# **DELAWARE RIVER BASIN COMMISSION**

# FINAL

# ORDER

#### Water Quality Regulations, Water Code and Comprehensive Plan to Classify the Lower Delaware River as Special Protection Waters

The Delaware River Basin Commission ("Commission" or "DRBC") is a federal-state regional agency charged with managing the water resources of the Delaware River Basin without regard to political boundaries. Its members are the governors of the four Basin states – Delaware, New Jersey, New York and Pennsylvania – and the North Atlantic Division Commander of the U.S. Army Corps of Engineers, representing the federal government. The DRBC is not subject to the requirements of the Delaware Administrative Procedures Act. The purpose of this notice is to advise the public that duly adopted regulations of the Commission have been filed with the State of Delaware in accordance with Section 14.2 of the Delaware River Basin Compact.

# I. Summary

By Resolution No. 2008-9 on July 16, 2008, the Commission approved amendments to its Water Quality Regulations, Water Code and Comprehensive Plan to establish numeric values for existing water quality for the reach of the main stem Delaware River known as the "Lower Delaware" and to assign the Special Protection Waters (SPW) classification "Significant Resource Waters" (SRW) on a permanent basis to this reach. The Commission also approved language to clarify aspects of the SPW regulations, especially with respect to existing facilities, that have confused some DRBC docket holders and applicants since the SPW program was originally adopted by the Commission in 1992 for point sources and in 1994 for non-point sources.

Notice of the proposed regulation was published in the Delaware Register of Regulations on October 1, 2007 (11 DE Reg. 376-378 (10/01/07)) as well as in the Federal Register (72 FR 57255) on October 9, 2007, the New Jersey Register (39 N.J.R. 4392) on October 15, 2007, the New York State Register (page 8) on October 10, 2007 and the Pennsylvania Bulletin (37 Pa. B. 5527) on October 13, 2007, respectively. The Commission held informational meetings about the proposed changes on October 25, 2007 in Stockton, New Jersey and on November 1, 2007 in Easton, Pennsylvania. A public hearing was held on December 4, 2007, and written comments were received through December 6, 2007.

By Resolution No. 2005-2 in January of 2005, the Commission classified the Lower Delaware as SRW on a temporary basis, pending the determination of numeric values for existing water quality for this section of the river and a thorough evaluation of the data to determine whether or not to classify certain sections of the Lower Delaware as Outstanding Basin Waters and whether to make the temporary Special Protection Waters designation permanent for some or all of the Lower Delaware. Following duly noticed public hearings in September 2005, September 2006, September 2007 and May 2008, temporary designation was extended repeatedly pending the Commission's final action on July 16, 2008.

### II. Findings and Decision

The Commission's findings are summarized in DRBC Resolution No. 2008-9, dated July 16, 2008, approving the final form of the proposed amendments to the Commission's Water Code, Water Quality Regulations and Comprehensive Plan. Resolution No. 2008-9 is re-printed below. However in place of the attachment to the resolution, which consists of a redline text of the amended rule, the rule in its final form is provided, incorporating all amendments with the exception of a lengthy technical table (Table 2). Table 2 identifies the water quality control points for the Lower Delaware and numeric values for existing water quality at each control point.

The attachment to Resolution No. 2008-9, showing the rule amendments as proposed in October of 2007 and as finally approved by the Commission on July 16, 2008, and including Table 2, is available on the DRBC website, DRBC.net. A comment and response document addressing oral comments offered at the public hearing and written comments received through the close of the comment period is also available on the Commission's website. Hard copies of these documents may be obtained by request of the Commission's Information Resources

Coordinator, Kim Wobick, who can be reached at 609-883-9500, ext. 263 or at kim.wobick@drbc.state.nj.us. A charge for printing and mailing may apply.

#### III. Text and Citation

The text of Section § 3.10.3 A.2. Special Protection Waters of the Commission's Administrative Manual Part III - Water Quality Regulations and the same section of the Delaware River Basin Water Code shall be in the form set forth in Resolution No. 2008-9. The Commission's Water Quality Regulations are incorporated by reference in the Code of Federal Regulations at 18 CFR Part 410.

#### IV. Effective Date

The Commissioners unanimously approved the subject amendments at a public meeting on July 16, 2008. The amendments are effective upon filing with the signatory parties in accordance with Section 14.2 of the Delaware River Basin Compact, 53 Delaware Laws, Chapter 71.

Pamela M. Bush Commission Secretary and Asst. General Counsel

#### NO. 2008 – 9

A RESOLUTION to amend the *Water Quality Regulations, Water Code* and *Comprehensive Plan* by permanently designating the Lower Delaware River as Special Protection Waters with the classification Significant Resource Waters.

WHEREAS, by Resolution No. 70-3, codified in the Commission's *Water Quality Regulations* at Section 3.10.3 A., the Commission established an antidegradation policy for interstate waters within its jurisdiction, and by Resolutions No. 92-21 and 94-2, it instituted a set of regulations known as the "Special Protection Waters" program to implement this policy in certain portions of the Basin. The program is intended to maintain or improve the quality of interstate waters where existing water quality is better than the established stream quality objectives; and

WHEREAS, in accordance with Section 3.10.3 A.2 of the Commission's Administrative Manual–Part III, Water Quality Regulations ("Regulations"), the Delaware Riverkeeper Network submitted to the Commission in April 2001 a nomination petition requesting that the Commission classify the Lower Delaware River – the reach of the main stem Delaware River extending from River Mile 209.5 (the downstream boundary of the Delaware Water Gap National Recreation Area) to River Mile 133.4 (the Head of Tide) – as Special Protection Waters; and

WHEREAS, to be protected as Special Protection Waters, waters must be classified as either "Outstanding Basin Waters" or "Significant Resource Waters," as defined in Section 3.10.3 A.2.a. of the Regulations; and

WHEREAS, "Outstanding Basin Waters" are defined as interstate and contiguous intrastate waters that are contained within the established boundaries of national parks; national wild, scenic and recreational rivers systems; and/or national wildlife refuges that the Commission has classified under Section 3.10.3 A.2.g.1 of the Regulations as having exceptionally high scenic, recreational and ecological values that require special protection; and

WHEREAS, "Significant Resource Waters" are defined as interstate waters that the Commission has classified under Section 3.10.3 A.2.g.2 of the Regulations as having exceptionally high scenic, recreational, ecological, and/or water supply uses that require special protection; and

WHEREAS, as set forth more fully in Resolution No. 2005-2, data and findings documenting the high quality of scenic, recreational, ecological and water supply attributes of the Lower Delaware River are contained in two studies (DRBC, 2004 and National Park Service, 1999, respectively), a management plan for the Lower Delaware that received a formal expression of Commission support in Resolution No. 98-2 (1997) (this plan was recently re-affirmed in the *Lower Delaware River Management Committee Action Plan 2007-2011*); a federal designation of the Lower Delaware as part of the national Wild & Scenic Rivers System (P.L. 106-418, 106<sup>th</sup> Congress), and the *Water Resources Plan for the Delaware River Basin* (DRBC, 2004); and

WHEREAS, after a duly noticed public comment period and a public hearing on the matter, by Resolution No. 2005-2 on January 19, 2005 the Commission found on the basis of the foregoing studies, findings, plans, and

federal designation that "the section of the Delaware River from River Mile 133.4 to River Mile 209.5, known as the "Lower Delaware River", is characterized by exceptionally high scenic, recreational, ecological and/or water supply values/uses within the meaning of Section 3.10.3 A. of the *Water Quality Regulations* and requires special protection in accordance with that section" (Res. No. 2005-2, par. 1); and

WHEREAS, by Resolution No. 2005-2 the Commission temporarily classified the Lower Delaware River (also "Lower Delaware") as Significant Resource Waters, pending the determination of numeric values for existing water quality for this section of the river and a thorough evaluation of these data to determine whether or not to classify certain sections of the Lower Delaware as Outstanding Basin Waters and whether to make the temporary Special Protection Waters designation permanent for some or all of the Lower Delaware; and

WHEREAS, in the course of designating the Lower Delaware as Special Protection Waters the Commission determined that it would clarify certain provisions of the SPW rule to ensure the rule's uniform application in all parts of the basin in which the rule is applied; and

WHEREAS, to allow the Commissioners and staff time to evaluate implementation options and develop language to clarify aspects of the rule, the Commission extended temporary designation of the Lower Delaware by resolutions No. 2005-15 (extension through September 30, 2006), No. 2006-22 (extension through September 30, 2007) and No. 2007-13 (extension through May 15, 2008), before they caused to be published in October of 2007 in the *Federal Register* and in the Delaware, New Jersey, New York and Pennsylvania registers a new Notice of Proposed Rulemaking to Amend the *Water Quality Regulations, Water Code* and *Comprehensive Plan* to classify the Lower Delaware River as Special Protection Waters; and

WHEREAS, the Commission has determined values for existing water quality for the Lower Delaware, enabling the Commission for the first time to require applicants for new wastewater treatment facilities or for substantial alterations or additions to existing facilities to demonstrate that their new or increased discharges will cause no measurable change to existing water quality except toward natural conditions at a set of established water quality control points; and

WHEREAS, the Commission established a public comment period on the proposed amendments to run through December 6, 2007; it held informational meetings in Stockton, New Jersey on October 25, 2007 and in Easton, Pennsylvania on November 1, 2007; it made presentations on the proposed rule at a series of professional conferences as well as at meetings hosted by citizens' groups and elected officials within the affected regions; and it held a public hearing on the proposal on December 4, 2007; and;

WHEREAS, between September of 2004, when the Commission issued its first public notice of proposed rulemaking to classify the Lower Delaware River as Special Protection Waters, and December 6, 2007, when the comment period closed on the amendments noticed formally in October of 2007, the Commission received thousands of comments from residents, elected officials, treatment plant operators, and administrative agencies, of which the majority constituted petitions and letters in support of the action, and of which approximately three dozen expressed objections to it; and

WHEREAS, during the months of February through July of 2008 Commissioners and Commission staff participated in additional meetings and conference calls at the request of interested parties in order to listen first-hand to the concerns that some constituents raised in written comments submitted during the comment period; and

WHEREAS, the Commissioners and staff have painstakingly sorted, categorized reviewed and prepared written responses to these comments, and in a number of instances have revised the proposed amendments to address concerns raised by commenters and to improve the rule's clarity, especially as applied to existing facilities; and

WHEREAS, extending the full Special Protection Waters program to the Lower Delaware River on a permanent basis will afford these interstate waters the same uniform high standard of protection that has preserved water quality in the Upper and Middle Delaware for approximately 15 years – a standard of protection that could not be achieved by the Commission's member states acting independently of one another; and

WHEREAS, the Commission will reevaluate the Best Demonstrable Technology (BDT) requirements of the rule in light of wastewater technologies developed since the BDT requirements were initially promulgated in 1992, and will consider among other things the effects of employing wastewater technologies on other media, greenhouse gas emissions and energy demands; now therefore,

# **BE IT RESOLVED** by the Delaware River Basin Commission:

1. The section of the non-tidal Delaware River known as the "Lower Delaware" between River Miles 209.5 (the downstream boundary of the Delaware Water Gap National Recreation Area) and 134.4 (the Calhoun

Street Bridge near the Head of Tide at Trenton, New Jersey), is hereby classified as Significant Resource Waters.

2. The Commission's *Water Quality Regulations* and *Water Code* are amended as set forth in the attached, effective upon filing with each of the signatory parties in accordance with Section 14.2 of the *Delaware River Basin Compact*.

3. As of their effective date, these amendments are hereby incorporated in the Commission's *Comprehensive Plan.* All aspects of the rule shall be in effect for classified reaches, including the Lower Delaware, in accordance with the amended provisions and including without limitation those requirements that depend for implementation upon the determination of numeric values for existing water quality.

4. Temporary classification of the Lower Delaware River as Significant Resource Waters in accordance with Resolution No. 2005-2 and as extended by resolutions No. 2005-15, No. 2006-22, No. 2007-13, and No. 2008-3 is hereby continued and shall remain in effect until these amendments to the Water Quality Regulations and Water Code are filed in accordance with Section 14.2 of the *Compact* and a notice of final rulemaking has appeared in the *Federal Register*.

The Commission's Comment and Response Document, containing detailed responses to written and oral comments submitted on the proposed amendments, shall be finalized and made a part of the official rulemaking record for this action and shall be available for public inspection not later than upon the filing of these amendments with each of the signatory parties in accordance with Section 14.2 of the *Compact*.

Michele Putnam, Chairwoman pro tem

Pamela M. Bush, Esquire, Commission Secretary

ADOPTED: July 16, 2008

[The text of **Section 3.10.3 A.2.** of the Commission's Water Quality Regulations and Water Code, as amended, but excluding Table 2, follows. For additional information, see section II of this notice, above.]

# 2. **Special Protection Waters.**

It is the policy of the Commission that there be no measurable change in existing water quality except towards natural conditions in waters considered by the Commission to have exceptionally high scenic, recreational, ecological, and/or water supply values. Waters with exceptional values may be classified by the Commission as either Outstanding Basin Waters or Significant Resource Waters.

In determining waters suitable for classification as Special Protection Waters, the Commission will consider nomination petitions from local, state and federal agencies and governing bodies, and the public for waters potentially meeting the definition of Outstanding Basin Waters and Significant Resource Waters as described in 3.10.3A.2.a.

The following policies shall apply to waters classified by the Commission as Outstanding Basin Waters or Significant Resource Waters and their drainage areas:

a. Definitions

1) "Outstanding Basin Waters" are interstate and contiguous intrastate waters that are contained within the established boundaries of national parks; national wild, scenic and recreational rivers systems; and/or national wildlife refuges that are classified by the Commission under Subsection 2.g.1) hereof as having exceptionally high scenic, recreational, and ecological values that require special protection.

2) "Significant Resource Waters" are interstate waters classified by the Commission under Subsection 2.g.2) hereof as having exceptionally high scenic, recreational, ecological, and/or water supply uses that require special protection.

3) "Existing Water Quality" for purposes of the Special Protection Waters program is defined for a limited set of parameters, consisting of those listed in Tables 1 and 2. Existing water quality is defined in Table 1 for stream reaches between Hancock, New York and the Delaware Water Gap and in Table 2 for stream reaches between the Delaware Water Gap and Trenton, New Jersey. Where existing water quality is not defined in Tables 1 and 2, existing water quality may be defined by extrapolation from the nearest upstream or downstream

Interstate Control Point, from data obtained from sites within the same ecoregion, or on the basis of best scientific judgment.

4) "Measurable Change to Existing Water Quality" is defined as an actual or estimated change in a seasonal or non-seasonal mean (for SPW waters upstream of and including River Mile

209.5<sup>1</sup>) or median (for SPW waters downstream of River Mile 209.5) in-stream pollutant concentration that is outside the range of the two-tailed upper and lower 95 percent confidence intervals that define existing water quality.

5) "Public Interest" is a determination of all the positive and negative social, economic and water resource impacts associated with a project affecting a Significant Resource Water. A project that is in the public interest is one that, at a minimum, provides housing, employment, and/or public facilities needed to accommodate the adopted future population, land use, and other goals of a community and region without causing deleterious impacts on the local and regional environment and economy. In general, such a project would be one that conforms to a locally-adopted growth management plan which is undergoing active implementation by local officials, is supported by the larger community as a whole, and is compatible with national, state and regional objectives as well. For a project not fully meeting the above criteria, the Commission will weigh the positive and negative impacts to determine public interest.

6) "Regional Resources Management Plan" is a management plan developed and adopted by the government agency that is assigned primary responsibilities for the overall management of a National park, scenic and recreational river and/or wildlife refuge which contains waters that have been classified by the Commission as Outstanding Basin Waters. A regional resources management plan is one that addresses, among other subjects, the location and general size of allowable wastewater treatment facilities. A regional resources management plan, or applicable portions thereof, may be incorporated into the Commission's Comprehensive Plan.

7) "Natural Condition" is the ecological state of a water body that represents conditions without human influence.

8) "Non-discharging/Load Reduction Options" are options whereby the amount of wastewater discharged to a surface stream is reduced by (a) instituting load reduction measures involving reductions in pollutants at the source, possibly accompanied by water conservation practices to reduce the amount of flow received at a wastewater treatment plant; and/or (b) using land-based wastewater disposal whereby treated wastewater effluent is further treated by percolation and other soil-based processes instead of in-stream processes.

9) "Natural Wastewater Treatment Systems" are soil-based, vegetative and/or aquatic wastewater treatment systems characterized by the use of low energy treatment processes that use and simulate "natural" environmental processes such as primary and secondary productivity, crop production, wetlands, ponds and others.

10) "Non-Point Sources" are sources of pollutants carried by surface and sub-surface runoff that are derived from human activities and land use.

11) "Cumulative Impact" is the net sum of all individual impacts including all point and non-point source impacts.

12) "Boundary Control Points" are locations where monitoring and other activities occur to determine existing water quality, no measurable change, and related pollution control requirements as applicable. Boundary Control Points for Outstanding Basin Waters will generally correspond to federallyestablished boundaries for National parks, etc. while those for Significant Resource Waters will generally correspond to the confluence of an intrastate tributary with the classified interstate water. The locations of Boundary and Interstate Control Points are described in Part C of Table 1 for the reach between Hancock, N.Y. and the Delaware Water Gap and in Tables 2A and 2B for the reach between the Delaware Water Gap and Trenton, N.J.).

13) "Interstate Control Points" are general locations used to assess water quality for purposes of defining and protecting Existing Water Quality. The locations of Boundary and Interstate Control Points

<sup>1.</sup> River Mile 209.5 is the downstream boundary of the Delaware Water Gap National Recreation Area. SPW waters upstream of and including this point received SPW designation in 1992 and SPW waters below this point received SPW designation in 2005. The water quality strategy used to support the later designation differed from that employed a decade earlier.

are described in Part C of Table 1 for the reach between Hancock, N.Y. and the Delaware Water Gap and in Tables 2A and 2B for the reach between the Delaware Water Gap and Trenton, N.J.).

14) "Growth Management Plans" are locally developed and adopted plans expressing the social, economic, and environmental goals and objectives of the local community. A growth management plan in this context can be one plan, a series of plans, local ordinances, and other official documents of a municipality. Growth management plans outline the community's desired growth patterns and related infrastructure. To be considered in the Commission's determination of public interest, growth management plans must be undergoing active implementation and forming the basis for local governmental decisions.

15) An "Expanding Wastewater Treatment Project" is a project involving either (a) alterations or additions to an existing wastewater treatment facility that result in a reviewable project in accordance with the Commission's *Rules of Practice and Procedure*; or (b) a new load or increased flow or loading from an existing facility that was not included in a NPDES permit or docket effective on the date of SPW designation.

16) "Substantial Alterations or Additions" are those additions and alterations resulting in: (a) a complete upgrade or modernization of an existing wastewater treatment plant, including substantial replacement or rehabilitation of the existing wastewater treatment process or major physical structures such as headworks, settling tanks, and biological/chemical treatment and filtration tanks, whether conducted as a single phase or a multi-phased project or related projects; or (b) a new load or increased flow or loading from an existing facility that was not included in a NPDES permit or docket effective on the date of SPW designation. Among other projects, modifications made solely to address wet weather flows; and alterations that are limited to changes in the method of disinfection and/or the addition of treatment works for nutrient removal are not deemed to be "Substantial Alterations or Additions."

17) "Load" and "loading" are used interchangeably in these regulations and refer to the amount of a substance or material, expressed as a weight per unit time (pounds per day, for example), that is discharged from a facility.

18) "Incremental load" and "incremental loading" are used interchangeably in these regulations and refer to the load that is greater than the actual load discharged by a facility at the time of SPW designation.

19) "Best Management Practices" are any structural or non-structural measure designed to reduce stormwater runoff and resulting non-point source loads.

20) "Watershed Non-Point Source Management Plan" is a plan prepared for a watershed that describes the basis for, and overall control strategy of, a plan for controlling, limiting, and abating all relevant non-point source loadings within the watershed. The plan will identify and assess important natural and anthropogenic features and influences on water quality; existing local, state and other non-point source control programs; potential non-point source loads on Special Protection Waters; watershed-specific protection requirements; and the institutional needs and arrangements required to implement the plan.

21) "Non-Point Source Pollution Control Plan" is a plan describing the Best Management Practices to be used at the project site and in the project service area to control increases in nonpoint source pollutant loadings resulting from the project.

22) "Priority Watershed" is a watershed that has been evaluated in conjunction with other watersheds draining to Special Protection Waters and designated by the Commission as having a substantial potential pollution impact on the water quality of Special Protection Waters in comparison with other watersheds.

No Measurable Change to Existing Water Quality

b.

1) Outstanding Basin Waters shall be maintained at their existing water quality. Point and non-point sources of pollutants originating from outside the boundaries of stream reaches classified as Outstanding Basin Waters shall be treated as required and then dispersed in the receiving water so that no measurable change occurs at Boundary and Interstate Control Points. Point sources of pollutants discharged to Outstanding Basin Waters shall be treated as required and then dispersed in such a manner that complete mixing of effluent with the receiving stream is, for all practical intents and purposes, instantaneous.

2) Significant Resource Waters shall not be degraded below existing water quality as defined in these regulations, although localized degradation of water quality may be allowed for initial dilution if the Commission, after consultation with the state NPDES permitting agency, finds that the public interest warrants these changes. Point and non-point sources of pollutants originating from outside the boundaries of stream reaches classified as Significant Resource Waters shall be treated as required and then dispersed in the receiving water so that no measurable change occurs at Boundary and Interstate Control Points, unless a mixing zone is

allowed in Significant Resource Waters, and then to the extent of the mixing zone designated as set forth in this section. If degradation of water quality is allowed for initial dilution purposes, the Commission, after consultation with the state NPDES permitting agency, will designate mixing zones for each point source and require the highest possible point source treatment levels necessary to limit the size and extent of the mixing zones. The dimensions of the mixing zone will be determined by the Commission after consultation with the state NPDES permitting agency based upon an evaluation of (a) site-specific conditions, including channel characteristics; (b) the cost and feasibility of treatment technologies; and (c) the design of the discharge structure. Mixing zones will be developed using the wastewater treatment facility design conditions and low ambient flow conditions unless site-specific characteristics indicate otherwise. Non-point sources shall be subject to the requirements of Section 3.10.3 A.2.e. for the implementation of non-point source control plans.

Allowable Discharges

C.

d.

1. Direct discharges of wastewater to Special Protection Waters are discouraged. The following categories of projects discharging directly to Special Protection Waters may be approved only after the applicant demonstrates that it has fully evaluated all non-discharge/load reduction alternatives and is unable to implement these alternatives because of technical and/or financial infeasibility: new wastewater treatment facilities and substantial alterations or additions to existing wastewater treatment facilities. When evaluating non-discharge/ load reduction alternatives, the applicant shall consider alternatives to any and all loadings – both existing and proposed – in excess of actual loadings at the time of SPW designation.

2) The following categories of projects within the drainage area of Special Protection Waters may be approved only after the applicant demonstrates that it has fully evaluated all natural wastewater treatment system alternatives and is unable to implement these alternatives because of technical and/or financial infeasibility: new wastewater treatment facilities and substantial alterations or additions to existing wastewater treatment facilities. When evaluating natural treatment alternatives, the applicant shall consider alternatives to any and all loadings – both existing and proposed – in excess of actual loadings at the time of SPW designation.

3) The following categories of projects discharging directly to Significant Resource Waters may be approved only following a determination that the project is in the public interest as that term is defined in Section 3.10.3.A.2.a.5): new wastewater treatment facilities and substantial alterations or additions to existing wastewater treatment facilities.

4) The general number, location and size of future wastewater treatment facilities discharging to Outstanding Basin Waters (if any) shall be developed taking into consideration any adopted regional resource management plan as defined in Section 3.10.3 A.2.a.6) and, on an individual project basis, considering the feasibility of non-discharge/load reduction alternatives.

Wastewater Treatment Facilities

1) All wastewater treatment facilities discharging to waters classified as Special Protection Waters shall have available standby power facilities unless it can be shown that a proposed discharge can be interrupted for an extended period with no threat to the water quality of Special Protection Waters. Existing facilities must comply with this requirement upon their next permit renewal under the delegated national pollutant discharge elimination system (NPDES) permit program.

2) All wastewater treatment facilities discharging to Special Protection Waters that are not staffed 24 hours every day shall have a remote alarm that will continuously monitor plant operations whenever the plant is not staffed. The alarm system will be designed to alert someone available with authority and knowledge to take appropriate action. Existing facilities must comply with this requirement upon their next permit renewal under the delegated NPDES program.

3) All new wastewater treatment facilities discharging to Outstanding Basin Waters shall not have visual discharge plumes. Existing facilities must comply with this requirement upon their next permit renewal under the delegated NPDES program.

4) All new wastewater treatment facilities discharging to Special Protection Waters shall prepare and implement an emergency management plan following the guidance provided in the Water Pollution Control Federation's *Manual of Practice SM-8, Emergency Planning for Municipal Wastewater Facilities,* the U.S. EPA's *Design Criteria for Mechanical, Electric and Fluid System and Component Reliability* or other suitable manuals. Emergency management plans shall include an emergency notification procedure covering all affected downstream users. Existing facilities must comply with this requirement upon their next permit renewal under the delegated NPDES program.

5) The minimum level of wastewater treatment for the following categories of

projects will be "Best Demonstrable Technology" as defined below: all new wastewater treatment facilities and all projects involving substantial alterations or additions to existing wastewater treatment facilities when the new or expanding facility discharges directly to Outstanding Basin Waters or Significant Resource Waters. Equivalent effluent criteria for industrial facilities and seasonal limits, if any, will be developed on a case-by-case basis. The following 30-day average effluent criteria define Best Demonstrable Technology\*:

| 5-day CBOD:             | 10 mg/l or less     |
|-------------------------|---------------------|
| Dissolved oxygen:       | 6.0 mg/l or greater |
| Total suspended solids: | 10 mg/l or less     |
| Ammonia-nitrogen:       | 1.5 mg/l or less    |
| Total nitrogen:         | 10.0 mg/l or less   |
| Total phosphorus:       | 2.0 mg/l or less    |
| Fecal coliform:         | 50/100 ml or less   |

\* The effluent criteria that define Best Demonstrable Technology (BDT) were established by these Regulations in 1992 when DRBC originally promulgated the Special Protection Waters regulations for point source discharges. Although treatment technologies have advanced since that year, these "BDT" criteria have been retained for the limited purposes of the SPW program. BDT as defined herein may be superseded, however, by applicable federal, state or DRBC criteria that are more stringent.

6) Best demonstrable technology for disinfection shall be ultraviolet light disinfection or an equivalent disinfection process that results in no harm to aquatic life, does not produce toxic chemical residuals, and results in effective bacterial and viral destruction.

7) For wastewater treatment facility discharge projects that satisfy applicable requirements of Sections 3.10.3 A.2.b. through d. above, the Commission may approve effluent trading on a voluntary basis between point sources within the same watershed or between the same Interstate or Boundary Control Points to achieve no measurable change to existing water quality. Applicants seeking the Commission's approval for a trade must demonstrate equivalent load and pollutant reductions and the ability (through contracts, docket conditions, NPDES effluent limits or other legal instruments) to ensure continuous achievement of the required reductions for a term of not less than five (5) years or the time required for the point source(s) to install the treatment needed to demonstrate no measurable change to Existing Water Quality, whichever term is longer. States will be encouraged to incorporate appropriate conditions in the next NPDES permits issued to the trading dischargers.

For wastewater treatment facilities within the drainage area to Special Protection 8) Waters, the actual loads and design flows included in a NPDES permit or docket effective at the time of Special Protection Waters designation ("SPW designation") may continue without triggering the additional treatment requirements and alternatives analyses required by these regulations. However, when Substantial Alterations or Additions as defined herein are proposed, although the actual discharge at the time of SPW designation remains exempt from additional requirements, the proposed expansion cannot be approved until (a) the applicant demonstrates that it has evaluated all non-discharge load reduction alternatives for all or a portion of the incremental load and is unable to implement these alternatives because of technical or financial infeasibility (for discharges directly to Outstanding Basin Waters (OBW) and Significant Resource Waters (SRW)); (b) the applicant demonstrates that it has evaluated all natural wastewater treatment system alternatives for all or a portion of the incremental load and is unable to implement these alternatives because of technical or financial infeasibility (for discharges directly to OBW and SRW and for tributary discharges); (c) the Commission has determined that the project is demonstrably in the public interest as defined herein (for discharges directly to SRW); (d) the minimum level of treatment to be provided for the incremental discharge is Best Demonstrable Technology as defined herein (for discharges directly to OBW and SRW); and (e) the applicant demonstrates that the project will cause no measurable change to Existing Water Quality as defined herein (for discharges directly to OBW and SRW and for tributary discharges).

9) For wastewater treatment facility projects subject to the no measurable change requirement, the demonstration of no measurable change to existing water quality shall be satisfied if the applicant demonstrates that the new or incremental increase in the facility's flow or load will cause no measurable change at the relevant water quality control point for the parameters denoted by asterisks in Tables 1 and 2 of this section:

ammonia (NH<sub>3</sub> N); dissolved oxygen (DO); fecal coliform (FC); nitrate (NO<sub>3</sub> N) or nitrite + nitrate (NO<sub>2</sub> N + NO<sub>3</sub> N); total nitrogen (TN) or total Kjeldahl nitrogen (TKN); total phosphorus (TP); total suspended solids (TSS); and biological oxygen demand (BOD) (Table 1 only). In making the demonstration required in the preceding sentence the applicant shall use a DRBC-approved model of the tributary or main stem watershed if available. Where a DRBC-approved model is not available, the applicant shall use other methodologies submitted to and approved in advance by the Commission to estimate cumulative effect at the applicable control point.

Control of Non-Point Sources

e.

1) Projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the project's service area which is also located within the drainage area of Special Protection Waters.

The plan will document which Best Management Practices described in handbooks, manuals and other documents prepared by the applicable state environmental agency that the project sponsor will use to control, to the extent possible, the non-point source loads from the project.

In approving the plan, the Commission may consider, but not require, tradeoffs, that the project sponsor might propose, between the reduction of potential new non-point source loads and (a) equivalent reductions in existing non-point source loads; (b) equivalent point source loads; and c) equivalent non-point source loads from outside the affected service area. Applicants desiring Commission approval of tradeoff strategies must provide information concerning the amount of non-point source loads to be reduced through an equivalent tradeoff process and, where necessary, the enforceable mechanisms and/or agreements required to implement the tradeoffs. Where tradeoffs have been approved, control measures for existing non-point sources must be substantially in-place prior to project operation.

The Executive Director may, upon agreement with the state, delegate review and approval responsibilities under this section to the appropriate state environmental agency.

Exceptions to this policy are:

(a) Public authorities, other special purpose districts, and private corporations that do not have the legal authority to implement non-point source controls in their new or expanded service areas. Such entities are subject, however, to the requirement set forth in paragraph 3.10.3 A.2.e.2) below, that no new connection may be approved unless the area(s) served is (are) regulated by a non-point source pollution control plan approved by the Commission.

(b) The requirement for service area non-point source control plans is automatically satisfied if the project service area is part of a watershed non-point source management plan that has been adopted into the Commission's Comprehensive Plan and is being implemented.

(c) Projects located above major surface water impoundments listed in Section 3.10.3.A.2.g.5) where time of travel and relevant hydraulic and limnological factors preclude a direct impact on Special Protection Waters.

(d) Projects located in municipalities that have adopted and are actively implementing non-point source/stormwater control ordinances that have been reviewed and approved by the Commission.

(e) Projects located in watersheds where the applicable state environmental agency, county government, and local municipalities are participating in the development of a watershed plan being prepared under the auspices of these regulations, the federal Clean Water Act, or state initiatives.

2) Approval of a new or expanded water withdrawal and/or wastewater discharge project will be subject to the condition that any new connection to the project system only serve an area(s) regulated by a non-point source pollution control plan which has been approved by the Commission.

3) Within two years after the adoption of Special Protection Waters non-point source control regulations, the Commission shall, after substantial consultation with local, county, state and federal agencies and the general public, publish a report presenting its methodology for prioritizing watersheds in the Special Protection Waters drainage area including alternatives, if any; a preliminary listing of priority watersheds in the drainage area; and a recommended plan of study for the development of watershed-specific management plans. For waters classified as Special Protection Waters after December 1992, the watershed prioritization process will be completed within two years after the Special Protection Waters are classified.

Watershed priorities will be determined from a comparative analysis of each

watershed's location and potential, future impact on existing water quality at designated Boundary and Interstate Control Points. In determining priorities, the Commission will consider:

the physical characteristics of the watershed including slopes, (a) soils, existing land use and land cover, drainage characteristics, and others;

the status of existing water quality and trends, if any, of the (b) watershed as measured at its Boundary Control Point;

(d)

(f)

the anticipated mass loadings of new non-point sources; (c) the watershed management and planning priorities of applicable

local, state and federal agencies;

the watershed:

(e) the current status of local land use/non-point source controls in

the stormwater permitting activity in the NPDES permitting

program; and

(g) other natural and anthropogenic factors.

4) Once the public has been given an opportunity to comment, the Commission will adopt a list of priority watersheds. This listing will be reviewed and modified as necessary on a two year basis after adoption.

Within five years after adopting a list of priority watersheds draining to Special 5) Protection Waters, the Commission shall develop, or encourage the development of, watershed non-point source management plans for each priority watershed unless new circumstances result in deferring plan completion. Watershed non-point source management plans will focus on non-point source loadings, but will consider total loads including both point and non-point sources and their interrelationship where necessary.

During plan development, the Commission will seek technical assistance from the applicable state environmental agency and all other applicable federal, state, county, and local governmental units; and will consider direct delegation of plan development (with concurrence of the state environmental agency) to any county or other applicable governmental entity desiring to perform the watershed planning activities on behalf of, or instead of, the Commission. Where more than one political unit shares a watershed, joint plan development arrangements between the Commission and delegated agencies will be developed.

Watershed management plans developed by the Commission, or approved by the 6) Commission will be incorporated into the Commission's Comprehensive Plan in accordance with the Rules of Practice and Procedure.

The Commission shall encourage the voluntary development of watershed 7) management plans for tributary watersheds entering Special Protection Waters and local non-point source regulatory programs that conform to the goals and objectives of the Special Protection Waters regulations as promulgated in Sections 3.10.3A.2. Within the limits of its resources, the Commission will provide technical assistance, a clearinghouse for non-point sources information, regulatory authority, inter-agency coordination, and other services to local and other governmental units desiring to develop and implement stormwater and non-point source watershed plans and local regulatory programs.

8) The Commission shall encourage the submission of watershed management plans prepared voluntarily and independently from these regulations for consideration of inclusion into the Commission's Comprehensive Plan. f.

Policies Regarding Inter-Government Responsibilities

1)

Inter-relationship of State and Commission Responsibilities.

The applicable state environmental agency shall assure to the extent possible that existing water quality in Special Protection Waters is not measurably changed by pollution discharged into the intrastate tributary watersheds within its jurisdiction. For water quality management purposes, the state environmental agency and the Commission will jointly establish Boundary Control Points as described in Section 3.10.3.A.2a.12) and g.4).

In performing this responsibility, the state environmental agency shall require that all new or expanding wastewater treatment facilities and existing wastewater treatment plants applying for a discharge permit or permit renewal under the delegated NPDES program to comply with the policies as prescribed in Section 3.10.3.A.2.d. unless it can be demonstrated, after consultation with the Commission, that these requirements are not necessary for the protection of existing water quality in the Special Protection Waters due to

distance from Special Protection Waters, time of travel, the existence of water storage impoundments, the waste assimilation characteristics of the receiving stream, and other relevant hydrological and limnological factors.

The Commission shall, to the extent practicable and necessary, coordinate and oversee all Special Protection Waters activities and assist the efforts of each state environmental agency to control pollutants originating from intrastate tributary watersheds. The Commission shall determine pollution control requirements for discharges to Special Protection Waters; for non-point sources draining directly into Special Protection Waters; and total non-point source loads emanating from intrastate tributary watersheds as measured at Boundary Control Points.

g. Classified Special Protection Waters

the following:

1) The following stream reaches are classified as Outstanding Basin Waters:

(a) The Upper Delaware Scenic and Recreational River (Delaware River between River Mile 330.7 and 258.4);

(b) Those portions of intrastate tributaries located within the established boundary of the Upper Delaware Scenic and Recreational River Corridor;

(c) The Middle Delaware Scenic and Recreational River (Delaware River between River Miles 250.1 and 209.5);

(d) Those portions of tributaries located within the established boundary of the Delaware Water Gap National Recreation Area.

2) The following stream reaches are classified as Significant Resource Waters:

(a) The Delaware River between River Miles 258.4 (the downstream boundary of the Upper Delaware Scenic and Recreational River) and 250.1 (the upstream boundary of the Delaware Water Gap National Recreation Area);

(b) The Lower Delaware River between River Miles 209.5 (the downstream boundary of the Delaware Water Gap National Recreation Area) and 134.34 (the Calhoun Street Bridge near the Head of Tide at Trenton, NJ).

3) Definitions of Existing Water Quality for waters classified in paragraphs 1) and 2) above are presented in Part A of Table 1 for the Upper Delaware Scenic & Recreational River and Part B of Table 1 for the reach from Millrift, Pa. to the Delaware Water Gap, including the Middle Delaware Scenic and Recreational River; and in Table 2 for the reach between the Delaware Water Gap and Trenton, N.J.

4) The locations of Boundary and Interstate Control Points are described in Part C of Table 1 for the reach between Hancock, N.Y. and the Delaware Water Gap and in Table 2 for the reach between the Delaware Water Gap and Trenton, N.J.

5) Major surface water impoundments referenced in Section 3.10.3A.2.e.1)c.) are

- (a) Cannonsville Reservoir (New York State)
- (b) Pepacton Reservoir (New York State)
- (c) Neversink Reservoir (New York State)
- (d) Lake Wallenpaupack (Pennsylvania)
- (e) Mongaup System (New York State).

# TABLE 1. DEFINITION OF EXISTING WATER QUALITY IN THE DELAWARE RIVER BETWEEN HANCOCK,NEW YORK AND THE DELAWARE WATER GAP1

| PART A: UPPER DELAWARE SCENIC & RECREATIONAL RIVER <sup>2</sup> |      |  |                              |   |
|---|------|--|------------------------------|---|
| PARAMETER   | MEAN | 95 PERCENT CONFI-<br>DENCE LIMITS OF<br>MEAN | 10TH AND 90TH<br>PERCENTILES | ADDITIONAL  |
| Dissolved oxygen* (mg/l)  | 9.0  | 8.9 to 9.2                                   | 7.5 and 11.0                 | Never below 6.0 mg/l (night time);<br>May-Sept; reachwide |
| BOD <sub>5</sub> * (mg/l)                                       | 0.67 | 0.6 to 0.8                                   | 0.3 and 1.9                  | May-Sept; reachwide                                       |
| Conductivity (umhos/cm)   | 68   | 66.6 to 69.3                                 | 52 and 88                    | non-seasonal; reachwide                                   |

| Fecal coliform* (colonies/<br>100 ml) | 24   | 21 to 28     | 4 and 200     | May-Sept; reachwide                       |
|---------------------------------------|------|--------------|---------------|---|
| Total suspended* solids<br>(mg/l)     | 4.0  | 2.9 to 5.6   | 2.0 and 16    | non-seasonal; reachwide                   |
| Total phosphorus* (ug/l)              | 29   | 27 to 31     | 18 and 50     | non-seasonal; reachwide                   |
| Ammonia + ammonium*<br>(ug/l)         | 15   | 13 to 18     | 10 and 50     | as nitrogen; May-Sept; reachwide          |
| Ammonia + ammonium*<br>(ug/l)         | 22   | 20 to 25     | 10 and 60     | as nitrogen; non-seasonal; reach-<br>wide |
| Total kjeldahl nitrogen* (ug/<br>l)   | 202  | 172 to 237   | 100 and 530   | May-Sept; reachwide                       |
| Nitrite + nitrate nitrogen*<br>(ug/l) | 293  | 256 to 336   | 123 and 492   | May-Sept; reachwide                       |
| Hardness (mg/I as CaCo <sub>3</sub> ) | 21   | 19.9 to 22.2 | 17.0 and 27.0 | non-seasonal; reachwide                   |
| Biocriteria: Shannon-<br>Wiener       | 3.6  | 3.4 to 3.8   | 2.7 and 4.3   | May-Sept; reachwide                       |
| Biocriteria: Equitability             | 0.8  | 0.7 to 0.9   | 0.5 and 1.1   | May-Sept; reachwide                       |
| Biocriteria: EPT                      | 15.5 | 13.8 to 17.2 | 8.0 and 24.0  | May-Sept; reachwide                       |

\* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

<sup>1</sup> The numeric values for Existing Water Quality set forth in Parts A, B and C of Table 1 were developed through field measurements and laboratory analysis of data collected over a time period determined by the Commission to adequately reflect the natural range of the hydraulic and climatologic factors that affect water quality. Existing water quality is defined in terms of (a) an annual or seasonal mean of the available water quality data, (b) two-tailed upper and lower 95 percent confidence limits around the mean, and (c) the 10<sup>th</sup> and 90<sup>th</sup> percentiles of the data set from which the mean was calculated.

| PART B: DELAWARE RIVER FROM MILLRIFT THROUGH THE DELAWARE WATER GAP INCLUDING THE MIDDLE |      |  |                              |   |
|--|------|--|------------------------------|---|
| DELAWARE SCENIC AND RECREATIONAL RIVER <sup>2</sup>                                      |      |  |                              |   |
| PARAMETER  | MEAN | 95 PERCENT<br>CONFIDENCE<br>LIMITS OF MEAN | 10TH AND 90TH<br>PERCENTILES | ADDITIONAL  |
| Dissolved oxygen* (mg/l)   | 9.2  | 9.1 to 9.4                                 | 7.5 and 12.8                 | Never below 6.0 mg/l (night time);<br>non-seasonal; reachwide |
| BOD <sub>5</sub> * (mg/l)  | 0.63 | 0.6 to 0.7                                 | 0.3 and 1.6                  | May-Sept; reachwide   |
| Conductivity (umhos/cm)  | 76   | 75 to 77                                   | 60 and 95                    | non-seasonal; reachwide                                       |
| Fecal coliform* (colonies/<br>100 ml)  | 47   | 42 to 53                                   | 9 and 272                    | May-Sept; reachwide   |
| Total suspended solids*<br>(mg/l)  | 3.4  | 3.0 to 3.8                                 | 1.0 and 12.0                 | non-seasonal; reachwide                                       |
| Total phosphorus* (ug/l)   | 27   | 25 to 29                                   | 14 and 40                    | May-Sept; reachwide   |
| Ammonia + ammonium*<br>(ug/l)  | 23   | 21 to 26                                   | 10 and 50                    | May-Sept; reachwide   |
| Ammonia + ammonium*<br>(ug/l)  | 41   | 37 to 44                                   | 10 and 187                   | non-seasonal; reachwide                                       |
| Total kjeldahl nitrogen* (ug/<br>l)  | 293  | 276 to 312                                 | 101 and 860                  | non-seasonal; reachwide                                       |
| Total kjeldahl nitrogen* (ug/<br>I)  | 206  | 189 to 225                                 | 100 and 490                  | May-Sept; reachwide   |
| Nitrite + nitrate nitrogen*<br>(ug/l)  | 246  | 233 to 260                                 | 100 and 490                  | non-seasonal; reachwide                                       |

| Nitrite + nitrate nitrogen*<br>(ug/l) | 206  | 191 to 223   | 92 and 392   | May-Sept; reachwide     |
|---------------------------------------|------|--------------|--------------|-------------------------|
| Hardness (mg/l as CaCo <sub>3</sub> ) | 24   | 24 to 25     | 20 and 30    | non-seasonal; reachwide |
| Biocriteria: Shannon-<br>Wiener       | 3.6  | 3.4 to 3.7   | 3.2 and 4.1  | May-Sept; reachwide     |
| Biocriteria: Equitability             | 0.8  | 0.7 to 0.9   | 0.5 and 1.1  | May-Sept; reachwide     |
| Biocriteria: EPT                      | 13.9 | 12.8 to 15.1 | 8.0 and 20.0 | May-Sept; reachwide     |

\* Wastewater treatment facility projects subject to the no measurable change requirement must demonstrate no measurable change to EWQ for this parameter. Implementation guidance should be consulted.

<sup>2</sup> The definitions of Existing Water Quality presented in Parts A and B of this table were developed by performing parametric statistical analyses using logarithmic transformation of available water quality data to derive normality. The numbers represent the anti-log of the statistical results and, thus, will differ from numbers generated by using non-transformed data. Means derived from log transformations, for example, will be lower than means derived from non-transformed data. The 95 percent confidence limits were derived from a two-tailed distribution. Biocriteria were not developed using log-transformed data. The three indices used to develop the biocriteria were derived from specialized transformations of the original data, resulting in values that are normally distributed.

| HANCOCK, N.T. AND THE DELAWARE WATER GAP                                  |  |   |  |  |  |
|---|--|---|--|--|--|
| BOUNDARY  | CONTROL POINTS   | MAP REFERENCE   |  |  |  |
| Northern Boundary-UDSRR   | Delaware River Mile 330.7  | DRBC River Mile<br>maps & UDSRR<br>River Management<br>Plan |  |  |  |
| Eastern Boundary-UDSRR  | New York streams in Delaware & Sullivan Counties:<br>Blue Mill; Humphries; Abe Lord; Bouchoux; Pea;<br>Hoolihan; Basket; Hankins; Callicoon; Mitchell Pond;<br>Tenmile; Grassy Swamp; Narrow Falls; York Lake;<br>Beaver Brook; Halfway; Mill; Fish Cabin; Mongaup;<br>Shingle Kill                  | UDSRR River<br>Management PLAN                              |  |  |  |
| Western Boundary-UDSRR  | Pennsylvania streams in Wayne & Pike Counties:<br>Shingle Hollow; Stockport; Factory; Equinunk;<br>Weston; Little Equinunk; Cooley; Hollister;<br>Schoolhouse; Beaverdam; Calkins; Peggy Run;<br>Masthope; Westcolang; Lackawaxen; Verga Pond;<br>Panther; Shohola; Twin Lakes; Pond Eddy; Bush Kill | UDSRR River<br>Management PLAN                              |  |  |  |
| Northern Boundary-Eight<br>mile reach between UDSRR<br>and MDSRR          | Delaware River Mile 258.4 (railroad crossing at Millrift,<br>Pennsylvania)   | DRBC River Mile<br>maps; UDSRR River<br>Management Plan     |  |  |  |
| Eastern & Western<br>Boundaries-Eight mile reach<br>between UDSRR & MDSRR | Confluence of New York streams (Orange County);<br>Pennsylvania streams (Pike County); and New Jersey<br>streams (Sussex County) with the Delaware River:<br>Sparrowbush; Neversink; Cummins   | U.S.G.S. Port Jervis<br>South & North<br>topographic maps   |  |  |  |
| Northern Boundary-<br>DWGNRA  | Delaware River Mile 250.1 near the confluence of Cummins Creek   | DRBC River Mile<br>map & DWGNRA<br>Tract Map                |  |  |  |
| Eastern Boundary-DWGNRA   | New Jersey streams in Sussex County: Shimers;<br>White; Big Flatbrook; Little Flatbrook  | DWGNRA Tract<br>Maps  |  |  |  |

PART C: BOUNDARY AND INTERSTATE CONTROL POINTS FOR THE DELAWARE RIVER BETWEEN HANCOCK, N.Y. AND THE DELAWARE WATER GAP

| Western Boundary-<br>DWGNRA | Pennsylvania streams in Pike & Monroe Counties:<br>Crawford Branch; Vandermark; Sawkill; Raymondskill;<br>Conashaugh; Dry; Adams; Dingmans; Hornbeck;<br>Deckers; Alicias; Brodhead-Hellers; Hellers; Toms;<br>Denmark; Little Bushkill; Bushkill; Shawnee;<br>Brodhead; Cherry; Caledonia; Slateford | DWGNRA Tract<br>Maps |
|-----------------------------|---|----------------------|
|                             |   |                      |
| INTERSTATE                  | CONTROL POINTS (General Locations)  |                      |
| Upper Delaware Scenic &     | Buckingham Access Area  | 325                  |
| Recreational River          | Lordville Bridge  | 322                  |
|                             | Kellams Bridge  | 313                  |
|                             | Callicoon Access Areas  | 303                  |
|                             | Damacus/Cochecton   | 298                  |
|                             | Skinners Falls  | 295                  |
|                             | Narrowsburg area  | 290                  |
|                             | Ten Mile River Access Area  | 284                  |
|                             | Lackawaxen Access Area  | 277                  |
|                             | Barryville/Shohola Bridge   | 273                  |
|                             | Pond Eddy Bridge  | 266                  |
| Delaware River between the  | Millrift  | 258                  |
| UDSRR & the DWGNRA          | Matamoras/Port Jervis   | 254                  |
|                             | Northern boundary-DWGNRA  | 250                  |
| Delaware Water Gap National | Milford Beach   | 247                  |
| Recreation Area             | Dingmans Access Area  | 239                  |
|                             | Eshback Access Area   | 232                  |
|                             | Bushkill Access Area  | 228                  |
|                             | Depew Access Area   | 221                  |
|                             | Smithfield Beach  | 218                  |
|                             | Worthington S.F. Access   | 215                  |
|                             | Kittatinny Visitor Center   | 211                  |
|                             | Upstream end of Arrow Island  | 210                  |

12 DE Reg. 310 (09-01-08) (Prop.)