Interim Rules for the Determination of Intrastate Discounts For Services Provided to Elementary and Secondary Schools and Libraries For Purposes of Receipt of Federal Universal Service Support" ("S&L Rules") to delete language which could be construed to sunset the S&L Rules on December 31, 1998. The Commission previously made such a change, on an emergency basis,¹ by PSC Order No. 4984 (Dec. 15, 1998).² The Commission now makes that change permanent, substituting language into Rule 1.2 which will allow the S&L Rules to continue in effect until further Order of the Commission.

2. In PSC Orders Nos. 4601 (Sept. 23, 1997) and 4984 (Dec. 15, 1998), the Commission reviewed how Congress, in

the federal Telecommunications Act of 1996³ directed that both interstate and intrastate telecommunications services be provided to eligible elementary and secondary schools and libraries at discounted prices. Here this Commission also explained how the Federal Communications Commission, in its 1997 Universal Service Fund Order, enticed the states to provide discounts on intrastate services comparable to those available for interstate services by offering federal universal support reimbursement for intrastate services if a state commission would set intrastate discounts as deep as those applied to interstate services.

3. This Commission accepted the federal offer by initially adopting a comparable intrastate discount matrix in PSC Order No. 4555 (July 15, 1997), and by soon thereafter promulgating the S&L Rules (with an included discount matrix). PSC Order No. 4601 (Sept. 23, 1997). One rule, Rule 1.2, included a sunset date for the S&L Rules of December 31, 1998. The purpose was to push the Commission to revisit the rules after schools, libraries, and carriers had gained some hands-on experience with the discounts and the federal reimbursement procedures.

4. As explained in PSC Order No. 4984 and the memorandum from Staff submitted here (Exh. 4), the federal program did not get off the ground as quickly as had been anticipated in 1997. Indeed, the first wave of federal support was not committed until late in 1998. In light of that, and to ensure that carriers providing services to Delaware schools and libraries could continue to secure reimbursement, the Commission amended Rule 1.2, on an emergency basis, to delete the December 31, 1998 sunset date for the S&L Rules. PSC Order No. 4984 (Dec. 15, 1998). At the same time, the Commission also gave notice in the Delaware Register of Regulations of its intent to make such emergency revision a permanent one. By notice in the Register (2:7 Del. R. 1220 (Jan. 1, 1999) and in two newspapers (Exhs. 1 & 2), the Commission solicited written comments and announced a February 16, 1999 public hearing on the proposed permanent change.

II. EVIDENCE

5. The Division of Libraries of the Delaware Department of State was the only entity or person to submit written comments during the comment period. In a letter, that agency expressed its support for the proposed amendment so that Delaware libraries could continue to receive discounted telecommunications services reimbursed with federal universal service monies. Exh. 3.

6. At the public hearing, a representative of Bell

1. 29 Del. C. § 10119.

2. 2:7 Del. R. 1057 (Jan. 1, 1999).

3. 47 U.S.C. § 254(h)(1)(B), (h)(2)(A).

Atlantic-Delaware, Inc., ("BA-Del") appeared. In its oral presentation and by written letter (Exh. 5), BA-Del also voiced support for the proposed revision. The Division of the Public Advocate also supported the removal of the sunset date. No other person nor entity appeared to offer comments or information.

7. After receiving such comments and the memorandum of Staff (Exh. 4), the Commission (with Commissioner McRae absent) voted to amend Rule 1.2 of the S&L Rules to delete the December 31, 1998 sunset date and to insert language to allow the S&L Rules to continue until further Order of the Commission.

III. FINDINGS

8. The Commission finds that it is in the public interest to delete the provisions of Rule 1.2 as originally adopted. The removal of the sunset date originally included in that Rule will preclude any argument that Delaware schools and libraries are no longer eligible for federal universal service support because the S&L Rules - and the intrastate service discount included therein - lapsed on December 31, 1998. The removal of the sunset date will allow the S&L Rules (and the included intrastate service discount matrix) to continue in effect. At the same time, the Commission retains the authority to revisit the S&L Rules after Delaware schools and libraries, and the carriers providing discounted services, gain more experience with the federal support program. Thus, the Commission now confirms as a permanent revision the language adopted, on an emergency basis, for Rule 1.2 in PSC Order No. 4984.

NOW, THEREFORE, IT IS ORDERED:

1. That Rule 1.2 of the "Interim Rules for the Determination of Intrastate Discounts For Services Provided to Elementary and Secondary Schools and Libraries For Purposes of Receipt of Federal Universal Service Support," as adopted by PSC Order No. 4601 (Sept. 23, 1997), is hereby deleted in its entirety and replaced by the following new Rule 1.2:

1.2 Duration

These rules shall govern the intrastate discounts for services provided by telecommunications carriers to eligible schools and libraries for the period from the effective dates of these rules until further action of the Commission. The Commission may hereafter alter, amend, or repeal these rules.

2. That, the Secretary shall forthwith forward a copy of this Order to the Registrar of Regulations for publication

in the next edition of the Delaware Register of Regulations.

3. That the amendment set forth in paragraph one shall become effective ten days after publication in the Delaware Register of Regulations. Until the above revision becomes effective, the emergency amendment adopted by PSC Order No. 4984 (Dec. 15, 1998) shall remain in effect.

4. That the Secretary shall provide a copy of this Order to all persons or entities who filed comments or appeared at the public hearing concerning this amendment.

5. That the Commission reserves the jurisdiction and authority to enter such further Orders in this matter as may be deemed necessary or proper.

BY ORDER OF THE COMMISSION:

***Please note that no changes were made to the regulation as originally proposed and published in the January 1999 issue of the Register at page 1220 (2:7 Del.R. 1220). Therefore, the final regulation is not being republished. Please refer to the January 1999 issue of the Register or contact the Public Service Commission.**

**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
DOVER**

**EXECUTIVE ORDER
NUMBER FIFTY-NINE**

TO: HEADS OF ALL STATE DEPARTMENTS,
AGENCIES, AND AUTHORITIES, AND ALL
POLITICAL SUBDIVISIONS AND
GOVERNMENTAL UNITS OF THE
STATE OF DELAWARE

RE: RECONSTITUTING THE EDUCATION
SALARY SCHEDULE IMPROVEMENT
COMMITTEE AS THE EDUCATION
COMPENSATION COMMITTEE

WHEREAS, the Education Salary Schedule Improvement Committee was originally created by Executive Order 50;

WHEREAS, the Education Salary Schedule Improvement Committee reported its recommendations to the Governor in December, 1998;

WHEREAS, the recommendations focused exclusively on teachers and other 10 month professionals;

WHEREAS, the Governor accepted the recommendations of the Education Salary Schedule Improvement Committee,

WHEREAS, the compensation and professional development system for school administrators and Department of Education employees also needs to be reviewed;

WHEREAS, the Professional Accountability plan has recommendations for a new certification and re-certification process which may have salary implications; and

WHEREAS, individual school employee accountability criteria and parameters need to be developed.

NOW, THEREFORE, I, Thomas R. Carper, by the authority vested in me as Governor of the State of Delaware, do hereby declare and order as follows:

1. The Education Compensation Committee shall be reconstituted and shall consist of the original membership of the Education Salary Schedule Committee: five members appointed by the Governor, the President of the Delaware State Education Association (DSEA), or her designee; the

Executive Director of the DSEA, or his designee; the Chairpersons of the Joint Finance Committee, or their respective designee, the Chairperson of the Professional Standards Council, or her designee; and the President of the Delaware Chief School Officers Association, or her designee. The Committee shall also include the President of the Delaware Association of School Administrators (DASA), or her designee; the Executive Director of the DASA or his designee, and the Executive Director of the Delaware School Boards Association, or her designee.

2. The Committee shall address salary schedules and professional development for school administrators and employees of the Department of Education and present its recommendations to the Governor.

3. The Committee shall review the Professional Accountability Plan that was submitted to the General Assembly on January 30, 1999, to evaluate the salary implications of the certification and re-certification proposals.

4. The Committee shall review details associated with the proposed Skills and Knowledge Supplement column to ensure consistency with the intent of the Education Salary Schedule Improvement Committee's recommendations.

5. The Committee shall develop preliminary criteria for individual teacher accountability.

6. The Committee shall consider the potential consequences on individuals employed by schools which lose accreditation under the State's accountability plan.

7. The Department of Education and the State Budget Office shall provide staff assistance to the Committee.

Approved this 8th day of March, 1999

Thomas R. Carper
Governor

Attest:

Edward J. Freel
Secretary of State

GOVERNOR'S APPOINTMENTS

1909

BOARD/COMMISSION OFFICE	APPOINTEE	TERM OF OFFICE
Advisory Council for Exceptional Citizens	Ms. Genevieve Marino	Pleasure of the Governor
	Ms. Diane Merritt	Pleasure of the Governor
	Ms. Melissa Shahan	Pleasure of the Governor
Advisory Committee on Information Services	Dr. Robert D. Smith	Pleasure of the Governor
Advisory Panel on Intergovernmental Planning & Coordination	Mr. R. Thorpe Moeckel	01/08/02
Board of Examiners of Psychologists	Dr. Constance Dancu	01/15/02
	Mr. William Ulmer	01/26/02
Board of Funeral Services	Ms. Kelly Anne Pepper	01/08/02
Board of Landscape Architecture	Mr. Paul DeVilbiss	01/26/02
Board of Nursing	Ms. Deborah A. Maichle	03/06/01
Board of Professional Counselors of Mental Health	Ms. Joan T. McDonough	01/08/02
Board of Registration of Geologists	Mr. Jerome Cooper	01/08/02
	Mr. R. Peder Hansen	01/08/02
	Mr. Theodore W. Ressler	01/08/02
	Mr. Eric J. Trinkle	01/08/02
Board of Veterinary Medicine	Dr. John T. Gooss	01/29/02
Committee on Massage/Bodywork Practitioners	Ms. Vivian L. Cebrick	02/23/02
Council on Alcoholism, Drug Abuse & Mental Health	Ms. Janet F. Arns	01/08/02
	Ms. Julia S. Loescher	01/08/02
Council on Long Term Care Facilities	Ms. Carolee Burton Kunz	01/26/02
	Mr. Stuart Levine	01/26/02
	Mr. McKinley Wardlaw, Jr.	01/15/02
Council on Social Services	Ms. Leslie C. Wilkinson	01/26/02
Council on State Service Centers	Dr. Edward Goate	01/29/02
	Dr. Jaime Rivera	01/29/02
	Mr. Theodore Van Name	01/29/02
Council on Volunteer Services	Colonel Peter K. Sullivan	02/18/01

GOVERNOR'S APPOINTMENTS

BOARD/COMMISSION OFFICE	APPOINTEE	TERM OF OFFICE
Delaware Commission for Women	Ms. Renee Du Jean	01/26/02
	Ms. Beverly Stewart	01/26/02
Delaware Commission on Interstate Cooperation	Mr. Jeffrey W. Bullock	01/15/02
Delaware Commission on Veterans Affairs	Mr. Robert E. Barnett	01/08/03
	Mr. Gary M. Morris	01/08/03
	Mr. George Webb	01/29/03
Delaware Greenways & Trails Council	Mr. William H. Willis	03/05/02
	Ms. Diane Wilson	03/05/02
Delaware Health Care Commission	Dr. Jacquelyne W. Gorum	03/05/03
	Dr. Joseph A. Lieberman	03/05/03
	Mr. Robert F. Miller	03/05/03
Delaware Institute of Medical Education & Research	Dr. William A. Newcomb	01/08/02
Delaware Qualified Tuition Savings Board	Mr. William N. Spiker	03/05/02
Family Court of the State of Delaware	Honorable Kenneth M. Millman, Associate Judge	02/12/11
	Mr. John R. Carrow, Commissioner	02/03/03
	Ms. Carolee M. Grillo, Esq., Commissioner	02/03/03
	M. DeSales Haley, Esq., Commissioner	02/03/03
	Ms. Mary Ann H. Herlihy, Esq., Commissioner	02/03/03
	Ms. Mary Susan Much, Esq., Commissioner	02/03/03
	Ms. Martha F. Sackovich, Esq., Commissioner	02/03/03
Ms. Patricia Tate Stewart, Commissioner	02/03/03	
Human Relations Commission	Ms. Sharon W. Yarborough	03/31/99
Justice of the Peace Court of the State of Delaware	Hon. Thomas E. Cole	02/03/05
Public Service Commission	Dr. Donald J. Puglisi	02/03/04
Unemployment Compensation Advisory Council	Mr. Robert L. Byrd	03/12/02
	Mr. Allen S. Hedgecock	03/12/02
	Mr. Edward F. Peterson	03/12/02
University of Delaware Board of Trustees	Dr. Patricia DeLeon	02/03/05

**DEPARTMENT OF NATURAL
RESOURCES AND
ENVIRONMENTAL CONTROL****Delaware's State Implementation Plan (SIP) Revision
For the Implementation of the National Low Emission
Vehicle (NLEV) Program**

Secretary's Order No. 99-A-0007

Re: Revisions to the SIP Plan for the Attainment and
Maintenance of the Ozone Air Quality Standard
relating to the National Low Emission Vehicle Program

Date of Issuance: February 25, 1999

I. Background

On Tuesday, February 16, 1999, a public hearing was held at the DNREC Priscilla Building at 156 S. State Street in Dover at approximately 6:00 p.m. The public hearing concerned a proposed revision to the State Implementation Plan for the Attainment and Maintenance of the Ozone Air Quality Standard relating to the National Low Emission Vehicle Program. Proper notice of the hearing was provided as required by law, including publication in the Delaware Register of Regulations. Absolutely no members of the public attended the public hearing or submitted any written comments pertaining thereto. The Hearing Officer prepared a Hearing Officer's Memorandum dated February 23, 1999, and that Memorandum is expressly incorporated herein.

II. Findings

1. Proper notice of the public hearing was provided as required by law, including publication in the Delaware Register of Regulations.

2. No members of the public appeared at the public hearing.

3. No changes were made to this proposal after it was put out to public notice.

4. During 1998, the 8-hour National Ambient Air Quality Standards for ozone was exceeded on 34 days statewide and on 21 of these days, exceedances were recorded on more than one of Delaware's six ozone monitoring sites.

5. Implementing the NLEV Program will significantly aid the State of Delaware in its efforts to achieve and maintain the National Ambient Air Quality Standard for ozone, by reducing the in-use emissions of air contaminants from gasoline-fueled motor vehicles.

6. Reducing ozone levels in Delaware will improve air quality and protect the health and welfare of Delaware citizens.

7. Implementing the NLEV Program will result in benefits to the healthfulness of the air quality in Delaware that would not otherwise be possible.

8. Implementing the NLEV Program involves the expenditure of no Delaware resources and may only slightly increase the cost of vehicles in states within the Ozone Transport Commission during 2 model years.

9. The benefits from the NLEV Program on the healthfulness of the air quality in Delaware due to reduction in ozone significantly outweigh the potential slight increase in costs for the purchase of vehicles during the 1999 and 2000 model years.

10. Beginning with model year 2001, all vehicles produced nationwide will be subject to the NLEV program, and there will be no difference in the purchase price of new vehicles due to the NLEV program between states in the Ozone Transport Region and other parts of the United States.

11. The NLEV Program is not a regulation in its traditional sense but public involvement and awareness was solicited by implementation of this project in the manner applicable to regulations.

12. Because of resulting significant benefits to the air quality in Delaware, implementation of the NLEV Program should further the policies and purposes of 7 Del. C. Chapter 60.

III. Order

In view of the above findings, it is hereby ordered that the State Implementation Plan be amended to include the National Low Emissions Vehicle Program attached hereto as Attachment A.

IV. Reasons

Incorporating the National Low Emissions Vehicle Program into the State Implementation Plan further the policies and purposes of 7 Del. C. Chapter 60 by reducing ozone and resulting in benefits to the healthfulness of the air quality in Delaware that would not otherwise be possible.

Mary L. McKenzie, Acting Secretary

On June 6, 1997, in recognition of the progress made between the twelve States and the District of Columbia which comprise the northeast Ozone Transport Commission (the OTC States) and the automobile manufacturers in developing an NLEV program, the EPA finalized the main regulatory framework rules for the NLEV program. For the details of this action, see 62 Fed. Reg. 31192. On January 7, 1998, EPA finalized its supplemental NLEV program rules

addressing the reciprocal commitments necessary to effectuate the NLEV program. See 63 Fed. Reg. 926. These rules established voluntary exhaust emissions standards for new light-duty vehicles that are not quite as stringent as those of the California Low Emission Vehicle (CAL-LEV) program. The CAL-LEV program was provided as an option to any State under Section 177 of the Clean Air Act as Amended in 1990, which is nonattainment of the ozone standard. The EPA has determined that implementation of these voluntary standards on a national basis under the NLEV program would provide emissions benefits to the OTC States substantially equivalent to those obtainable from the implementation of the CAL-LEV program in all of the OTC States (the OTC-LEV program), due to the expanse of the program. Further, the standards, which are applicable in the OTC States starting with the 1999 model year and in the remaining states except for California starting with the 2001 model year, are more stringent than those standards that the EPA is authorized to mandate for implementation prior to the 2004 model year. Generally, this program will be in effect until 2006.

By letter dated January 14, 1998, Governor Thomas Carper advised EPA Administrator Carol Browner of Delaware's commitment to the NLEV program. The letter also directed Secretary Tulou to complete the State's opt-in by taking the necessary steps to adopt appropriate regulations and submit the requisite state implementation plan (SIP) revision committing the State to NLEV in accordance with the EPA NLEV regulations. These EPA NLEV regulations specify that the states shall submit their SIP revisions to the EPA by March 1, 1999. This action allows for more substantive public awareness than the singular action taken by the Governor to participate in the NLEV Program. Any action more stringent than the action taken herein is expected to require specific authority by the Legislature of the State of Delaware.

On March 2, 1998, after having received notifications from all manufacturers that they voluntarily opted into the NLEV program, the EPA made its finding that the NLEV program is in effect starting in the OTC States with the 1999 model year and in the remainder of the Nation (except for California) with the 2001 model year. See 63 Fed. Reg. 11374.

Social Impact

Implementation of the NLEV program by EPA will significantly aid the State of Delaware in its efforts to achieve and maintain the NAAQS for ozone by reducing the in-use emissions of air contaminants from gasoline-fueled motor vehicles, and thereby make the air in Delaware more healthful than would otherwise be possible.

Motor vehicles are significant contributors of carbon monoxide, volatile organic compounds (VOCs) and oxides

of nitrogen (NO_x). In the presence of sunlight, VOCs, NO_x and other compounds in the ambient air react to form ozone. VOCs are a subcategory of a much broader spectrum of organic chemical compounds, including hydrocarbons (HCs). HCs are compounds composed of only hydrogen and carbon atoms.

Carbon monoxide is a poisonous gas at certain threshold levels. It is absorbed into the bloodstream and may have both direct and indirect effects on the cardiovascular system. This poisonous gas interferes with the oxygen-carrying ability of the blood. Exposure to CO aggravates angina and other aspects of coronary heart disease and decreases exercise tolerance in persons with cardiovascular problems. In fetuses, infants, elderly persons, and individuals with respiratory diseases, elevated levels of CO are also a serious health risk.

NO_x by themselves exhibit serious human health effects. For example, although nitric oxide (NO) itself is a relatively nonirritating gas, it is readily oxidized to nitrogen dioxide (NO_2), which can damage respiratory defense mechanisms, allowing bacteria to proliferate and invade the lung tissue. NO_x cause irritation to the lungs, lower resistance to respiratory infections, and contribute to the development of emphysema, bronchitis, and pneumonia. NO_x also react chemically in the air to form nitric acid, which contributes to acid rain formation.

Some VOCs, including benzene, formaldehyde and 1,3-butadiene, are classified as air toxics. They have been associated with the onset of cancer and other adverse health effects. As is mentioned above, VOCs participate in photochemical reactions with NO_x to create ozone and other oxidants harmful to health. Ground level ozone is a major public health problem in Delaware. Studies have proven that ozone has severe and debilitating effects on lung capacity and can have detrimental effects on respiration. A series of EPA studies indicate that ozone exposures as low as 0.08 ppm, which is the newly-promulgated 8-hour National Ambient Air Quality Standard (NAAQS) for ozone, can impair lung function. Even at low levels, ozone can cause average humans to experience breathing difficulty, chest pains, coughing and irritation to the nose, throat and eyes. For individuals who already experience respiratory problems or who are predisposed to respiratory ailments, these symptoms can become much more severe, forcing those individuals to alter their lifestyles to avoid unnecessary exposure.

In addition, chronic ozone exposure studies performed on laboratory animals indicate that long-term exposure to ozone affects lung physiology and morphology. These studies suggest that humans exposed to ozone over prolonged periods of time can experience chronic respiratory injuries resulting in premature or accelerated aging of human lung tissue.

During the May to October ozone season of this year, the 8-hour National Ambient Air Quality Standard (NAAQS) for ozone was exceeded on 34 days, statewide, with 21 of these same days recording exceedances at more than one of the State's six (6) ozone monitoring sites. It is clear, therefore, that the ozone levels in Delaware must be reduced in order to protect the health and welfare of the residents of the State. While the State has never violated the NAAQS for CO, it is critical that we continue to maintain this important health standard.

Economic Impact

It is expected that the cost of some motor vehicles produced under the NLEV Program may increase slightly over a comparable vehicle not produced under the NLEV Program, but that differential, if any, will only impact model year (MY) 1999 and 2000 vehicles. Beginning with MY 2001, all vehicles produced nationwide will be subject to the NLEV program. The early introduction of the NLEV to the northeast is in recognition of that area's experience with higher ozone concentrations than the balance of the nation, except for California.

Environmental Impact

The implementation of these amendments will have a positive impact on the environment by reducing the emissions of VOCs, and NO_x, thereby reducing the formation of ground-level ozone, and by reducing the emissions of CO. The primary impact of both ground-level ozone and CO is upon human health and well-being. In addition to human health effects, studies have shown that increasing ozone levels damage foliage. One of the earliest and most obvious manifestations of ozone impact on the environment is this type of damage to sensitive plants. Subsequent effects include reduced plant growth and decreased crop yield. A reduction in ambient ozone concentrations will mitigate damage to foliage, fruits, vegetables and grain. Considering Delaware's vast agricultural activity, this is an important factor in determining overall impact.

Decreased ozone levels will also reduce the level of the degradation of various man-made materials, such as rubber, plastics, dyes and paints. This degradation is caused by the oxidizing properties of ozone. However, if the photochemical production of ground-level ozone can be limited, as it will be with the implementation of the proposed amendments, this degradation can be significantly reduced.

Regulatory Requirements

This program is not a regulation in any traditional sense. As stated earlier, the OTC requested EPA to adopt such a

program as this NLEV Program. EPA agreed to this request and promulgated the program which is now in effect. The action taken herein utilizes the traditional SIP process to assure that public awareness of the program has been accomplished. It is implicit in the "commitments" made by Delaware in this action that Delaware recognizes its authority to adopt a motor vehicle emission control program identical to that of California, but also recognizes that the NLEV program is "substantially equivalent" to those same California emission standards. For that reason, and for the reason that the NLEV program will not require any State resources to implement the program, Delaware has chosen to participate in the NLEV Program.

Full text of the proposal follows. The entire text is new and therefore displayed in the conventional *bold italics* type. This action will not be included in the *Delaware Regulations Governing the Control of Air Pollution* since there is no regulatory impact on the public.

Delaware's National Low Emission Vehicle (NLEV) Program

Section 1 - Applicability

The environmental benefits of this federal program will be realized in all counties in the State of Delaware.

Section 2 - Definitions

The following terms, when used in this program description, shall have the following meanings:

NLEV Program or **National Low Emission Vehicle Program** means a federally enforceable, voluntary nationwide clean car program designed to reduce smog and other pollution from new motor vehicles and that would achieve emission reductions from new motor vehicles in the Ozone Transport Region equivalent to or greater than would be achieved by the adoption of the CAL-LEV Program by all the OTC states.

Section 3 - Program Participation

(a) For the duration of Delaware's participation in NLEV, manufacturers may comply with NLEV or equally stringent mandatory Federal standards in lieu of compliance with any program, including the provisions of this subchapter and including any mandates for sales of ZEVs, adopted by the State pursuant to the authority provided in ' 177 of the Clean Air Act (CAA), 42 U.S.C. ' 7401 et seq., applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and/or medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in

the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, '1900, incorporated herein by reference.

(b) Delaware's participation in NLEV extends until the commencement of model year 2006, except as provided in 40 C.F.R. 86.1707. If, no later than December 15, 2000, the EPA does not adopt standards at least as stringent as the NLEV standards provided in 40 C.F.R. Part 86, subpart R, that apply to new motor vehicles in model year 2004, 2005 or 2006, the State's participation in NLEV extends only until the commencement of model year 2004, except as provided in 40 C.F.R. '86.1707.

(c) If a covered manufacturer, as defined at 40 C.F.R. 86.1702, opts out of the NLEV program pursuant to the EPA NLEV regulations at 40 C.F.R. '86.1707, the transition from NLEV requirements to any State Clean Air Act '177 Program applicable to passenger cars, light-duty trucks up through 6000 pounds GVWR, and/or medium-duty vehicles from 6001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, '1900, incorporated herein by reference will proceed in accordance with the EPA NLEV regulations at 40 C.F.R. '86.1707.

Section 4 – Commitments

(a) The State commits to support NLEV as an acceptable alternative to the State's Section 177 Program for the duration of the State's participation in NLEV.

(b) The State recognizes that its commitment to NLEV is necessary to ensure that NLEV remain in effect.

(c) The State is submitting this SIP revision in accordance with the applicable Clean Air Act requirements at '110 and EPA regulations at 40 C.F.R. Part 86 and 40 C.F.R. Parts 51 and 52.

Section 5 – Agreement to Forbear Adoption of Replacement Programs

For the duration of Delaware's participation in NLEV, the State intends to forbear from adopting and implementing a ZEV mandate effective prior to model year 2006. Notwithstanding the previous sentence, if, no later than December 15, 2000, the US EPA does not adopt standards at least as stringent as the NLEV standards provided in 40 C.F.R. Part 86, subpart R that apply to new motor vehicles in model year 2004, 2005, or 2006, the State intends to forbear from adopting and implementing a ZEV mandate effective prior to model year 2004.

**DEPARTMENT OF
ADMINISTRATIVE SERVICES
DIVISION OF PROFESSIONAL REGULATION
BOARD OF LANDSCAPE ARCHITECTS**

Notice of Public Hearing

PLEASE TAKE NOTICE, pursuant to 29 Del.C. Chapter 101 and 24 Del.C. Section 205(a)(1), the Delaware Board of Landscape Architects proposed to revise and adopt Rules and Regulations. The proposed rules and regulations will eliminate the period of time in which licenses can be renewed after the end of the license period, except in cases of exceptional hardship and will require licensees to submit proof of continuing education hours by November 1 of the year preceding the renewal date.

A public hearing will be held on the proposed Rules and Regulations on May 12, 1999 at 8:30 a.m. in the Second Floor Conference Room A of the Cannon Building, 861 Silver Lake Boulevard, Dover, Delaware. The Board will receive and consider input from interested persons on the proposed rules and regulations, and individuals are urged to submit their comments in writing. Anyone wishing to obtain a copy of the proposed regulations, or to make comments at the public hearing, should contact the Board's Administrative Assistant, Sheila Wolfe, by calling (302) 739-4522 or write to the Delaware Board of Landscape Architects, 861 Silver Lake Boulevard, Dover, Delaware 19904.

**DIVISION OF PROFESSIONAL REGULATION
BOARD OF OCCUPATIONAL THERAPY**

NOTICE OF PUBLIC HEARING

PLEASE TAKE NOTICE, pursuant to 29 Del.C. Chapter 101 and 24 Del.C. §2007(a)(1), the Delaware Board of Occupational Therapy proposes the following changes to Rule 1(C)(3) to read as follows:

An occupational therapist may supervise up to three (3) occupational therapy assistants but never more than two (2) occupational therapy assistants who are under direct supervision at the same time.

A public hearing will be held on the proposed Rules and Regulations on Wednesday, April 21, 1999 at 4:30 p.m. in the Second Floor Conference Room A of the Cannon Building, 861 Silver Lake Blvd., Dover, DE 19904. The Board will receive and consider input in writing from any person on the proposed changes Rule 1(C)(3). Written comments should be submitted to the Board in care of Mary

Paskey at the above address. Final date to submit written comments shall be at the above scheduled public hearing. Anyone wishing to obtain a copy of the proposed Rules and Regulations or to make comments at the public hearing should contact Mary Paskey at the above address or by calling (302) 739-4522, ext. 207.

This notice will be published in two newspapers of general circulation not less than twenty (20) days prior to the date of the hearing.

DEPARTMENT OF AGRICULTURE

**PUBLIC NOTICE
FARMLAND PRESERVATION PROGRAM
CHANGES PROPOSED**

Pursuant to 3 Delaware Code §904(a) (1)-(3), and §904(b)(7), and §904(b)(21) and other pertinent provisions of 3 Delaware Code, Chapter 9, the Delaware Agricultural Lands Preservation Foundation will conduct a public hearing to consider amendments to the following document:

The Delaware Agricultural Lands Preservation Foundation, Policies - Procedures - By-Laws and Statewide Agricultural, Lands Preservation Strategy.

The hearing is to provide opportunity for public comment on the proposed amendments. The public record will close at the close of the Hearing unless a request is made to keep the record open.

The hearing will be held April 21, 1999, starting at 9:30 a.m., in the Conference Center of the Delaware Dept. of Agriculture, 2320 S. DuPont Hwy., Dover, DE 19901.

Copies of the proposed amendments will be available March 1, 1999 from the Delaware Dept. of Agriculture upon request. The proposed amendments will also be published in the April 1, 1999 edition of the "Register of Regulations."

If you have any questions regarding the hearing, please contact Cathy Mesick, Delaware Dept. of Agriculture, 2320 S. DuPont Hwy., Dover, DE 19901 or call (302) 739-4811 or 1-800-282-8685.

**DEPARTMENT OF AGRICULTURE
HARNESS RACING COMMISSION**

Notice of Public Comment

The Commission proposes the following amendments:

1. Amend chapter VII, rule I-F to revise the procedure for determination of preference dates.

2. Amend chapter VI, rule II-A-5 to revise the procedure for selection of races in divisions.

The public may obtain copies of the proposed regulations from the Commission's Office, 2320 S. DuPont Highway, Dover, DE 19901, phone (302) 739-4811. The Commission will accept written public comments from April 1, 1999 through April 30, 1999.

DEPARTMENT OF EDUCATION

The Department of Education will hold its monthly meeting on Thursday, April 15, 1999 11:00 a.m. in the Townsend Building, Dover, Delaware.

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

DIVISION OF SOCIAL SERVICES

PUBLIC NOTICE DIVISION OF SOCIAL SERVICES A BETTER CHANCE PROGRAM

The Delaware Health and Social Services / Division of Social Services / A Better Chance Program is proposing to implement a policy change to the Division of Social Services' Manual Section 3002, 3031 and adding 3032. These changes arise from Public Law 104-193, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (national welfare reform), as an option and was first announced in January 1995, as part of the original A Better Chance (ABC) waiver design.

SUMMARY OF PROPOSED REVISIONS:

Changing the time limit from forty-eight (48) cumulative months to twenty-four (24) cumulative months for all households headed by an employable adult applying on or after 10/01/99.

Eliminating the provision that families can reapply after expiration of the time limit when the family has not received assistance for 96 consecutive months.

Creating diversion assistance provision as an alternative to receiving A Better Chance benefits effective 10/01/99.

Revising language in the Work For Your Welfare provision to include individuals on the twenty-four (24) month time limit effective 10/01/99.

PUBLIC COMMENT

The Division will conduct a series of public hearings at which this proposal will be discussed. The schedule for these hearings is as follows:

May 4, 1999	Carvel State Office Building (Wilmington) 6 p.m. to 8 p.m.
May 5, 1999	Del Tech Stanton Campus Conference Facility 7 p.m. to 9 p.m.
May 12, 1999	Del Tech Terry Campus (Dover) Lecture Hall 7 p.m. to 9 p.m.
May 19, 1999	Del Tech Owens Campus (Georgetown) 4 p.m. to 6 p.m.

Any person unable to attend these hearings who wishes to make written suggestions, compilations of data, testimony, briefs or other written materials concerning the proposed new regulations must submit same to the Director, Division of Social Services, P. O. Box 906, New Castle, DE, by May 31, 1999.

The action concerning the determination of whether to adopt the proposed regulations will be based upon the results of Department and Division staff analysis and the consideration of the comments and written materials filed by other interested persons.

DIVISION OF SOCIAL SERVICES

PUBLIC NOTICE

Medicaid / Medical Assistance Program

In compliance with the State's Administrative Procedures Act (APA - Title 29, Chapter 101 of the Delaware Code) and with 42CFR §447.205, and under the authority of Title 31 of the Delaware Code, Chapter 5, Section 505, the Delaware Department of Health and Social Services (DHSS) / Division of Social Services / Medicaid Program is amending its eligibility manual.

Any person who wishes to make written suggestions, compilations of data, testimony, briefs or other written materials concerning the proposed new regulations must submit same to the Director, Medical Assistance Programs, Division of Social Services, P.O. Box 906, New Castle, DE 19720 by April 30, 1999.

DIVISION OF SOCIAL SERVICES

PUBLIC NOTICE

Medicaid / Medical Assistance Program

In compliance with the State's Administrative Procedures Act (APA - Title 29, Chapter 101 of the Delaware Code) and with 42CFR §447.205, and under the authority of Title 31 of the Delaware Code, Chapter 5,

Section 505, the Delaware Department of Health and Social Services (DHSS) / Division of Social Services / Medicaid Program is amending its general policy manual.

Any person who wishes to make written suggestions, compilations of data, testimony, briefs or other written materials concerning the proposed new regulations must submit same to the Director, Medical Assistance Programs, Division of Social Services, P.O. Box 906, New Castle, DE 19720 by April 30, 1999.

**DEPARTMENT OF NATURAL
RESOURCES AND
ENVIRONMENTAL CONTROL**

**DIVISION OF AIR AND WASTE MANAGEMENT
HAZARDOUS WASTE MANAGEMENT SECTION**

REGISTER NOTICE

1. TITLE OF THE REGULATIONS:

Delaware Regulations Governing Hazardous Waste (DRGHW).

2. BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE AND ISSUES:

The State of Delaware is authorized by the U. S. Environmental Protection Agency to administer its own hazardous waste management program. To maintain this authorization, the State must remain equivalent to and no less stringent than the federal program. To accomplish this, the State regularly amends the DRGHW by adopting regulations previously promulgated by EPA.

3. POSSIBLE TERMS OF THE AGENCY ACTION:

NONE

4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:

Amendments to DRGHW are proposed and amended in accordance with the provisions found at 7 Delaware Code, Chapters 60 & 63.

5. OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL: NONE

6. NOTICE OF PUBLIC COMMENT:

The public hearing on the proposed amendments to DRGHW will be held on Wednesday, May 12, 1999, beginning at 7:00 p.m. in the Richardson and Robbins Auditorium, 89 Kings Highway, Dover, DE. In addition, those affected by the proposed amendments are invited to attend one of two workshops conducted on April 13th and 15th, 1999.

7. PREPARED BY: Donald Short (302) 739-3689

**DIVISION OF AIR & WASTE MANAGEMENT
AIR QUALITY MANAGEMENT SECTION**

***Please Note the Change in Public Hearing Date From April 13, 1999 To April 30, 1999. For More Information Please Contact The Department Of Natural Resources And Environmental Control.**

REGISTER NOTICE

1. TITLE OF THE REGULATIONS:

Amendment to Regulation 31 and its plan for implementation

2. BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE AND ISSUES:

To amend Regulation 31 (Inspection and Maintenance Program) as follows:

1. To extend the new model year exemption for the exhaust idle test from 3 years to 5 years.

2. To revise the procedure of the exhaust idle test for model year vehicles 1981 and newer, whereby the new procedure would test vehicles at an engine speed of normal idle and 2500 rpms, and;

3. To amend Section 3 (c) (1) of the Regulation to specify the VMASTM dynamometer procedure as the method of evaluating the I/M program.

4. To add a new section to the regulation, titled Clean Screening whose provisions would allow exempting vehicles normally required to be tested for exhaust and evaporative emissions when those vehicles are at an inspection facility and the wait time for vehicles at the end of the testing queue is 90 minutes or greater. The new section describes the model years eligible for the "clean screen exemption". The clean screen exemption is given to vehicles categorized by model and model year that have passed vehicle exhaust emissions inspections in the State of Colorado.

To amend the Plan for Implementation of Regulation 31 as follows:

To revise the performance standard modeling to reflect the change in the new idle test procedure

3. POSSIBLE TERMS OF THE AGENCY ACTION: N/A

4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:

7 Del. C. Section 6010
Clean Air Act Amendments of 1990

5. OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL: NONE

6. NOTICE OF PUBLIC COMMENT:

Public Hearing is on April 30, 1999, 6 PM, Richardson and Robbins Auditorium, 89 Kings Highway, Dover

PREPARED BY:

Philip A. Wheeler 739-4791, 3/29/99

**DELAWARE RIVER
BASIN COMMISSION**

P.O. Box 7360 West Trenton

The Delaware River Basin Commission will meet Wednesday, April 28, 1999, in West Trenton, N.J. For more information contact Susan M. Weisman at (609) 883-9500 ext. 203.

PUBLIC SERVICE COMMISSION

BEFORE THE PUBLIC SERVICE COMMISSION OF
THE STATE OF DELAWARE

**IN THE MATTER
OF THE REGULATION
ESTABLISHING THE
MINIMUM FILING
REQUIREMENTS FOR
ALL REGULATED
COMPANIES SUBJECT
TO THE JURISDICTION
OF THE PUBLIC SERVICE
COMMISSION**

PSC REGULATION
DOCKET NO. 4

NOTICE OF COMMENT PERIOD ON PROPOSED
CHANGES AND AMENDMENTS TO MINIMUM
FILING REQUIREMENTS

In 1981, the Delaware Public Service Commission (the "Commission or "PSC") adopted its Minimum Filing Requirements for general rate increase applications. These requirements, which were last modified in 1984, govern the filing and content of rate increase applications made by utilities under the Commission's jurisdiction.

In May 1998, the Commission's Technical Staff ("Staff") sought changes and additions to the Minimum Filing Requirements for the stated purposes of increasing the procedural and practical efficiency of Staff's oversight of the ratemaking process and reducing administrative burdens. On May 26, 1998, the Commission initiated proceedings to

give public notice of Staff's proposals and solicit comment concerning their efficacy, reasonableness, and propriety.

Based on the comments received by Staff in the course of the proceedings, Staff has abandoned its original proposals in favor of new proposed revisions. Staff is proposing to: (1) clarify the definition of "test year;" (2) clarify when and how a utility can submit modifications to its filing during the proceeding; (3) address the review of an initial rate application for compliance to the Rules and penalties for non-compliance; and (4) make other textual changes. The Minimum Filing Requirements, Staff's newly proposed changes and additions to the same, and the materials submitted in connection therewith will be available for public inspection and copying at the Commission's office during normal business hours.

The Commission hereby solicits written comments, suggestions, compilations of data, briefs, or other written materials concerning Staff's proposed changes and additions to the Minimum Filing Requirements. Ten (10) copies of such materials shall be filed with the Commission at its Dover office. *All such materials shall be filed on or before May 1, 1999.*

In addition, the Commission's duly appointed Hearing Examiner will conduct a public hearing concerning Staff's proposed changes and additions on a date to be determined, and after receipt of written comments. Notice of such public hearing will be published at a later date in the Delaware Register of Regulations and in two newspapers of general circulation. Interested persons may present comments, evidence, testimony, and other materials at that public hearing.

Any individual with disabilities who wishes to participate in these proceedings should contact the Commission to discuss any auxiliary aids or services needed to facilitate such review or participation. Such contact may be in person, by writing, telephonically, by use of the Telecommunications Relay Service, or otherwise. The Commission's toll-free telephone number in Delaware is (800) 282-8574. Persons with questions concerning this application may contact the Commission's Secretary, Karen J. Nickerson, by either Text Telephone ("TT") or by regular telephone at (302) 739-4333 or by e-mail at knickerson@state.de.us.

SUBSCRIBE TO THE OFFICIAL SOURCE OF COMPLETE INFORMATION ON DELAWARE STATE REGULATIONS

THE DELAWARE REGISTER OF REGULATIONS



A single-source document for regulatory information, including proposed and adopted text of state regulations, all emergency regulations, Governors Executive Orders and Appointments, Attorney General Opinions, General Notices and notices of public

hearings and open meetings of state agencies.

PUBLISHED MONTHLY - \$120.00 PER YEAR

YES, PLEASE ENTER MY SUBSCRIPTION FOR THE DELAWARE REGISTER AT \$120/YEAR

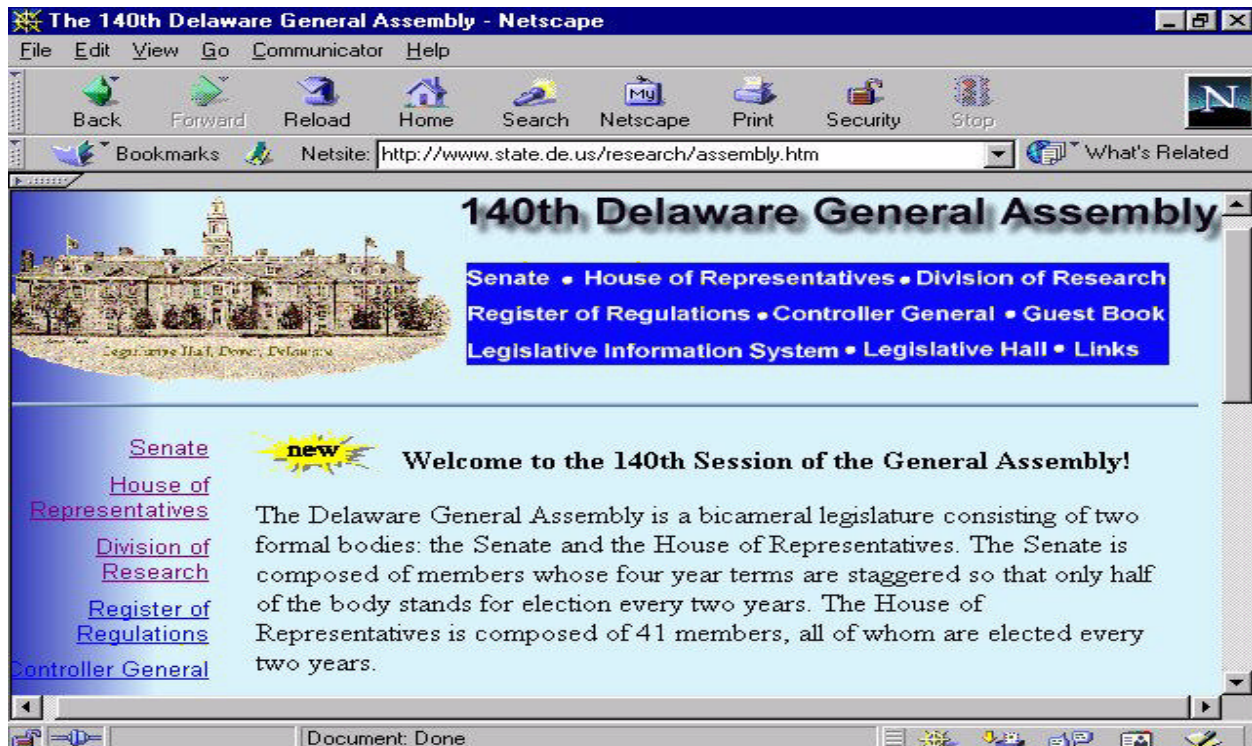
You will be billed upon receipt of your order. Subscription period runs from January to December. Mid-year subscriptions will be prorated at \$10 per issue. Back issues are available at \$12 per issue. Subscription fees are non-refundable.

NAME _____ ADDRESS _____

ORGANIZATION _____ CITY _____

PHONE _____ STATE _____ ZIP _____ EMAIL _____

Visit The Delaware General Assembly On The Web!



The General Assembly Website features:

- ! Current legislative information
- ! Information on both the Senate and House of Representatives
- ! Access the Delaware Code
- ! Access to the Delaware Register of Regulations
- ! Information on the legislative process
- ! Various reports and publications

The General Assembly Website is located at:

<http://www.state.de.us/research/assembly.htm>



LEGISLATIVE BILL SUBSCRIPTION SERVICES

Order Form (please print or type)

NAME _____ ADDRESS _____

ORGANIZATION _____ CITY _____ FAX _____

PHONE _____ STATE _____ ZIP _____ EMAIL _____

Please check the specific service(s) to which you wish to subscribe :

<u>SERVICES</u>	<u>ANNUAL COST</u>
One copy of all legislation introduced:	
<input type="checkbox"/> Picked up by subscriber *- - - - -	\$100
<input type="checkbox"/> Mailed daily via First Class postage - - - - -	\$775
One copy of all legislation signed by the Governor:	
<input type="checkbox"/> Mailed via First Class postage - - - - -	\$195
One copy of House and Senate calendars:	
<input type="checkbox"/> 1st Session set - - - - -	\$75
<input type="checkbox"/> Picked up by subscriber *- - - - -	\$100
<input type="checkbox"/> Mailed daily via First Class postage - - - - -	\$775
One copy of all Governor's Advisories:	
<input type="checkbox"/> Mailed via First Class postage - - - - -	\$25
Daily Legislative Agendas and weekly Standing Committee Notices:	
<input type="checkbox"/> Via Fax - - - - -	\$150

* Subscribers who choose to pick up their materials at Legislative Hall are requested to do so at least once a week, due to limited on-site file space. Thank you.

If you have any questions about our subscription services, please contact Ms. Ginny Potts in the Division of Research by dialing, toll-free, (800) 282-8545 (in state). Ms. Potts may also be reached via E-Mail at vpotts@state.de.us. Please dial (302) 739-4114 if you are calling from outside Delaware.

Please return this order form to Ms. Potts at P.O. Box 1401, Legislative Hall, Dover, Delaware, 19903, or fax it to (302) 739-3895 as soon as possible. (Don't forget to make a copy for your own files). You will be billed upon our receipt of your order. Your service(s) will begin, promptly, when payment is received and the General Assembly convenes. Thank you for using the Subscription Services of the Division of Research.