

# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## DIVISION OF WASTE AND HAZARDOUS SUBSTANCES

Statutory Authority: Title 7 Delaware Code, Chapter 91

7 DE Admin. Code 1375

### FINAL

Secretary's Order No.: 2012-WH-0024

Date of Issuance: July 10, 2012

Effective Date of the Amendment: August 11, 2012

### 1375 Regulations Governing Hazardous Substance Cleanup

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") the following findings, reasons and conclusions are entered as an Order of the Secretary in the above-referenced rulemaking proceeding.

#### Background and Procedural History

This Order considers proposed regulatory amendments to 7 DE Admin. Code 1375, *Delaware Regulations Governing Hazardous Substance Cleanup* ("HSC Regulations"). The Department's Site Investigation and Restoration Section (formerly known as the Site Investigation and Restoration Branch) of the Division of Waste and Hazardous Substances (formerly known as the Division of Air & Waste Management) commenced the regulatory development process with Start Action Notices 2008-26. The Department initially published the proposed regulatory amendments in the May 1, 2012 *Delaware Register of Regulations* and held a public hearing on May 31, 2012. The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated June 27, 2012 (Report). The Report recommends certain findings and the adoption of the proposed Amendments as attached to the Report as Appendix A.

#### Findings and Discussion

I find that the proposed Amendments are well-supported by the record developed by the Department, and I adopt the Report to the extent it is consistent with this Order. The Department's experts developed the record and drafted the proposed Amendments. Throughout the lengthy regulatory development process regarding this promulgation, the Department received absolutely no public comment from the regulated community, as noted in the Report, and no member of the public attended the hearing held on May 31, 2012.

I find that the Department's experts in the Site Investigation and Restoration Section of the Division of Waste and Hazardous Substances fully developed the record to support adoption of these Amendments. With the adoption of this Order, Delaware will be enabled to amend its Hazardous Substance Cleanup ("HSC") Regulations to establish new procedures for implementing the Hazardous Substance Cleanup Act, including Subchapter II, the Brownfields Development Program. Other substantive revisions to Delaware's HSC Regulations are as follows: (1) new definitions; (2) reporting requirements for releases of hazardous substances; (3) Environmental Consultant Certification Requirements; (4) additional types of investigations for sites with releases; (5) new cleanup, oversight, and reporting requirements for remedial actions; (6) incorporation of the Uniform Environmental Covenant Act (UECA) and Consolidation of Long Term Stewardship Requirements; (7) facility closure for cleaned up sites; (8) Natural Resource Damage Assessment; and (9) formal reformatting and re-organization of HSC Regulations to enhance overall clarity and understanding for the regulated community.

In conclusion, the following findings and conclusions are entered:

- 1.) The Department has jurisdiction under its statutory authority to issue an Order adopting these proposed Amendments as final;
- 2.) The Department provided adequate public notice of the proposed Amendments, and provided the public with an adequate opportunity to comment on the proposed Amendments, including at the public hearing held on May 31, 2012;
- 3.) The Department held a public hearing on May 31, 2012 in order to consider public comments before making any final decision;
- 4.) The Department's Hearing Officer's Report, including its recommended record and the recommended Amendments as set forth in Appendix A, are adopted to provide additional reasons and findings for this Order;
- 5.) The recommended Amendments do not reflect any changes from the proposed Amendments as published in the May 1, 2012, *Delaware Register of Regulations*;
- 6.) The recommended Amendments should be adopted as final regulation Amendments because Delaware will be enabled to (1) establish new procedures for implementing the Hazardous Substance Cleanup Act, including Subchapter II,

the Brownfields Development Program; (2) update and revise the existing HSC regulations to more closely follow the HSCA process; (3) clarifications and reorganizations made to specific sections of these regulations will promote a greater understanding of said regulations for the regulated community; and (4) the amendments are well supported by documents in the record; and that

7.) The Department shall submit this Order approving the final regulation to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

Collin P. O'Mara, Secretary

## 1375 Regulations Governing Hazardous Substance Cleanup

### 1.0 Scope and Applicability

#### 1.1 Scope.

~~These regulations establish the administrative processes and standards to identify, investigate, and cleanup facilities with a release or imminent threat of release of hazardous substances. The goal of these regulations is to implement the purpose and intent declared in 7 Del.C., Ch. 91, the Delaware Hazardous Substance Cleanup Act. These regulations provide a workable process to accomplish effective and expeditious cleanups to protect public health, welfare, and the environment, and provide opportunities to encourage the remedy of facilities to yield economic revitalization and redevelopment within the State.~~

#### 1.2 Overview of Cleanup Process.

~~1.2.1 This Subsection provides an overview of the different steps involved in dealing with a facility with a release or imminent threat of release of hazardous substances.~~

~~1.2.2 Any facility with a release or imminent threat of release may go through one or more of the following steps in the identification, investigation and cleanup processes.~~

~~1.2.2.1 Facility Identification. This process and the requirements shall be in accordance with Section 3.~~

~~1.2.2.2 Initial Investigation. This process and the requirements shall be in accordance with Section 4. The purpose of initial investigation is to determine if a suspected release or imminent threat of release may have occurred that warrants further action under these regulations.~~

~~1.2.2.3 Facility Evaluation. This process and the requirements are set forth in Section 5.~~

~~The Department or any person may conduct a facility evaluation at a facility suspected of a release or an imminent threat of release. The purpose of facility evaluation is to confirm the release or imminent threat of release at a facility, to develop information to evaluate threat to public health, welfare, or the environment, and to determine the relative hazard ranking of a facility.~~

~~1.2.2.4 Identification and Notification of Potentially Responsible Parties. This process and the requirements are set forth in Section 6. The Department, shall, as soon as is practicable, upon identification of a facility, initiate actions to identify and notify the potentially responsible parties associated with a facility where a release or imminent threat of release of hazardous substances has been confirmed. September, 1996 Page 2~~

~~1.2.2.5 Priority List. The process of preparing a priority list of the facilities and the requirements are set forth in Section 7. The priority list of facilities shall be prepared based on the hazard ranking established pursuant to a facility evaluation. The priority list may be used in determining priority of response actions and preparation of funding recommendations.~~

~~1.2.2.6 Negotiations with Potentially Responsible Parties. The Department may require the potentially responsible parties to perform response actions by issuing a letter inviting negotiations towards preparation of a settlement agreement in the form of a consent decree. The process and the requirements are set forth in Subsections 8.1, 13.2 and 13.3. If the potentially responsible parties fail to enter into a consent decree, the Secretary may issue an administrative order after a hearing. The Department may at any time carry out a response action at a facility if the potentially responsible parties have not carried out the response action in a timely manner or if no potentially responsible parties can be identified.~~

~~1.2.2.7 Remedial Investigation. The process and the requirements of conducting a remedial investigation are set forth in Subsections 8.3 and 8.4. A remedial investigation may be conducted at a facility to define the risks to and the extent of the problem that requires remediation. This is usually the first phase of a response action at a facility pursuant to a consent decree or an administrative order.~~

- 1.2.2.8 Feasibility Study. The process and the requirements of conducting a feasibility study are set forth in Subsection 8.5. After conducting a remedial investigation at a facility, a feasibility study may be conducted to identify the remedial alternatives.
- 1.2.2.9 Plan of Remedial Action. A remedial action is selected from among the remedial alternatives developed based on the criterion set forth in Subsection 8.6. The Department shall issue a proposed plan of remedial action outlining the proposed remedial action, for public comment. The process and the requirements for preparation of a plan of remedial action are set forth in Subsection 8.7. After review and consideration of the comments received during the comment period, the Department shall issue a final plan of remedial action. This final remediation plan shall be incorporated into a remedial decision record.
- 1.2.2.10 Remediation. The process and the requirements for conducting a remedy at a facility are set forth in Subsection 8.8. Based on the final plan of remedial action, the selected remedy is implemented at the facility. The implementation of a remedy may usually consist of distinct phases such as design, construction, operation and maintenance and compliance monitoring. The design phase may consist of preparation of reports including but not limited to "engineering design report", "construction plans and specifications" and "operation and maintenance and compliance monitoring plan". The construction phase usually consists of the actual implementation of the remedy in accordance with construction plans and specifications. Operation and maintenance involves action to maintain the effectiveness of the remedial action whereas compliance monitoring monitors the attainment of cleanup levels and the long-term effectiveness of the remedial action.
- 1.2.2.11 Interim Response Activity. The process and the requirements of interim response activity are set forth in Subsection 8.2. The Department may require or conduct an interim response activity at any time before the selection of final remedial action to prevent, minimize or mitigate harm to public health, welfare, or the environment.

#### 1.2.3 Oversight by the Department.

- 1.2.3.1 Concurrent Oversight. Any person may obtain the Department's concurrent oversight of work on any aspect of a remedy by entering into a settlement agreement with the Department for that purpose. By obtaining the Department's concurrent oversight of work, a person will be able to receive the Department's approval that the work which is proposed for a facility satisfies the requirements of HSCA, these Regulations, and all applicable guidances, policies and procedures. The interim response, remedial action, and operation and maintenance portions of a remedy shall not be performed by any person without the concurrent oversight of the Department except as provided under Section 8.2.3.
- 1.2.3.2 Subsequent Oversight. Any person may perform an initial investigation, facility evaluation, remedial investigation, feasibility study, or remedial design without the concurrent oversight of the Department. A person may obtain subsequent oversight of work not performed with the Department's concurrent oversight by entering into a settlement agreement with the Department for it to review such prior work and determine whether it can be approved as satisfying the requirements of HSCA, these Regulations, and any applicable guidances, policies and procedures. If the Department determines that any portion of the work does not satisfy these requirements, it may require that additional remedial work be performed prior to approving the person's work, or it may disapprove the work entirely.
- 1.2.3.3 Any person may undertake an emergency response action at a facility after initiation of response actions pursuant to these Regulations without the Department's oversight provided the person notifies the Department of the details of the action taken, within 48 hours of the initiation of the emergency response action. This does not limit or relieve any person's liability under other existing Federal or State laws or regulations for undertaking an emergency response action at a facility.

#### 1.3 Authority.

- 1.3.1 These regulations are enacted pursuant to 7 ~~Del.C.~~ Ch. 91 entitled "Delaware Hazardous Substance Cleanup Act."
- 1.3.2 These regulations shall be known as, "Delaware Regulations Governing Hazardous Substance Cleanup."

#### 1.4 Applicability; Other Laws and Regulations.

- 1.4.1 These regulations shall apply to all facilities with a release or imminent threat of a release without regard to whether the facility is publicly or privately owned.
- 1.4.2 Nothing in these regulations shall be construed to limit the authority of the Department to act pursuant to other existing laws and regulations.

## 1.5 Compliance with Other Laws and Regulations Required.

Any action taken under the authority of these regulations shall be in compliance with all applicable federal and state laws and regulations. Subject to the provision of 7 ~~Del.C.~~ Ch. 60, §§6011, 6012 and 6314, the Department may waive the requirements of any environmental permits for an on-facility activity during remedial action if substantive requirements of the permit have been met for the selected remedy. At the time of initiation of operation and maintenance, the potentially responsible parties responsible for such operation and maintenance, shall submit a complete application to the Department for all activities which require a permit under Delaware laws and regulations.

## 2.0 Definitions And Usage

### 2.1 Definitions.

The following words, phrases, and terms, as used in these regulations, are defined below:

**"Act"** means 7 ~~Del.C.~~ Ch. 91 relating to the cleanup of hazardous substance release facilities in the State of Delaware.

**"Allowable Interest Rate"** means a rate of interest 5% over the federal reserve discount rate.

**"Ambient Air"** means that part of the atmosphere outside of buildings.

**"Aquifer"** means a geologic formation, group of formations, or a part of a formation capable of yielding groundwater to wells or springs.

**"Assessment Area"** means the area or areas within which natural resources have been affected by release of hazardous substances and that serves as the geographic basis for the injury assessment.

**"Background"** or **"Natural Background"** means the level of contaminants present in the area from naturally occurring substances, excluding contaminants and other contributions resulting from human activity.

**"Baseline Conditions"** or **"Baseline"** means the condition or conditions that would have existed at the natural resource damage assessment area had the release of hazardous substances under investigation not occurred.

**"Carcinogen"** means a hazardous substance which may cause or induce cancer in humans. The Integrated Risk Information System (IRIS) may be used as the basis for determining that a particular hazardous substance is a carcinogen. The term also includes suspected carcinogen.

**"CERCLA"** means the Comprehensive Environmental, Response, Compensation and Liability Act of 1980, 42 U.S.C. Sec. 9601 et seq, as amended.

**"Conditional Cleanup Level"** means the concentration of hazardous substances in the environment that is protective of public health, welfare, and the environment under restricted site use conditions.

**"Cost Effective"** means when two or more activities provide the same or similar levels of benefits, the least costly activity providing that level of benefits is preferred, or when two or more activities provide different levels of benefits, the activity providing more benefits is preferred if the increase in benefits is not disproportionate to the cost of obtaining the benefits.

**"Day"** means calendar days; however any document due on the weekend or a holiday may be submitted on the first working day after the weekend or holiday.

**"Delaware Hazard Ranking Model"** means a ranking system developed by the Department used to prioritize facilities based on relative risk to public health, welfare, or the environment.

**"Department"** means the Delaware Department of Natural Resources and Environmental Control.

**"Direct Contact"** means exposure to hazardous substances through ingestion, inhalation or dermal contact.

**"Disposal"** means the discharge, deposit, injection, dumping, spilling, leaking or placing of any hazardous substance into or on any land, water or into the air so that such hazardous substance or any constituent thereof may enter the environment.

**"EMERGENCY RESPONSE"** means a response activity undertaken to eliminate or control an immediate threat to public health, welfare, or the environment from such situations as: (1) human, animal, or food chain exposure to contaminating substances; (2) contamination of drinking water supply; (3) contamination of air; (4) fire and/or explosion; or (5) similarly acute situations.

**"Environment"** means the navigable waters, the waters of the contiguous zone, ocean waters, and any other surface water, groundwater, drinking water supply, land surface or subsurface strata or ambient air within the State.

**"Facility"** means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, aircraft or any site or area where a hazardous substance

has been generated, manufactured, refined, transported, stored, treated, handled, recycled, disposed of, released, placed or otherwise come to be located. Where there is or has been a release or threat of release on a parcel of real estate, the entire real estate may be considered the facility for the purpose of performing a remedy. A facility also includes all adjacent properties where hazardous substances may have migrated since being released.

**"Facility Evaluation"** means investigations to identify the existence, source, nature and extent of a release or imminent threat of release of hazardous substances and the risk to public health, welfare, or the environment.

**"Feasibility Study"** means a study undertaken to develop, screen and evaluate options for remedial action.

**"Final Plan Of Remedial Action"** means the written determination by the Secretary, of appropriate action for remediation of a release at or from a facility to protect public health, welfare, or the environment.

**"Free Product"** means a hazardous substance which occurs as an immiscible (non aqueous phase) liquid in surface water, groundwater, the vadose zone, or the ground surface.

**"Fund"** means the Hazardous Substance Cleanup Fund created pursuant to Section 9113 of the Act.

**"Groundwater"** means water below the land surface in the zone of saturation.

**"Hazard Index"** means the numerical value obtained by dividing a person's expected daily intake of a non-carcinogen by a level which is not expected to produce toxic effects.

**"Hazard Ranking"** means the process of assigning relative rank or priority to a site using the Delaware Hazard Ranking Model.

**"Hazardous Substance"** means: (a) any hazardous waste as defined in 7 **Del.C.** Ch. 63 or any hazardous waste designated by regulation promulgated pursuant to 7 **Del.C.** Ch. 63; (b) any hazardous substance as defined in CERCLA or regulations promulgated pursuant thereto; (c) petroleum, including crude oil or any fraction thereof; however, any release of hazardous substances from an underground storage tank which is regulated by 7 **Del.C.** Ch. 74 or regulations promulgated thereto is not subject to these regulations except that such a release is eligible for funding under Subsection 14.1; (d) Any substance in sufficient concentrations which the Secretary through regulation determines may present risk to the public health, welfare, or the environment.

**"Hourly Rate Of Wages"** means the total annual wages of a State employee divided by 1,650 hours or the monthly wages of an employee divided by the actual number of hours worked by the employee during the month.

**"Imminent Threat Of Release"** means potential for a release which requires action to prevent or mitigate any adverse impact to the environment or endangerment to public health or welfare which may result from such a release.

**"Indirect Cost"** means those costs incurred for a common or joint purpose benefiting more than one cost objective, and which are not readily assignable to the cost objectives specifically benefited, without effort disproportionate to the results achieved.

**"Indirect Cost Rate"** means the ratio of indirect cost to the projected costs of salaries for facility remediation.

**"Initial Investigation"** means a process for identifying a suspected release or imminent threat of release.

**"Injury"** means a measurable adverse change, either long or short term, in the chemical, biological or physical quality or the viability of a natural resource including loss thereof resulting either directly or indirectly from exposure to release of hazardous substances, or exposure to a product of reactions resulting from the release of hazardous substances.

**"Interim Response Activity"** means the containment, cleanup, or removal of a release or imminent threat of release of hazardous substances from a facility, or the taking of other actions, prior to the selection of a remedial action, as may be necessary to prevent, minimize, or mitigate threat to public health, welfare, or the environment.

**"Long-term Effectiveness"** means the ability of a remedy to maintain the desired level of protection over time.

**"Loss"** means a measurable adverse reduction, either long or short term, of a chemical, biological or physical quality or viability of a natural resource, resulting either directly or indirectly from exposure to release of hazardous substances, or exposure to a product of reactions resulting from the release of hazardous substances.

**"Maximum Contamination Level"** or **"MCL"** means the level of a specific chemical promulgated by EPA pursuant to the Safe Drinking Water Act, 42 U.S.C. Sec 300 (f) et seq as amended.

**"Mixed Funding"** means any funding provided to potentially responsible parties from the Hazardous Substance Cleanup Fund, as provided for in Section 9104 (b) (2) m of the Act.

**"Natural Resources"** means land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by Delaware, the United States, any foreign government, any local government, or any Indian tribe.

**"Natural Resource Damages" or "Damages"** means the amount of money sought by the Department as compensation for injury, destruction, or loss of natural resources, or the restoration or replacement of such natural resources.

**"Natural Resource Damage Assessment" or "Assessment"** means the process of collecting, compiling, and analyzing information, statistics, or data to determine damages for injuries to natural resources.

**"Natural Resource Services" or "Services"** means the physical, chemical and biological function performed by the resource including, but not limited to, the human use or aesthetic value of those functions. These services are the results of the physical, chemical or biological quality of the resource.

**"Non-carcinogen"** means a hazardous substance which may cause toxic or poisonous effects but will not cause cancer.

**"Non-profit Enterprise"** means a governmental unit or an organization described in Section 501(c)(3) of the federal Internal Revenue Code [26 U.S.C. Section 501(c)(3)] and exempt from tax under Section 501(a) of the federal Internal Revenue Code [26 U.S.C. Section 501(a)] but only with respect to a trade or business carried on by such organization which is not an unrelated trade or business, determined by applying Section 513(a) of the federal Internal Revenue Code [26 U.S.C. Section 513(a)] to such organization.

**"Operation And Maintenance"** means the activities necessary to provide for continued effectiveness and integrity of a response activity after implementation of the remedial action is completed.

**"Other Employee Costs Rate"** means the sum of State contributions to pension, unemployment insurance, Federal Income Contribution Act, health insurance, and worker's compensation for a State employee per year divided by 1,650 hours, or the sum of State contributions to pension, unemployment insurance, Federal Income Contribution Act, health insurance, and worker's compensation for a State employee per month divided by the actual number of hours worked by the employee during the month.

**"Oversight"** means: (1) Concurrent Oversight: concurrent supervision by the Department of a person's work on any aspect of a remedy during the performance of that work, including the Department's review, and prior approval of work proposed by the person, and (2) Subsequent Oversight: subsequent review and approval of a person's prior work on any aspect of a remedy which was not conducted with the concurrent supervision of the Department, and which is subsequently submitted to the Department for its approval.

Oversight may be performed by the Department, its consultants or contractors, and it includes the review of documents, studies and test results, and also any necessary administrative decision-making by the Department. The purpose of oversight of a remedy by the Department is to assure that the remedial work is consistent with, and satisfies the requirements of, HSCA, these Regulations, and any applicable guidances, policies or procedures. Oversight may also include, but not be limited to, supervision of activities in the field, the collection of split samples at a facility, and laboratory analyses of the split samples.

**"Owner Or Operator"** means:

- Any person owning or operating a facility.
- Any person who previously owned, operated, or otherwise controlled activities at a facility.
- The term "owner or operator" does not include an agency of the State or unit of local government that acquired title or control of the facility involuntarily through bankruptcy, tax delinquency, abandonment or other circumstances.
- The term "control" does not include regulation of the activity by a federal, state or local government agency.
- The term "owner or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility.

**"Pathway"** means the route or medium through which hazardous substances are or were transported from the source of the release to the injured resource or the exposed human population.

**"Person"** means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, state government agency, unit of local government, school district, conservation district, federal government agency, Indian tribe or interstate body.

**"Proposed Plan Of Remedial Action"** means a detailed plan describing cleanup actions and related information for the containment or permanent removal and disposal of hazardous substances from a facility to protect public health, welfare and the environment or other measures to protect public health, welfare or the environment from the release of hazardous substances.

**"Potentially Responsible Party"** means any person identified pursuant to Section 9105 (a) (1) through (6) and these regulations as a person liable with respect to a facility.

**"Preliminary Risk Assessment"** means a risk assessment based on the limited information gathered during the facility evaluation and focused on the most obvious and significant risks posed at the site.

**"Presumptive Remedy"** means established and preferred technologies for common categories of releases or facilities based upon historical patterns of remedy selection, and upon scientific and engineering evaluations of performance data on technology implementation.

**"Priority List"** means the listing established to rank the facilities based on the risk they pose to the public health, welfare, or the environment.

**"Quality Assurance Project Plan"** means a plan that describes protocols necessary to achieve the data quality objectives defined for all remedial facility sampling activities.

**"Reasonable Maximum Exposure"** means the highest exposure that could reasonably be expected to occur at a facility. Reasonable maximum exposure is calculated in accordance with the methods contained in the Environmental Protection Agency's "Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A)", (December 1989).

**"Release"** means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a hazardous substance, pollutant or contaminant into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes:

- any release which results in exposure to a person solely within his or her workplace, with respect to a claim which such person may assert against his or her employer; provided, however, that this exclusion does not apply to any such release which also results in exposure to the environment;
- emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine;
- the appropriate and legal application of fertilizers and pesticides; and
- any discharges in compliance with State permits issued in conformance with Title 7 of the Delaware Code and federally permitted releases under CERCLA.

**"Remedial Action"** means the containment, contaminant mass or toxicity reduction, isolation, treatment, removal, cleanup, or monitoring of hazardous substances released into the environment, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate harm or risk of harm to the public health, welfare, or the environment which may result from a release or an imminent threat of a release of hazardous substances.

**"Remedial Design"** means the preparation of a plan and specifications necessary for implementation of a remedial action.

**"Remedial Investigation"** means an evaluation of a release or imminent threat of release of a hazardous substance at a facility to determine the nature, extent, and impact of the release and the collection of data necessary to conduct a feasibility study of remedial alternatives.

**"Remedy"** means any action, response or expenditure consistent with the purposes of the Act, or any regulations or guidance developed pursuant thereto to identify, minimize or eliminate any imminent threat posed by any hazardous substances to public health, welfare, or the environment including preparation of any plans, conducting of any studies and any investigative, oversight of remedy or monitoring activities with respect to any release or imminent threat of release of a hazardous substance and any health assessments, risk assessments or health effect studies or natural resource damage assessments conducted in order to determine the risk or potential risk to public health or welfare or the environment.

**"Replacement"** or **"Acquisition Of The Equivalent"** means the substitution for the injury or loss of a resource with another resource that provides the same or substantially similar services, when such substitutions are in addition to any substitutions made or anticipated as part of response actions and when such substitutions exceed the level of response actions determined appropriate to the facility pursuant to the National Oil and Hazardous Substances Contingency Plan (NCP), as amended.

**"Response Action"** or **"Response Activity"** means emergency response, interim response, initial investigation, facility evaluation, remedial investigation, feasibility study, remedial design, remedial action, operation and maintenance and compliance monitoring.

**"Restoration" or "Rehabilitation"** means actions undertaken to return an injured resource to its baseline condition, as measured in terms of the injured resource's physical, chemical or biological properties or the services it provided during its baseline conditions when such actions are in addition to response actions completed or anticipated, and when such actions exceed the level of response actions determined appropriate to the facility pursuant to the National Oil and Hazardous Substances Contingency Plan (NCP), as amended.

**"Risk Assessment"** means the process of defining the possible health effects of exposure of human populations to hazardous substances. Risk Assessment may also include defining the risk to the environment.

**"Risk Based Concentration Values"** means levels of concentration of contaminants determined to be protective of human health and the environment.

**"Sampling And Analysis Plan"** means a plan prepared under Subsection 13.4 of these regulations.

**"Secretary"** means Secretary of the Department or his or her designee.

**"Settlement Agreement"** means a written agreement between one or more persons and the Department in which the terms and conditions are embodied in a consent decree, administrative order on consent, memorandum of agreement, or any other type of agreement approved by the Department.

**"Short term Effectiveness"** means the ability of the remedy to maintain the desired level of protection during implementation of the remedy.

**"Small Business Enterprise"** means a business that employs five hundred (500) or fewer employees, has a net worth which does not exceed \$6 million and the average net income after taxes does not exceed \$2 million.

**"Surface Water"** means the waters of the State of Delaware, occurring on the surface of the earth.

**"Type A Assessment"** means standard procedures for simplified assessments requiring minimal field observation to determine damages as specified in CERCLA as amended.

**"Type B Assessment"** means alternative methodologies for conducting assessments in individual cases to determine the type and extent of short- and long-term injury and damages, as specified in CERCLA as amended.

**"Voluntary Cleanup Program"** means the remedial process established by the Department under 7 Del.C. Ch. 91, that a party willingly enters into, provided its application is approved by the Department, for the purpose of conducting a remedy at a facility.

**"40E-05 Cancer Risk"** means the potential risk for one additional cancer death caused by exposure to a carcinogen in a human population of 100,000 in a life time.

## 2.2 Usage.

2.2.1 For the purpose of these regulations, the following shall apply:

2.2.1.1 Unless the context clearly requires otherwise, the use of the singular shall include the plural and conversely;

2.2.1.2 "Include" or "including" means including, but not limited to;

2.2.1.3 "May" means the provision is optional, at the discretion of the Department; and

2.2.1.4 "Shall" and "will" means the provision is mandatory.

## 3.0 Facility Identification

### 3.1 Mechanisms to Identify Facilities

Facilities with a release or imminent threat of release of hazardous substances may be identified by the Department through a variety of mechanisms including, but not limited to, any of the following:

3.1.1 Reports to or investigations by the Department;

3.1.2 Reports to or from, or investigations, by the Delaware Department of Health and Social Services;

3.1.3 Reports to or from, or investigations, by the Delaware Department of Transportation;

3.1.4 Reports to or from, or investigations, by other local government agencies;

3.1.5 Reports to or from, or investigations, by the State Police or other law enforcement agencies;

3.1.6 Reports to or from, or investigations, by the State Fire Marshal's Office or any Fire Department;

3.1.7 Reports to or from, or investigations, by the United States Environmental Protection Agency or other Federal agencies;

3.1.8 Other reporting sources including but not limited to impacted public, neighboring facilities, public contractors, consultants and other sources of information about the existing releases; and

3.1.9 Reports to or from, or investigations by, the Delaware Emergency Management Agency.

## 4.0 Initial Investigation



#### 4.1 Applicability

~~Whenever the Department or any person receives information that there may be a release or an imminent threat of release the Department or the person may conduct an initial investigation to identify the suspected release. Any person may elect to obtain oversight from the Department by entering into a settlement agreement for the purposes described in Subsection 1.2.3 hereof. Initial investigation may also include an environmental site assessment conducted by a person in connection with transacting real estate and Preliminary Assessments conducted by the Environmental Protection Agency.~~

#### 4.2 Scope

~~The Department may determine that existing information constitutes all or part of an initial investigation. At the discretion of the Department, the initial investigation may include a facility visit and documentation of conditions observed.~~

#### 4.3 Future Action.

~~4.3.1 Based on the information obtained about the facility during the initial investigation, the Department may decide to do one or more of the following:~~

~~4.3.1.1 Conduct a facility evaluation, or review the results of a facility evaluation conducted by any person. Any person may elect to obtain oversight from the Department by entering into a settlement agreement for the purposes described in Subsection 1.2.3;~~

~~4.3.1.2 Require an immediate response action;~~

~~4.3.1.3 Decide that the facility requires no further action under these regulations at this time because either:~~

~~4.3.1.3.1 There has been no release or there is no imminent threat of release; or~~

~~4.3.1.3.2 A release has occurred, but in the Department's judgment, based on a preliminary risk assessment, does not pose a threat to public health, welfare, or the environment; or~~

~~4.3.1.3.3 Action under another authority is appropriate;~~

~~4.3.1.4 List the facility on an inventory of hazardous substance release sites which represents facilities at which there are suspected releases that may require additional remedial actions. This inventory will not include facilities which are being addressed under the Voluntary Cleanup Program which will be maintained on a separate list.~~

~~4.3.1.5 Conduct any other action determined by the Department to be appropriate.~~

~~4.3.2 Action pursuant to section 4.3.1 does not preclude the Department from requiring further action, in the future, based on evaluation of the facility or additional information.~~

### **5.0 Facility Evaluation**

#### 5.1 Applicability.

~~5.1.1 The Department, or any person may conduct a facility evaluation at any facility suspected of a release or imminent threat of release or, the Department, at a person's request, may review the results of a facility evaluation conducted by the person. Any person may elect to obtain oversight from the Department by entering into a settlement agreement for the purposes described in Subsection 1.2.3 hereof. Facility evaluation may also include an environmental site assessment conducted by a person in connection with transacting real estate and Site Inspections conducted by the Environmental Protection Agency.~~

~~5.1.2 The Department may determine that existing information constitutes the equivalent of all or part of a facility evaluation.~~

~~5.1.3 The purpose of the facility evaluation is to develop sufficient information and sampling data to satisfy one or more of the following:~~

~~5.1.3.1 Confirm the release or imminent threat of release;~~

~~5.1.3.2 Identify the hazardous substances and collect any information regarding the extent, amount, or concentration of the substances;~~

~~5.1.3.3 Identify facility characteristics that could result in the hazardous substances entering and moving through the environment;~~

~~5.1.3.4 Perform a preliminary risk assessment;~~

~~5.1.3.5 Evaluate the threat to public health, welfare, and the environment;~~

~~5.1.3.6 Determine the relative priority of the facility using the Delaware Hazard Ranking Model;~~

~~5.1.3.7 Determine if further response action is necessary.~~

5.1.4 Prior to the Department conducting a facility evaluation, the Department shall attempt to notify the owner or operator of the facility, if known, of the Department's intent to conduct the evaluation, and allow the owner or operator to submit relevant information to the Department.

## 5.2 Scope.

5.2.1 The scope of the facility evaluation will depend on the specific needs of the facility. The process will remain flexible; however, in all cases sufficient information must be collected, developed, and evaluated to perform a preliminary risk assessment.

5.2.2 A facility evaluation may include one or more of the following:

5.2.2.1 General facility information;

5.2.2.2 Review of existing information;

5.2.2.3 Field investigations that address:

5.2.2.3.1 Surface water and sediments;

5.2.2.3.2 Soils;

5.2.2.3.3 Geology and groundwater systems;

5.2.2.3.4 Air;

5.2.2.3.5 Meteorological data;

5.2.2.3.6 Human population distribution;

5.2.2.3.7 Preassessment for natural resource damages;

5.2.2.4 Land use;

5.2.2.5 Critical Habitats;

5.2.2.6 Hazardous substances and their sources;

5.2.2.7 Receptor identification;

5.2.2.8 Any other information to accomplish the purposes of a facility evaluation;

5.2.2.9 Preliminary risk assessment.

## 5.3 Further Action

5.3.1 Based on the information obtained about the facility during the facility evaluation, the Department may decide to do one or more of the following:

5.3.1.1 Conduct, or require a potentially responsible party to conduct, a remedial investigation and/or a feasibility study;

5.3.1.2 Enter into a settlement agreement with any person that offers to conduct a remedial investigation and/or feasibility study;

5.3.1.3 Require or conduct an immediate response action;

5.3.1.4 Decide that the facility requires no further action under these regulations at that time because either:

5.3.1.4.1 There has been no release or there is no imminent threat of release; or

5.3.1.4.2 A release has occurred, but in the Department's judgment, based on a preliminary risk assessment, does not pose a threat to public health, welfare, or the environment; or

5.3.1.4.3 Action under another authority is appropriate;

5.3.1.5 Conduct any other action determined by the Department to be appropriate.

## 5.4 Potentially Responsible Party Update

The Department shall make available, upon request, the results of the facility evaluation to the facility's owner or operator, and any person who has received a potentially responsible party notification letter under Section 6.

## 6.0 Potentially Responsible Parties

### 6.1 Identification of Potentially Responsible Parties

6.1.1 The Department shall initiate identification of potentially responsible parties associated with the facility, as soon as practicable.

6.1.2 The Department may use existing information gathering authorities and coordinate such investigations with other state, local, and federal agencies.

### 6.2 Information Request

If the Department determines that there is reasonable basis to believe that there is a release or imminent threat of release of a hazardous substance, the Secretary may require information or documentation relevant to the release or imminent threat of release from any person who may have pertinent information.

### 6.3 Notice to Potentially Responsible Parties

6.3.1 ~~Notice Letter. The Department may issue a potentially responsible party notice letter at any time to any person it believes to be a potentially responsible party with respect to the facility as provided for in Section 9105 of the Act. Persons may be notified when the Department has evidence of their potential liability. The notice letter shall be sent by certified mail, return receipt requested. A copy of the notice letter may be provided to the local unit of government in which the facility is located.~~

6.3.2 ~~Contents of Letter. The notice letter may provide the following:~~

6.3.2.1 ~~The name of the person the Department believes to be potentially liable;~~

6.3.2.2 ~~A general description of the location of the facility;~~

6.3.2.3 ~~The basis for the Department's position that the person has a relationship to the facility;~~

6.3.2.4 ~~The basis for the Department's position that a release or imminent threat of a release of a hazardous substance poses a threat to public health, welfare, or the environment; and~~

6.3.2.5 ~~The names of other persons to whom the Department has sent such a notice letter with respect to the facility.~~

6.3.3 ~~Additional Potentially Responsible Parties. The Department reserves the right to notify additional potentially responsible parties at any time, and may facilitate efforts by potentially responsible parties who have been notified to identify additional potentially responsible parties.~~

### 6.4 Public Notice of Liability

6.4.1 ~~In the event that a potentially responsible party cannot be located, so that a notice letter can be sent under Subsection 6.3 hereof, the Department may publish, in a newspaper of statewide circulation, a public notice regarding that potentially responsible party which may provide the following:~~

6.4.1.1 ~~The name and last known address of the person the Department believes to be a potentially responsible party;~~

6.4.1.2 ~~A general description of the location of the facility;~~

6.4.1.3 ~~The basis for the Department's position that the person has a relationship to the facility;~~

6.4.1.4 ~~The basis for the Department's position that a release or imminent threat of a release of a hazardous substance poses a threat to public health, welfare, or the environment; and~~

6.4.1.5 ~~The name and address of the person within the Department who the potentially responsible party can contact in order to begin negotiations or obtain further information about the site.~~

6.4.2 ~~The date of publishing of the public notice shall be deemed to be the start of the negotiation period described in Subsection 13.2.2 hereof.~~

## 7.0 Priority List

### 7.1 Applicability

~~The Department shall establish a priority list of facilities from the inventory of hazardous substance release sites, where further response has been determined to be necessary, based on the relative hazard ranking of the facility using the Delaware Hazard Ranking Model. The relative priorities established in the priority list may be considered in the preparation of funding recommendations, under Section 14, and in determining the priority for response actions among facilities. The Department may conduct or require a response at a facility even if it is not included on the list.~~

### 7.2 Criteria for Placement of Facilities on Priority List

7.2.1 ~~Facilities may be placed on the priority list if, after the completion of a facility evaluation, the Department has determined that further response action is required at the facility. The priority list may be updated at least once every year. Placement of a facility on the priority list does not, by itself, imply that persons associated with the facility are liable under the Act or these regulations.~~

7.2.2 ~~Facilities placed on the priority list will be given a hazard ranking. The purpose of the hazard ranking is to estimate the relative potential risk posed by the facility to public health, welfare, or the environment based on the information compiled during the facility evaluation.~~

7.2.3 ~~The Department will objectively assess the relative degree of risk of each facility which is to be placed on the priority list using the Delaware Hazard Ranking Model established by the Department. Information obtained in the facility evaluation, and any additional data specified by the Department, will be included in the hazard ranking evaluation.~~

7.2.4 ~~The Department will, upon request, make available to the facility owner and operator and any potentially responsible party known to the Department, the final hazard ranking results for a facility to be placed on the priority list.~~

- 7.2.5 A facility may be removed from the inventory of hazardous substance release sites list and the priority list of facilities after the Department has determined that no further action is required at the facility or a certificate of completion of remedy is issued by the Department.
- 7.2.6 The Department will address facilities, to the maximum extent practicable, based upon their ranking on the priority list of facilities. A person may conduct a remedy at a facility, regardless of its priority listing, by entering into a settlement agreement through the Department's Voluntary Cleanup Program.
- 7.3 Public Notice of Priority List.  
The Department may provide, at least once a year, a public notice of the priority list. Such a public notice could be in the form of publication of a list in any report issued by the Department with a wide circulation.

## **8.0 Response Activities**

### **8.1 Response Activities by the Department or Any Other Person**

- 8.1.1 At any facility where the Department determines that there is a release or imminent threat of release of hazardous substances, the Department may require the identified potentially responsible parties to undertake appropriate response activities to abate, minimize, stabilize, mitigate, or eliminate the threat of release or imminent threat of release of hazardous substances.
- 8.1.2 At any facility where the Department determines that there is a release or imminent threat of release of hazardous substances, the Department may take any action to minimize, stabilize, mitigate, or eliminate the release or imminent threat of release of a hazardous substance when no potentially responsible parties have carried out the necessary activities in a timely manner or no potentially responsible parties can be identified to undertake the response action.
- 8.1.3 At any facility where there has been a release or imminent threat of release of hazardous substances, any person may conduct a remedial investigation and/or feasibility study without oversight from the Department to characterize the nature, extent and potential response activities if a release has occurred. The person may elect to obtain oversight from the Department of the remedial investigation and/or feasibility study, or evaluation of the results of the remedial investigation and/or feasibility study, by entering into a settlement agreement through the Department's Voluntary Cleanup Program.
- 8.1.4 After completion of the remedial investigation and feasibility study, no person shall implement a final plan of remedial action without oversight from the Department except as provided for in Subsection 1.2.3.
- 8.1.5 Combining Steps. Several steps in the cleanup process may be combined into fewer steps when deemed by the Department to be appropriate and protective of public health, welfare, or the environment. For example, the Department may decide that the facility evaluation, remedial investigation, feasibility study, remedial design and remedial action could be combined into a single step.

### **8.2 Interim Response Activities**

- 8.2.1 The Department may require an interim response activity at a facility. Interim response activities other than those listed in Section 8.2.3 shall only be conducted with concurrent oversight of the Department. An interim response activity must not be inconsistent with and must not interfere with any potential final remedies. When the Department conducts, requires or oversees an interim response activity, the following factors may be considered in determining the appropriateness of performing such activity:
- 8.2.1.1 Actual or potential exposure to hazardous substances of nearby human population, animals, or foodchain;
  - 8.2.1.2 Actual or potential contamination of drinking water supplies or sensitive ecosystems;
  - 8.2.1.3 Actual or potential injury to natural resources;
  - 8.2.1.4 Presence of hazardous substances in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release;
  - 8.2.1.5 High levels of hazardous substances in soils largely at or near the surface that are likely to migrate;
  - 8.2.1.6 The likelihood that weather conditions will cause hazardous substances to migrate or be released;
  - 8.2.1.7 The threat of fire or explosion;
  - 8.2.1.8 Other factors which pose threats to the public health, welfare, or the environment.
- 8.2.2 Interim response activities may include, but not be limited to, any of the following:
- 8.2.2.1 Drainage controls where precipitation or run-off from other sources can enter the release area and spread hazardous substances;
  - 8.2.2.2 Stabilization of berms, dikes, or impoundments where needed to maintain the integrity of the structures;

- 8.2.2.3 Temporary capping of the contaminated soils or sludges where needed to prevent the migration of hazardous substances into the environment;
- 8.2.2.4 Using chemicals or other materials to retard the spread of a release or mitigate its effects;
- 8.2.2.5 Removal of contaminated soil, from the drainage or other areas to reduce the spread of hazardous substances;
- 8.2.2.6 Removal of drums, barrels, tanks, or other bulk storage containers that contain hazardous substances when it will reduce the likelihood of any of the following:
  - 8.2.2.6.1 spillage,
  - 8.2.2.6.2 leakage,
  - 8.2.2.6.3 exposure to humans, animals, or the foodchain,
  - 8.2.2.6.4 fire or explosion,
- 8.2.2.7 Groundwater control or removal systems;
- 8.2.2.8 Removal of free product;
- 8.2.2.9 Provision of alternate water supply where it will reduce risk to public health;
- 8.2.2.10 Temporary evacuation to protect public health or welfare;
- 8.2.2.11 Other measures judged by the Department to be technically sound and necessary to protect public health, welfare, and the environment.

8.2.3 Interim response activities also include the placement of fences and warning signs, securing a facility or taking control precautions, supplying bottled water and human evacuations. These activities may be conducted without oversight from the Department.

### 8.3 Remedial Investigation.

- 8.3.1 The Department may require a potentially responsible party to conduct a remedial investigation, may itself conduct a remedial investigation, or may provide subsequent oversight of the results of a remedial investigation conducted by any person at the person's request. Any person may elect to obtain concurrent oversight of the Department by entering into a settlement agreement for the purposes described in Subsection 1.2.3 hereof.
- 8.3.2 The Department may determine that existing information constitutes the equivalent of all or part of a remedial investigation.
- 8.3.3 The purpose of the remedial investigation is to clearly describe risks to public health, welfare, or the environment and to identify the specific problems that require remediation. An understanding of these risks forms the basis of all actions to be taken at the facility.
- 8.3.4 A remedial investigation conducted pursuant to this subsection may address the following:
  - 8.3.4.1 The nature and extent of the contamination at the facility;
  - 8.3.4.2 Routes of exposure;
  - 8.3.4.3 All of the following with respect to hazardous substances that are present:
    - 8.3.4.3.1 amount,
    - 8.3.4.3.2 concentrations,
    - 8.3.4.3.3 characteristics,
    - 8.3.4.3.4 bioaccumulative properties,
    - 8.3.4.3.5 mobility,
    - 8.3.4.3.6 form,
  - 8.3.4.4 All of the following with respect to the physical setting of the facility:
    - 8.3.4.4.1 geology,
    - 8.3.4.4.2 hydrology,
    - 8.3.4.4.3 hydrogeology,
    - 8.3.4.4.4 soils,
    - 8.3.4.4.5 depth to saturated zone,
    - 8.3.4.4.6 hydrologic gradient,
    - 8.3.4.4.7 proximity to human population,
    - 8.3.4.4.8 proximity to drinking water aquifers,
    - 8.3.4.4.9 proximity to surface water,
    - 8.3.4.4.10 proximity to flood planes,
    - 8.3.4.4.11 proximity to wetlands,

- 8.3.4.5 Current and potential groundwater and surface water use;
- 8.3.4.6 Climate;
- 8.3.4.7 Source identification and characterization;
- 8.3.4.8 Whether substances at the facility can be reused or recycled;
- 8.3.4.9 ~~The extent to which natural or manmade barriers currently contain the substances and the adequacy of the barriers;~~
- 8.3.4.10 ~~The extent to which the substances have migrated or are expected to migrate from the area of release and the impact of the migration;~~
- 8.3.4.11 ~~An assessment of ecological injury including injury to natural resources resulting from the release; and~~
- 8.3.4.12 ~~Contribution of the substances to contamination of the air, land, water or foodchain.~~

8.3.5 Risk Assessment. Following the determination of the factors identified in section 8.4, any risk assessment conducted or required by the Department, or conducted by any other person, will consider the following:

- 8.3.5.1 ~~Carcinogenic risk posed to human health by the release or imminent threat of release of hazardous substances;~~
- 8.3.5.2 ~~Non-carcinogenic risk posed to human health by the release or imminent threat of release of hazardous substances;~~
- 8.3.5.3 ~~Any other risk posed to human health by the release or imminent threat of release of hazardous substances;~~
- 8.3.5.4 ~~Risk to the environment including, but not limited to, contamination of groundwater, surface water, air or soil produced by the release or imminent threat of release of hazardous substances; and~~
- 8.3.5.5 ~~Risk to public welfare.~~

#### 8.4 Facility Remedial Action Objectives

8.4.1 ~~During or immediately following the remedial investigation, remedial action objectives shall be developed by either the Department, a potentially responsible party or any person conducting the investigation. Remedial action objectives may consider factors, including but not limited to, current and potential land use, natural resource use, proximity of human populations, use of surrounding properties, level of contamination of surrounding properties and specific environmental issues.~~

8.4.2 ~~The remedial action objectives, which may include qualitative and quantitative objectives, shall be established before remedial alternatives are developed. In developing remedial alternatives, the focus will be to achieve desired facility remedial action objectives.~~

8.4.3 ~~Qualitative Objectives. Qualitative objectives may be developed to describe, in general terms, what the ultimate result of remedial action at the facility should be. These qualitative objectives may specifically identify the prospective use of the facility and be developed in consideration of each of the key facility characteristics that may impact the required level of remedial action of the facility. The specific threats to public health, welfare, or the environment are among some of the factors which may be considered while setting qualitative objectives.~~

8.4.4 ~~Quantitative Objectives. Based on the qualitative objectives, quantitative objectives may be developed that define specific levels of remedial action to achieve protection of public health, welfare, and the environment.~~

8.4.5 ~~Qualitative and Quantitative Remedial Action Objectives. Remedial action objectives may be developed iteratively to allow the Department to revisit the objectives based on additional information. The final objectives may be established before a remedy is selected considering the following:~~

- 8.4.5.1 ~~Current and/or proposed uses selected for areas affected by the release or imminent threat of release of hazardous substances;~~
- 8.4.5.2 ~~Any applicable local, state and federal laws and regulations;~~
- 8.4.5.3 ~~Facility specific risk assessment; and~~
- 8.4.5.4 ~~Potential risk to public health, welfare, or the environment.~~

#### 8.5 Feasibility Studies

8.5.1 ~~The Department may require a potentially responsible party to conduct a feasibility study, may itself conduct a feasibility study, or may provide subsequent oversight of the results of a feasibility study conducted by any person, at the person's request to identify remedial alternatives at a facility where remedial action is to be undertaken. Any person may elect to obtain concurrent oversight of the Department by entering into a settlement agreement for the purposes described in Subsection 1.2.3 hereof.~~

- 8.5.2 The feasibility study conducted may include, but not be limited to, the development of remedial alternatives that provide for meeting the remedial action objectives.
- 8.5.3 The Department may consider and may approve any presumptive remedy that is determined to satisfy the requirements contained in Subsection 8.6.
- 8.5.4 Development of alternatives may include, but not be limited to, the following steps:
  - 8.5.4.1 An initial screening of alternatives to narrow the list of potential remedies for further detailed evaluation. The initial screening shall be conducted to eliminate from the evaluation those alternatives which need no further consideration in the context of the following broad criteria:
    - 8.5.4.1.1 The effectiveness in meeting the cleanup level in Section 9 of these regulations to protect public health, welfare, and the environment.
    - 8.5.4.1.2 Acceptable engineering practices based on the following criteria:
      - 8.5.4.1.2.1 applicability to the problem;
      - 8.5.4.1.2.2 feasibility for the locations and conditions of release; and
      - 8.5.4.1.2.3 reliability; and
    - 8.5.4.1.3 Relative cost of the remedial action.
  - 8.5.4.2 After the initial screening is performed, an evaluation shall be conducted of the remaining alternatives considering the following factors:
    - 8.5.4.2.1 The protection of public health, welfare, and the environment. The remedial action that attains compliance cleanup levels, in accordance with Section 9, shall be presumed to demonstrate compliance with this paragraph unless the person undertaking the remedy can demonstrate that conditional cleanup levels, as set forth in section 9.1, are fully protective in accordance with Section 9. ; When the compliance cleanup levels or conditional cleanup levels cannot be established, a remedial action which complies with Section 9.1.5.3 shall be presumed to demonstrate compliance with this paragraph.
    - 8.5.4.2.2 Compliance with all applicable local, state and federal laws and regulations;
    - 8.5.4.2.3 Community acceptance of the alternatives;
    - 8.5.4.2.4 Monitoring the success of the remedial action. In considering this factor the Department will evaluate whether the alternative will provide for monitoring in accordance with Subsection 8.8 of these regulations;
    - 8.5.4.2.5 Technical practicability of the alternative at the facility. In considering this factor, the Department will evaluate whether the alternative will meet the following factors:
      - 8.5.4.2.5.1
        - 8.5.4.2.5.1.1 Technical feasibility;
        - 8.5.4.2.5.1.2 Ability to be implemented.
      - 8.5.4.2.5.2 A remedial action may not be considered technically practicable if the incremental cost of the cleanup action is substantial and disproportionate to the incremental degree of protection it would achieve.
    - 8.5.4.2.6 A reasonable restoration time frame as determined by the Department;
    - 8.5.4.2.7 Reduction of toxicity, mobility, and volume through treatment or containment of the hazardous substances, either on-site or at an approved off-site facility;
    - 8.5.4.2.8 Long-term effectiveness; and
    - 8.5.4.2.9 Short-term effectiveness.
  - 8.5.4.3 For remedial action alternatives which comply with Subsection 8.5.4.2.1 and 8.5.4.2.2, and satisfy the remaining evaluation criteria of subsection 8.5.4.2, preference shall be given to the remedial action which is most cost effective, and cost shall include present and future direct and indirect capital costs, operation and maintenance costs, compliance monitoring costs, and other foreseeable costs.

## 8.6 Selection of Proposed Remedial Action

The Department shall select a remedial action from the alternatives developed for the facility based on the determination of which remedial action complies with Subsection 8.5.4.2.1 and 8.5.4.2.2 and best complies with the remaining criteria in Subsection 8.5.4.2, and complies with Subsection 8.5.4.3.

## 8.7 Proposed Plan of Remedial Action

- 8.7.1 The Department shall prepare a proposed plan of remedial action to implement the alternative selected by the Department. The proposed plan of remedial action may include the following:

- 8.7.1.1 Brief summary of all site investigations and the results upon which the proposed remedial action is based;
  - 8.7.1.2 General description of the proposed remedial action including compliance monitoring;
  - 8.7.1.3 Brief summary of other alternative remedial actions evaluated in the remedial investigation/feasibility study and the justification for selecting the proposed remedial action;
  - 8.7.1.4 Cleanup levels for each medium of concern and the point of compliance where the levels will be met;
  - 8.7.1.5 Schedule for implementation of the plan of remedial action including restoration time frame, if known;
  - 8.7.1.6 Institutional controls required for facility use restriction, if any, for the proposed remedial action;
  - 8.7.1.7 Applicable state and federal laws and regulations for the proposed remedial action.
- 8.7.2 ~~Public Participation. The Department will provide public notice and opportunity to comment on the proposed plan of remedial action in accordance with Section 12.~~
- 8.7.3 ~~Final Plan of Remedial Action. After completion of the public comment period, the Department, after review and consideration of the comments received, shall issue a final plan of remedial action which shall designate the final selected remedial action.~~
- 8.7.4 ~~Remedial Decision Record. The proposed and final plan of remedial action and the basis for it, as well as all comments received by the Secretary, constitute the remedial decision record of the Secretary.~~
- 8.8 ~~Implementation of the Final Plan of Remedial Action~~  
The Department will implement or will require a potentially responsible party to implement the final plan of remedial action. No person shall implement a final plan of remedial action at a facility without concurrent oversight from the Department except as provided for in Subsection 1.2.3.
- 8.8.1 ~~The implementation of the remedy may follow the following distinct phases.~~
- 8.8.1.1 ~~Remedial Design. Engineering documents may be prepared for the remedial action and the level of detail may vary from facility to facility depending on the facility's specific conditions, and the nature and complexity of the proposed remedial action. The information in these various documents may be combined into one report to avoid unnecessary duplication. The Department may require the submission of the following reports:~~
    - 8.8.1.1.1 ~~Engineering design report. This shall contain information as required by the Department.~~
    - 8.8.1.1.2 ~~Construction plans and specifications. Construction plans and specifications shall detail the remedial action to be performed. The plans and specifications shall be prepared in conformance with the currently accepted engineering practices and techniques and shall include information as required by the Department.~~
    - 8.8.1.1.3 ~~Operation, maintenance and compliance monitoring plan. An operation and maintenance plan lists activities, technical guidance and regulatory requirements to ensure effective operation of the remedy under both normal and emergency conditions. The compliance monitoring plan provides for monitoring the attainment of the cleanup level and confirming the long-term effectiveness of the remedy. The operation and maintenance plan and the compliance monitoring plan shall include information as required by the Department.~~
  - 8.8.1.2 ~~Remedial Action. Construction of the remedy shall be conducted in accordance with the construction plans and specifications, and other plans prepared under this subsection.~~
    - 8.8.1.2.1 ~~Department inspections.~~
      - 8.8.1.2.1.1 ~~The Department may perform facility inspections and remedial construction oversight at areas of the facility subject to remediation under these regulations, or other work or construction activities as defined in subsection 13.10 which may interfere with the remedy. If remedial construction or any supporting activities are not consistent with approved plans, or not in compliance with environmental regulations or accepted construction procedures, or endanger public health, welfare, or the environment, the Department may issue a stop order requiring that remedial construction activities be halted at the facility and that all the conditions be brought into compliance with the applicable requirements.~~
      - 8.8.1.2.1.2 ~~The Department may conduct inspections of the facility following completion of remedial construction, during the operational shake down period and during the operation and maintenance period.~~
    - 8.8.1.2.2 ~~Construction documentation.~~



~~8.8.1.2.2.1 During remedial construction, detailed records shall be kept of all aspects of the work performed including construction techniques and materials used, items installed, and tests and measurements performed.~~

~~8.8.1.2.2.2 At the completion of remedial construction, the professional responsible for the supervision of construction shall prepare as-built drawings and a report documenting all aspects of facility construction. The report shall also contain an opinion from the approved professional, based on testing results and inspections, as to whether the remedial action work has been constructed in compliance with the plans and specifications and related documents.~~

~~8.8.1.2.3 Changes in the design or construction of the remedial action shall require Department's written approval.~~

#### ~~8.8.1.3 Operation and Maintenance, and Compliance Monitoring.~~

~~8.8.1.3.1 Operation and maintenance refer to measures initiated after the remedy is determined to be operational and functional. A remedy becomes "operational and functional" either one year after construction is completed, or when the remedy is determined by the Department to be functioning properly and performing as designed, whichever occurs earlier; except that for ground and surface water restoration, this period could be longer as determined by the Department. The Department may grant extensions to the one year period, as appropriate.~~

~~8.8.1.3.2 The purposes of compliance monitoring are to provide for:~~

~~8.8.1.3.2.1 Protection monitoring. Confirm that public health, welfare, and the environment are adequately protected during construction and during the operation and maintenance period of an interim response activity or remedial action described in the health and safety plan;~~

~~8.8.1.3.2.2 Performance monitoring. Confirm that the interim response activity or remedial action has attained cleanup levels and, if appropriate, other performance standards;~~

~~8.8.1.3.2.3 Confirmation monitoring. Confirm the long-term effectiveness of the remedial action once cleanup levels and, if appropriate, other performance standards have been attained.~~

### ~~8.9 Periodic Review~~

~~If the Department selects or approves a remedial action that results in hazardous substances remaining at a facility at concentrations which exceed compliance cleanup levels established under Section 9, the Department shall review the remedial action no less frequently than every 5 (five) years after the initiation of such remedial action to ensure that public health, welfare, and the environment are being protected; provided, however, that no further review shall be required if the Department determines that public health, welfare, and the environment will continue to be protected by the levels of hazardous substances present at the site.~~

### ~~8.10 Institutional Controls~~

~~8.10.1 Institutional controls that restrict the use of the facility and natural resources affected by a release of hazardous substances from the facility may be required to ensure continued protection of public health, welfare, and the environment, or the integrity of any interim response activity or remedial action in the following circumstances:~~

~~8.10.1.1 Where a remedial action results in residual concentrations of hazardous substances which exceed compliance cleanup levels established under Section 9, or~~

~~8.10.1.2 When the Department determines that the institutional controls are needed to ensure continued protection of public health or welfare, or the environment, or the integrity of the remedial action.~~

~~8.10.2 These institutional controls shall not be used as a substitute for remedial actions that would otherwise be technically practicable. Institutional controls which are used shall be considered remedial actions for the purposes of these Regulations.~~

~~8.10.3 Such restrictions shall be described in restrictive covenants executed by the property owner and recorded with the registrar of deeds for the county in which the facility is located. Such restrictive covenants shall be run with the land, and be binding on the owner's successors and assignees.~~

~~8.10.4 Any current owner or operator and all future owners and operators of a facility shall comply with all the institutional controls established pursuant to these Regulations.~~

## **9.0 Cleanup Levels**

### ~~9.1 General Procedures~~

~~9.1.1 All remedies performed under these regulations shall attain a degree of cleanup of hazardous substances and control of further releases of hazardous substances that ensures protection of public health, welfare, and the environment. The cleanup levels will be determined using a riskbased approach on a site specific basis. The risk-based approach may include consideration of existing and likely future uses of the facility and related natural resources.~~

- 9.1.2 Cleanup levels may be based on current and potential future resource uses and reasonable maximum exposures expected to occur under both current and potential future use conditions of areas that could be impacted by a release or imminent threat of a release of hazardous substances.
- 9.1.3 The Department may consider the use of established risk-based concentration values approved by the Department or cleanup standards and guidances established under 7 ~~Del.C.~~ Ch. 74, as a substitution for a risk assessment. The Department will determine, on a case-by-case basis, the appropriate instances in which any established risk-based values may be used.
- 9.1.4 Individuals or groups of individuals may be exposed to hazardous substances through more than one exposure pathway. Where the same individuals or groups of individuals are or could be consistently exposed through more than one pathway, the reasonable maximum exposure shall represent the total exposure through all of those pathways. The cleanup levels derived for individual pathways may be adjusted to be more stringent as directed by the Department to take into account multiple exposure pathways.
- 9.1.5 Methods for determining cleanup levels.
  - 9.1.5.1 Compliance cleanup levels: These will be established at concentrations which are protective of public health, welfare, and the environment and, which require no restrictions on the use of the facility. Compliance cleanup levels shall be established in accordance with Subsections 9.2–9.4 and as directed by the Department.
  - 9.1.5.2 Conditional cleanup levels: These represent concentrations which are protective of public health, welfare, and the environment under restricted facility use conditions. Conditional cleanup levels may be established where the person undertaking the remedy can demonstrate that such levels are consistent with state and federal laws, that all practicable methods of treatment are utilized, and that institutional controls are implemented in accordance with conditions as determined to be appropriate by the Department.
  - 9.1.5.3 When there are legitimate risks to public health, welfare and the environment which are not quantifiable under Section 9, the Department may establish cleanup levels or cleanup strategies which are in its best professional judgement, protective of public health, welfare, and the environment.
- 9.1.6 When multiple carcinogens and/or non-carcinogens exist at a facility for which inadequate toxicological data is available, the Department may set more stringent cleanup levels than those established under Subsections 9.2 through 9.4 of these regulations.

## 9.2 Groundwater Cleanup Levels

- 9.2.1 Groundwater cleanup levels may be based on estimates of the highest beneficial use and the reasonable maximum exposure expected to occur under both current and potential future use conditions of areas that could be impacted by the release or imminent threat of release of hazardous substances or may otherwise reasonably be determined by the Department to abate the threat to public health, welfare, and the environment.
- 9.2.2 The Department has determined that, unless demonstrated otherwise by the potentially responsible parties, the current use or potential for the use of groundwater as drinking water, including domestic uses, is the beneficial use which shall be protected. This beneficial use will require the highest quality of groundwater and exposure to hazardous substances via ingestion of drinking water and other domestic water uses represent the most common exposure pathways. For beneficial uses other than drinking water or domestic uses, appropriate exposure pathways will be determined by the Department consistent with the use. In the event of a release of hazardous substances, treatment, removal, or containment measures shall be implemented to reduce the concentration of the hazardous substances in groundwater to concentrations consistent with its use as follows:
  - 9.2.2.1 When the natural background level exceeds  $10E-05$  cancer risk level or a level corresponding to a hazard index value of one level, then the natural background level shall be the cleanup level; and
  - 9.2.2.2 When the natural background level is less than  $10E-05$  cancer risk level or a level corresponding to a hazard index value of one, then the  $10E-05$  cancer risk level or a level corresponding to a hazard index value of one level shall be the level for cleanup; provided, however, that the MCL may be used as the cleanup level if the Department determines it is protective of human health and the environment and it is consistent with the policy and purposes of the Act and these regulations.
  - 9.2.2.3 When there are multiple contaminants at a facility, the cleanup level of each contaminant shall be such that sum of the risks posed by the contaminants shall not exceed  $10E-05$  cancer risk or a hazard index value of one.

- 9.2.3 When the area contains high levels of contaminants as a result of human activity, such as in an urban or industrial area, and where the Department has determined that no active remediation is appropriate, then the goal shall be either no further degradation, or a level established by the Department. The goal is not only prevention of further degradation, but also, with the implementation of improved technology, remediation under other state or federal programs or allowing natural processes to occur, restoring the groundwater to natural background conditions.
- 9.2.4 Groundwater cleanup levels shall be established so that releases of hazardous substances to groundwater of the State shall not cause violations of surface water, sediments, soil, or air cleanup levels established pursuant to these regulations or other applicable state and federal laws.
- 9.2.5 In establishing groundwater cleanup levels, risk to the environment shall be considered.
- 9.2.6 Risk based concentration values for hazardous substances in groundwater which comply with Subsection 9.2.1 and 9.2.2, or cleanup standards and guidances established under 7 ~~Del.C.~~ Ch. 74 for groundwater, may be used as cleanup levels for groundwater.
- 9.3 **Surface Water Cleanup Levels**  
Cleanup levels for soils, and cleanup levels for groundwater that discharges to water bodies, shall not be at levels which may cause an exceedance of the State of Delaware Surface Water Quality Standards. Surface water cleanup levels shall meet the State of Delaware Surface Water Quality Standards.
- 9.4 **Soil Cleanup Levels**
- 9.4.1 Soil cleanup levels and the depths to which the cleanup levels will apply, shall be based on estimates of the facility use and the reasonable maximum exposure expected to occur under both current and future facility use conditions or may otherwise reasonably be determined by the Department to abate the threat to public health, welfare, and the environment.
- 9.4.2 The Department has determined that residential facility use is generally the facility use requiring the most protective cleanup levels and that exposure to hazardous substances in the soil via soil ingestion under residential facility use conditions represents the most common exposure pathway. For facility use other than residential use, appropriate exposure pathways will be determined by the Department consistent with its use. In the event of a release of hazardous substances, treatment, removal, or containment measures shall be implemented to reduce the levels of hazardous substances in soils at a facility to levels consistent with its use as follows:
- 9.4.2.1 When the natural background level exceeds the 10E-05 cancer risk level or a hazard index value of one level, for direct exposure or inadvertent ingestion, then the background level will be the cleanup level; and
- 9.4.2.2 When the natural background level is less than the 10E-05 cancer risk level or a level corresponding to a hazard index value of one, for direct exposure or inadvertent ingestion, then the 10E-05 cancer risk level or a level corresponding to a hazard index value equal to one becomes the cleanup level.
- 9.4.2.3 When there are multiple contaminants at a facility, the cleanup level of each contaminant shall be such that sum of the risks posed by the contaminants shall not exceed 10E-05 cancer risk or a hazard index value of one.
- 9.4.3 When the area contains high levels of contaminants as a result of human activity, such as in an urban or industrial area, and where the Department has determined that no active remediation is appropriate, then the goal shall be no further degradation or a level established by the Department. The goal is not only prevention of further degradation, but also, with the implementation of improved technology, remediation under other state or federal programs or allowing natural processes to occur, the restoration of the soil to natural background conditions.
- 9.4.4 Soil cleanup levels will also be such that migration of the contaminants from the soil will not cause a violation of the cleanup levels established for the ground or surface waters.
- 9.4.5 In establishing soil cleanup levels, risk to the environment shall be considered.
- 9.4.6 Risk based concentration values for hazardous substances in soil which comply with Subsection 9.4.1 and 9.4.2, or cleanup standards and guidances established under 7 ~~Del.C.~~ Ch. 74 for soil, may be used as cleanup levels for soil.

## **10.0 Natural Resource Damage Assessment**

### **10.1 Purpose**

- 10.1.1 To ensure timely and comprehensive assessment of injuries to natural resources resulting from a release of a hazardous substance.

10.1.2 To appropriately estimate the damages for injury to the natural resource as a consequence of the release of a hazardous substance.

10.1.3 To ensure that all lost uses are compensated for and appropriate restoration or replacement is carried out, or compensation is received, for resources which are injured by the release of a hazardous substance, but which would not be restored or replaced as part of the remedial action at a facility.

#### 10.2 Natural Resource Damages

10.2.1 Compensation: The Department may require monetary compensation from any potentially responsible party for any injury to natural resources, including any such injury prior to restoration or replacement of the natural resources. The Department shall not require compensation for those portions of natural resources that are replaced or restored after such restoration or replacement. If any restoration or replacement efforts ultimately fail, the Department may require compensation for any periods after such failure.

10.2.2 Restoration or Replacement. The Department may require restoration or replacement of any injured natural resources.

10.2.3 Damage Assessment Costs. The Department may also recover from the potentially responsible party, all costs of performing the natural resource damage assessment.

#### 10.3 Preassessment Phase

10.3.1 Identification. Upon identification of a facility where there is a release or threat of a release of a hazardous substance, the Department shall conduct a preliminary survey to determine whether there are any natural resources affected or potentially affected by the release or threat of release. This survey should be done concurrently, with or as part of, the initial investigation. Upon identification of a facility where there is a release of a hazardous substance, the Department may conduct:

10.3.1.1 A preassessment screen to determine whether the release justifies a natural resource damage assessment;

10.3.1.2 Immediate sampling for the purpose of substantiating injury to resources which would otherwise be lost if sampling were delayed, such as counts of dead or injured organisms; and

10.3.1.3 Emergency response activities to the extent necessary to prevent or reduce the immediate migration of hazardous substances onto or into the resource of concern.

10.3.2 Preassessment Screen. This phase should be done concurrently with, or as part of, the facility evaluation, and should use data and information generated for the facility evaluation to the extent practicable. As determined by the Department the preassessment screen may include, but not be limited to, the following:

10.3.2.1 A review of existing information on the facility;

10.3.2.2 Preliminary identification of natural resources potentially at risk;

10.3.2.3 Sampling;

10.3.2.4 Preliminary identification of the substance released;

10.3.2.5 Preliminary identification of pathways of exposure;

10.3.2.6 Cost consideration of performing an assessment; and

10.3.2.7 A determination based on the information obtained in steps in subsections 10.3.2.1 through 10.3.2.5 of whether a damage assessment is appropriate.

#### 10.4 Assessment Phase

10.4.1 If a damage assessment is determined to be appropriate in the Preassessment phase, an assessment plan may be developed by the Department which will outline the approach to be taken in carrying out the assessment. Assessments may be conducted using the procedures for "Type A" or "Type B" natural resource damage assessments outlined in 43 CFR part 11, as amended, or via other procedures determined to be appropriate by the Department. The damage assessment plan should be incorporated into the Remedial Investigation Work Plan to the maximum extent practicable.

10.4.2 If the damage assessment plan cannot be incorporated into the remedial investigation work plan, then the damage assessment may be done concurrently with the remedial investigation under a separate plan, unless the injury to natural resources is incapable of being quantified at that time, and a later assessment is justified.

10.4.3 The assessment shall be conducted in the following three stages:

10.4.3.1 Injury Determination. The Department shall determine whether an injury to one or more natural resources has occurred or may have occurred, and whether the injury did result or may have resulted from the release of a hazardous substance. The following factors must be considered during this stage:

- 10.4.3.1.1 ~~Injury Definition. In order to determine whether an injury has occurred or may have occurred to a natural resource, the Department shall take into account the applicable state and federal standards, criteria and other requirements.~~
- 10.4.3.1.2 ~~Pathway Determination. Exposure pathways shall be documented.~~
- 10.4.3.1.3 ~~Testing and Sampling Methods. Methodologies shall be selected according to the requirements provided in 43 CFR part 11, as amended or as determined to be appropriate by the Department, and shall be described in the Assessment Plan.~~
- 10.4.3.2 ~~Quantification. If the Department determines that there is an injury or may be an injury to a natural resource, the Department shall evaluate the extent of the injury to that resource. The Quantification phase shall consist of the following steps:~~
  - 10.4.3.2.1 ~~Service Reduction Quantification. The Department shall quantify the effects of a release of a hazardous substance by determining the extent to which natural resource services have been or may have been reduced or impaired as a result of the injuries determined in the Injury Determination stage.~~
  - 10.4.3.2.2 ~~Baseline Services Determination. After quantifying the reduced natural resource services, the Department shall determine the physical, chemical, and biological baseline conditions and the associated baseline services for injured resources at the assessment area, and compare those baselines with the service reduction quantification.~~
  - 10.4.3.2.3 ~~Resource Recoverability Analysis. The Department shall determine the time likely to be needed for each injured resource to recover to the state where baseline conditions and services are re-established, whether by restoration, replacement or natural processes.~~
- 10.4.3.3 ~~Damage Determination. The Department shall estimate the damages resulting from the release of a hazardous substance based upon the information provided in the Injury Determination and Quantification stages. In order to appropriately estimate the damages for each natural resource or services which have been or may have been injured or degraded as a consequence of the release of a hazardous substance, the Department shall use the Restoration Valuation, and one of the other two Valuation Methodologies outlined below.~~
  - 10.4.3.3.1 ~~Restoration Valuation. This methodology shall consist of damage estimation based on restoration or replacement of the injured natural resource due to the release of a hazardous substance. An evaluation of restoration alternatives shall be conducted. The evaluation shall consider a range of actions to restore the injured services over various recovery periods, and shall include a "no-action" or natural recovery alternative. The expected present value of alternative restoration methodologies shall be determined.~~
  - 10.4.3.3.2 ~~Use Value Valuation. These methodologies shall consist of damage estimations based on diminution of use values. The use values of the injured resource shall be estimated by using approaches as specified by the Department.~~
  - 10.4.3.3.3 ~~Nonuse Value Valuation. These methodologies shall consist of damage estimations based on diminution of the nonuse values. The nonuse values of the injured resource shall be estimated by using approaches as specified by the Department.~~
- 10.4.4 ~~The results of the assessment shall be documented in a report which shall be incorporated into the Remedial Investigation Report to the extent practicable.~~

## 10.5 Post-Assessment Phase

- 10.5.1 ~~Upon completion of the assessment, the Department may, as appropriate:~~
  - 10.5.1.1 ~~Select an appropriate cost-effective restoration alternative from those evaluated in the Damage Determination stage;~~
  - 10.5.1.2 ~~Present a demand in writing to the potentially responsible parties for compensation for the injury to natural resources;~~
  - 10.5.1.3 ~~Develop or require development by the potentially responsible parties of a Restoration Plan. The plan should describe the specific actions to be taken to restore or replace, and/or provide compensation for the injured natural resources. The Restoration Plan should be based on the restoration alternative selected by the Department.~~
- 10.5.2 ~~Any settlement between the Department and the potentially responsible parties for the payment of damages shall be included in the Remedial Design/Remedial Action consent decree to the extent practicable.~~
- 10.5.3 ~~The Restoration Plan shall be incorporated into the facility Remedial Design and implemented during the Remedial Action to the extent practicable.~~

## **11.0 Certification Of Completion Of Remedy**

### **11.1 Certification of Completion of Remedy**

~~At the completion of remedy, the owner, parties to a settlement agreement or parties responding to an order may submit to the Department, by registered mail, a request for certification of completion of remedy. The request for certification must be signed by the owner, parties to the settlement agreement or parties responding to an order and must be accompanied by documentation supporting the certification. A person who has conducted an initial investigation, facility evaluation, remedial investigation or feasibility study without concurrent oversight from the Department may not request a certification of completion of remedy until they have entered into a settlement agreement with the Department providing for subsequent oversight and approval of the remedial activities conducted by the person.~~

### **11.2 Approval**

~~Within one hundred and eighty (180) days of the receipt of the request, the Department shall accept or deny the request for certification based on the review of the request.~~

## **12.0 Public Participation**

### **12.1 Public Notice**

~~12.1.1 General Requirements. Whenever public notice is required by the Act or these regulations, the Department shall, at a minimum, provide or require notice as described in this Subsection. 12.1.1 Newspaper Publication. Notice of the proposed action shall be published in a newspaper circulated in the county of the proposed action, by one or more of the following methods: Display advertisement; legal notice; or any other appropriate format, as determined by the Department. (b) Additional Methods. In addition the Department may provide or require a notice by any other method deemed appropriate. (c) Comment Periods. All public notices shall indicate the public comment period on the proposed action. The comment periods shall be no less than twenty (20) days from the date of the notice. (d) Combining Public Comment Requirements. Whenever reasonable, the Department may consolidate public notice and opportunities for public comment under these regulations with public notice and comment requirements under other laws and regulations.~~

~~12.1.2 Consent Decrees. The following notification requirements shall be applicable for consent decrees.~~

~~12.1.2.1 Notice of proposed decree. The Department shall provide or require public notice of the proposed consent decree for a twenty (20) day comment period.~~

~~12.1.2.2 Revisions. If the Department and the potentially responsible party agree to substantial changes to the proposed consent decree, the Department shall provide additional public notice and at least a twenty (20) day comment period.~~

~~12.1.3 Proposed Plan of Remedial Action. The following notification requirements shall be applicable to the plan of remedial action:~~

~~12.1.3.1 The Department shall provide or require public notice of the proposed plan of remedial action and of the investigation upon which the proposed plan of remedial action is based. At a minimum, public notice shall briefly:~~

~~12.1.3.1.1 Describe the facility;~~

~~12.1.3.1.2 Identify the Department's proposed remedial action and provide an explanation for its selection or indicate where the information may be obtained; and~~

~~12.1.3.1.3 Invite public comment on the proposed plan of remedial action. The public comment period shall run for at least twenty (20) days from the date of issuance of the public notice.~~

~~12.1.4 Final Plan of Remedial Action. The Department shall provide or require public notice of the adoption of the final plan, including a brief description of the selected remedy or where it may be obtained, by advertising in a newspaper of general circulation in the State.~~

## **13.0 Miscellaneous Provisions**

### **13.1 Administrative Principles**

~~13.1.1 Where a release or imminent threat of release of hazardous substances requires a response action, potentially responsible parties that have been noticed in accordance with Subsection 6.3 of these Regulations, shall conduct such response action as expeditiously as possible. Any approval by the Department of a response action shall occur through one of the settlement agreements described in Subsection 13.3 of these Regulations.~~

~~13.1.2 Independent Response Action. No person shall perform an interim response activity except as provided for in Section 8.2.3, or remedial action independently from and without concurrent oversight of the Department at facilities where there is a release or imminent threat of release of hazardous substances.~~

13.1.3 Voluntary Cleanup Program. All procedures related to the Voluntary Cleanup Program shall be carried out in accordance with the applicable provisions of the Delaware Voluntary Cleanup Program Guidance, and these Regulations, as amended by the Department.

13.1.4 Interagency Coordination. ~~The Department may take such steps as it deems appropriate to keep any affected tribes, local, state and federal agencies involved in the development and implementation of the response activities. Such steps may include coordinating and combining its activities with other agencies to minimize the duplication of notices, hearings, preparation of documents, and implementation of response actions. The Department may, in connection with any order or consent decree, require the potentially responsible parties to take reasonable steps intended to ensure the participation of affected tribes and local, state and federal agencies. If the potentially responsible parties demonstrate that they are unable to obtain adequate involvement by a particular agency to allow the response action to proceed, the Department may request the involvement of the agency.~~

### 13.2 Procedures for Requiring a Response Action.

13.2.1 Initiation of Negotiations. ~~When the Department determines that a response action is warranted at a facility, it may initiate the procedures set forth in this subsection by sending a letter to the potentially responsible party. The letter shall be sent via certified mail, return receipt requested. The letter may be delivered with potentially responsible party status letters issued under these regulations. The contents of the letter may:~~

13.2.1.1 ~~Inform potentially responsible parties that the Department will begin negotiations which may lead to a settlement agreement providing for response action;~~

13.2.1.2 ~~Propose a settlement agreement and scope of work;~~

13.2.1.3 ~~Define the negotiation process and schedule which shall not exceed ninety (90) days from the date of receipt of the letter under section 13.1.1;~~

13.2.1.4 ~~Reference the Department's findings under the Act and the regulations;~~

13.2.1.5 ~~Require a written statement, within thirty (30) days of receipt of letter under section 13.1.1, of the potentially responsible parties' willingness to proceed with the negotiation process defined in the letter;~~

13.2.1.6 ~~Require the names of other persons who the person has reason to believe may be potentially responsible parties at the facility;~~

13.2.1.7 ~~Require the name and qualification of the consultant or contractor who will be performing the remedy on behalf of the potentially responsible party for approval by the Department; and~~

13.2.1.8 ~~Require the potentially responsible parties to respond, in writing, to the proposed settlement agreement and scope of work prior to initiating the negotiation phase.~~

### 13.2.2 Negotiations.

13.2.2.1 ~~The Department shall negotiate with the potentially responsible parties who have indicated a willingness to proceed with the negotiations. The negotiations shall be completed within ninety (90) days from the date the potentially responsible parties receive the letter under Section 13.1.1. The Department may extend this deadline for negotiations provided the extension does not exceed sixty (60) days. Negotiations may address one or more phases of response action. The Department may withdraw from negotiations if it determines that:~~

13.2.2.1.1 ~~Satisfactory progress is not being made toward a settlement agreement which is acceptable to the Department; or~~

13.2.2.1.2 ~~The proposal of the potentially responsible parties is inappropriate to investigate or remedy the release or threat of release. The Department may commence with an enforcement action after notifying the potentially responsible parties, in writing, of its intent to withdraw from negotiations.~~

13.2.2.2 ~~Enforcement Stay. Unless an emergency exists, during good faith negotiations, the Department will stay any enforcement action under the Act. The duration of the stay is limited to the time period of the negotiations.~~

13.2.3 Filing Consent Decrees. ~~After satisfying the public notice and the twenty (20) day comment period requirements under Section 9107 of the Act, a settlement agreement in the form of a consent decree shall be filed with the Superior Court.~~

### 13.3 Settlement Agreements

13.3.1 ~~The settlement agreement may be in the form of a consent decree, administrative order on consent, memorandum of agreement, letter agreement or any other type of agreement as determined to be appropriate by the Department. The form of settlement agreement between any person and the Department shall be determined solely by the Department. When the Department provides a person with~~

contribution protection in a settlement agreement in a manner which represents a final resolution of that person's liability for a remedy at the facility, the agreement, shall be subjected to a public notice with a twenty (20) day comment period. Any persons affected by the agreement may request the Secretary for a hearing.

#### ~~13.4 Worker Safety and Health~~

~~13.4.1 General Provisions. The requirements of the Occupational Safety and Health Act 29 U.S.C. 653, 655, 657, as amended, and EPA Order 1440 (EPA Health & Safety Program 40 CFR 311), as amended, and any regulations promulgated pursuant thereto, shall be applicable to response actions taken under these regulations.~~

~~13.4.2 Safety and Health Plan. Any person undertaking response actions under the Act or these regulations shall submit a facility specific Safety and Health Plan for the Department's review and comment. The Safety and Health Plan must be consistent with Occupational Safety and Health Act, 29 USC 653, 655, 657 as amended and Code of Federal Regulations 1910.120 (b).~~

#### ~~13.5 Sampling and Analysis Plan~~

~~13.5.1 General. Before conducting a facility evaluation or a remedial investigation, a sampling and analysis plan shall be prepared.~~

~~13.5.2 The Sampling and Analysis Plan consists of the following:~~

~~13.5.2.1 The Field Sampling Plan that provides guidance for all fieldwork by defining in detail the sampling and data-gathering methods to be used on a project; and~~

~~13.5.2.2 A Quality Assurance Project Plan that describes the policy, organization, functional activities, data quality objectives, analytical procedures, and quality assurance and quality control protocols necessary to achieve data quality objectives required for the intended use of the data.~~

~~13.5.3 Unless otherwise directed by the Department, a Sampling and Analysis Plan shall be prepared for all sampling activities which are part of facility evaluation and response activities except for emergencies. The level of detail required in the sampling and analysis plan may vary with the scope and purpose of the sampling activity. Sampling and Analysis Plans shall be submitted to the Department for review and approval. The Department shall have the right to have a representative present at all times to oversee any sampling event. The Department shall have the right to require split samples.~~

~~13.5.4 The methods used for sample collection, sample preservation, transportation, allowable time before analysis, sample preparation, analysis, method detection limits, practical quantitation limits, quality control, quality assurance and other technical requirements and specifications, as well as any laboratory doing any such work shall be only those methods or laboratories which have been approved by the Department.~~

#### ~~13.6 Validation of Remedial Work~~

~~13.6.1 General. The Department may confirm the validity of any remedial work performed at a facility by any person requesting the Department's approval of the work.~~

~~13.6.2 Verification. Any person requesting the Department's subsequent oversight of a remedial investigation, conducted without the Departments' concurrent oversight may be required to perform additional remedial sampling and analyses as determined necessary by the Department in order to verify that all work was performed in accordance with the Act, these Regulations, and all applicable Department guidances, policies and procedures.~~

~~13.6.3 Cost. Any costs incurred by the Department in validating any remedial work, whether direct or indirect, shall be paid for by the person requesting the approval of the remedial work. The Department's remedial costs shall be computed in accordance with Subsection 14.4 of these Regulations.~~

#### ~~13.7 Analytical Procedures~~

~~13.7.1 General. This Subsection describes the analytical procedures for facilities where response actions are being conducted. The analytical procedures must be conducted in accordance with all applicable provisions of the Standard Operating Procedures of the Hazardous Substance Cleanup Act for Chemical Analytical Programs, as amended by the Department.~~

~~13.7.2 Laboratory Selection and Requirements.~~

~~13.7.2.1 A potentially responsible party shall inform the Department, in writing, of the name of the laboratory where analyses will be performed. Prior to approving the use of any laboratory, the Department may perform an audit at the laboratory or may require an independent audit to be performed at the laboratory. Based on the audit results, the Department may disapprove the use of the laboratory;~~

~~13.7.2.2 The Department may, at any time during response activities, perform an audit of the selected laboratory or require an independent audit of the selected laboratory;~~



~~13.7.2.3 The potentially responsible party shall ensure that the laboratory produces deliverables as required by the Department, and maintain the laboratory records for a period of no less than ten (10) years from the completion of the remedial action. This period may be extended by the Department. Laboratory records shall be retained in such a manner so as to facilitate retrieval of data in sufficient detail to reconstruct the handling of samples for the entire period the samples were in the laboratory. The Department retains the right during this ten (10) year period, or longer, to require an audit of the laboratory analytical records and require additional sampling and analysis at the potential responsible parties' expense.~~

#### ~~13.7.3 Analytical Procedures.~~

~~13.7.3.1 All analytical procedures used shall be done in accordance with the analytical methods identified in the Sampling and Analysis Plan prepared under Subsection 13.4;~~

~~13.7.3.2 Samples shall be analyzed consistent with methods appropriate for the facility, the media being analyzed, the hazardous substances being analyzed for, and the anticipated use of the data;~~

~~13.7.3.3 The Department may require or approve modifications to the standard analytical methods identified in the Sampling and Analysis Plan to provide lower quantitation limits, improved accuracy, greater precision, or to address the factors in Section 13.3.2;~~

~~13.7.3.4 Laboratories shall achieve the lowest practical quantitation limits consistent with the selected method and matrix;~~

~~13.7.3.5 Where there is more than one method with a practical quantitation limit less than the cleanup level, any of the methods may be selected. In these situations, considerations in selecting a particular method may include confidence in the data, analytical costs, applicability of the analytical method to the sample matrix and considerations relating to quality assurance or analysis efficiencies; and~~

~~13.7.3.6 The Department may require an analysis to be conducted by more than one method in order to provide higher data quality. For example, the Department may require that different separation and detection techniques be used ("qualification") and determine the concentration of the hazardous substance ("quantitation").~~

#### ~~13.8 Record Keeping Requirements~~

~~13.8.1 Any response actions at a facility must be documented with adequate records. Such records may include: factual information or data; relevant decision documents; and any other relevant, facility-specific documents or information. The formats of the documents may include, but not be limited to, paper, audio, video, photographs, slides and transparencies.~~

~~13.8.2 Records shall be retained for at least ten (10) years from the date of completion of remedial action.~~

~~13.8.3 Records shall be retained by the potentially responsible party taking remedial action, unless the Department demands possession.~~

~~13.8.4 The Department shall become the repository of all records if the potentially responsible party becomes bankrupt.~~

~~13.8.5 The Department shall maintain its records in accordance with these regulations.~~

#### ~~13.9 Endangerment~~

~~In the event that the Department determines that any activity being performed at a facility is creating or has the potential to create a danger to public health, welfare, or the environment, the Department may direct such activities to cease for such period of time as it deems necessary to abate the danger, pursuant to 7 Del.C. Ch. 91(6)(b).~~

#### ~~13.10 Applicable State and Federal Requirements~~

~~13.10.1 General. For purposes of this Subsection, the term "applicable state and federal requirements" shall include all state and federal environmental laws and regulations such as those cleanup levels, standards of control, and other environmental protection requirements, criteria, or limitations promulgated under state or federal law that specifically address a hazardous substance, cleanup action, location or other circumstances at the facility.~~

~~13.10.2 Variances. For purposes of this section, a regulatory variance or waiver provision included in an applicable state and federal law may be considered potentially applicable to interim response activities and final remedial actions and, if allowed under applicable law, the Department may determine that a particular regulatory variance or waiver is appropriate if the substantive conditions for such a regulatory variance or waiver are met. In all such cases, interim response activities and final remedial actions shall be protective of public health, welfare, and the environment.~~

~~13.10.3 New Requirements. The Department shall consider new applicable state and federal laws as part of the periodic review. Remedial actions shall be evaluated in light of these new requirements to determine whether the cleanup action is still protective of public health, welfare, and the environment.~~

#### 13.11 Professional Qualifications

The Department may not consider any response actions for approval unless they have been performed by consultants or contractors who have been approved by the Department in accordance with applicable criteria established by the Department in Appendix A.

#### 13.12 Interference with Remedy

13.12.1 At any time after any person has been notified, pursuant to Section 9107 of the Act, of their potential liability, or after initiation of a response action, or after issuance of an order under Sections 9106(b) or 9109(b), and until completion of the remedy, or after the completion of a remedial action at a facility, no person shall perform any work or construction activities at the facility, unless authorized by the Department as part of the remedy, without doing all of the following:

13.12.1.1 Provide notice to the Department of any such planned work or construction activities;

13.12.1.2 Provide copies of all plans and a description of the planned work or construction activities to be performed at the facility;

13.12.1.3 Provide an explanation of how and why the planned work or construction activities will not interfere with any part of the remedy; and

13.12.1.4 Obtain the Department's approval, in writing, for any work or construction activities to be performed on the facility.

13.12.2 For the purpose of this subsection, "work or construction activities" shall include, but not be limited to, any building, constructing, drilling, digging, excavating, grading, landscaping, earthmoving, or any land disturbing activities.

13.12.3 However, this subsection shall not apply to any work or construction activities performed in areas of a facility where:

13.12.3.1 the remedial action achieved cleanup levels of groundwater and soil in accordance with Subsection 9.2 and 9.4;

13.12.3.2 the contamination is known not to exceed any screening levels established by the Department; and

13.12.3.3 any drilling, digging or excavation is carried out to collect samples to determine if contamination is present in the area of the proposed work or construction activities.

### 14.0 Funding And Response Costs

#### 14.1 Eligibility for Funding

14.1.1 Any facility for which responsible parties cannot be identified shall be eligible for funding for response actions from the Fund.

14.1.2 If the potentially responsible parties at a facility refuse to conduct response actions pursuant to a Secretary's order, the Department may conduct response actions at the facility using monies from the Fund.

14.1.3 The Department may use monies from the Fund to provide mixed funding at a facility or to provide low interest loans as detailed in Subsections 14.2 and 14.3 respectively.

14.1.4 The Department may use monies from the Fund to conduct initial investigation, facility evaluation, potentially responsible party search, interim response action and oversight of all response activities at all facilities with a release or imminent threat of release of hazardous substances.

#### 14.2 Mixed Funding

14.2.1 The Department may provide monies from the Fund to a potentially responsible party for the purpose of assisting with the payment of response costs incurred or to be incurred, with the approval of the Department. This assistance can be provided in the form of a contribution, in cash or in kind. Any mixed funding decision under this section is solely the responsibility of the Secretary.

14.2.2 Application for Mixed Funding.

14.2.2.1 Mixed funding shall be provided only to potentially responsible parties whom the Department has found to be eligible and who have entered into a settlement agreement with the Department under the requirements of these regulations;

14.2.2.2 The settlement agreement shall identify costs to be borne by the potentially responsible parties, costs to be borne by the Fund and terms of the agreement;

14.2.2.3 The potentially responsible party shall submit sufficient documentation as prescribed by the Department to support its request for mixed funding; and

14.2.2.4 The Secretary shall determine whether a potentially responsible party is eligible for funding. The only circumstances under which mixed funding can be approved by the Department are noted below:

~~14.2.2.4.1 A substantially more expeditious or enhanced cleanup would take place than would otherwise occur without mixed funding; and~~

~~14.2.2.4.2 The prevention or mitigation of unfair economic hardship. In considering this criterion the Department shall consider the extent to which mixed funding will either:~~

~~14.2.2.4.2.1 Prevent or mitigate unfair economic hardship faced by the potentially responsible parties if the response activities were to be implemented without public funding; or~~

~~14.2.2.4.2.2 Achieve greater fairness with respect to the share of response action costs between the potentially responsible parties entering into a settlement agreement with the Department and any nonsettling potentially responsible parties.~~

#### ~~14.2.3 Funding Decisions.~~

~~14.2.3.1 If a potentially responsible party is found to be eligible for mixed funding, the Secretary shall make a determination regarding the amount of funding to be provided. This shall be determined at the discretion of the Secretary and is not subject to review.~~

~~14.2.3.2 A determination of eligibility is not a funding commitment. Actual funding will depend on the availability of funds.~~

### ~~14.3 Loans~~

~~14.3.1 General. When funding is provided in the form of a loan, the Department shall use in consultation with the Delaware Economic Development Office, the following procedures:~~

~~14.3.1.1 Loans may only be made to potentially responsible parties who have entered into a settlement agreement with the Department to perform a remedy at a facility;~~

~~14.3.1.2 Loans may only be made to potentially responsible parties who qualify as a Small Business under the criteria established by the Federal Small Business Administration or who qualify as a non-profit organization;~~

~~14.3.1.3 Loan proceeds for any individual facility may not exceed \$250,000 or 90% of the total amount required to complete the project for which the loan is made, whichever is smaller;~~

~~14.3.1.4 Loans shall require interest payments at a simple interest rate of 3% or that which is 2% below the Federal discount rate in effect at the time the loan application is made with the Department, whichever is greater, and the loans shall be for a term not to exceed ten (10) years;~~

~~14.3.1.5 Loan applications shall be made on or before June 30, 2001, accompanied by a non-refundable application fee of \$250 which shall be deposited into the Hazardous Substance Cleanup Fund. No loans shall be made after December 31, 2001 unless the Act is reauthorized by the Delaware General Assembly;~~

~~14.3.1.6 Loan documents shall provide for security interests in the project and any additional property of the applicant necessary to secure the loan; and~~

~~14.3.1.7 All legal and other costs associated with loan closure will be paid for by the applicant.~~

~~14.3.2 Funding Decisions. The decision on granting of loans by the Secretary may be based on one or more of the following criteria:~~

~~14.3.2.1 availability of funds,~~

~~14.3.2.2 financial viability of the party,~~

~~14.3.2.3 economic benefit from the reuse of the remediated facility,~~

~~14.3.2.4 overall risk posed by the facility,~~

~~14.3.2.5 degree of risk reduction, and~~

~~14.3.2.6 compatibility with Departmental goals or objectives under the Act or any other program administered by the Department.~~

### ~~14.4 Recovery of Costs from Potentially Responsible Parties~~

~~14.4.1 Remedial Costs. The Department may seek to recover from the potentially responsible parties, and any person requiring oversight or review of any response actions by the Department at a facility, all remedial costs incurred by it in conducting oversight or review of a remedy at a facility. Such costs may include, but not be limited to, all amounts spent by the Department for direct and indirect costs of potentially responsible party searches, facility evaluations, remedial investigations, feasibility studies, remedial design, remedial action, operation and maintenance, interim response actions, review of documents of a remedy conducted by a person at a facility, oversight and enforcement activities related to the remedy. Whenever a person requests the Department's assistance in reviewing the results of a remedy or when a person participates in the voluntary Cleanup Program, the Department may require that the person pay the estimated cost of review or oversight at the time a settlement agreement is signed by the person and the Department to provide the review and oversight.~~

14.4.2 ~~Computation of Remedial Costs. Remedial costs with regard to a specific facility shall be calculated to reflect the actual costs incurred by the Department. Such costs shall be calculated for each facility as follows:~~

- ~~14.4.2.1 The total number of direct hours expended by each employee of the Department with regard to a specific facility shall be multiplied by the employee's hourly rate of wages and then the figures derived for each employee shall be added together;~~
- ~~14.4.2.2 The figure derived from Subsection 14.4.2.1 shall be added to a figure derived by multiplying the total figure from Subsection 14.4.2.1 by the current indirect cost rate;~~
- ~~14.4.2.3 The figure derived from Subsection 14.4.2.2 shall be added to a figure derived by multiplying the number of hours worked by each employee of the Department with regard to the specific facility by the "other employee costs" rate for the employee; and~~
- ~~14.4.2.4 All payments made by the Department to its contractors, consultants or vendors for the procurement of services, supplies or equipment for the specific facility shall be added to the figure derived from Subsection 14.4.2.3.~~

~~14.4.3 Interest Calculation. Interest shall accrue at the rate of the allowable interest rate upon all remedial activity costs from the time they were spent until the time they are paid.~~

#### 14.5 ~~Brownfields Determination Criteria~~

~~14.5.1 Criteria for Certification. The Department may certify all or part of a parcel of real property as a Brownfield based on the following criteria:~~

~~14.5.1.1 The property must meet the following [use] criteria:~~

~~14.5.1.1.1 All or that part of the property must be abandoned, vacant or underutilized; and~~

~~14.5.1.1.2 All or that part of the property must be subject to either a current or prospective development or redevelopment plan; and~~

~~14.5.1.1.3 The property must satisfy one of the following conditions:~~

~~14.5.1.1.3.1 The party seeking the Brownfield certification must have sufficient information or environmental data to show that the development or redevelopment may be hindered by the reasonably held belief that the property may be contaminated;~~

~~14.5.1.1.3.2 The property is one of the following classes of uses, which are deemed to fulfill the requirement for information or environmental data concerning contamination, which may hinder development or redevelopment:~~

~~14.5.1.1.3.2.1 Salvage yards;~~

~~14.5.1.1.3.2.2 Permitted or non-permitted landfills;~~

~~14.5.1.1.3.2.3 Lands that have been subject to historical filling with material other than clean soil;~~

~~14.5.1.1.3.2.4 Known hazardous substance release sites that have not been remediated, including those previously identified by DNREC-SIRB and which are within its inventory of hazardous substance release sites;~~

~~14.5.1.1.3.2.5 Gas stations; and~~

~~14.5.1.1.3.2.6 Dry cleaners.~~

~~The activities listed in (3)(B) (I) – (VI) apply to current or former sites that have not been remediated under HSCA; if the parcel has undergone a previous remediation under HSCA, the applicant must not have caused or contributed to the new release of hazardous substance(s).~~

~~14.5.1.2 The property must not be subject to any enforcement action from any State or Federal environmental agency unless such enforcement action is, in the opinion of the Secretary, adequately resolved with the applicable agency.~~

~~14.5.1.3 The applicant, including the employees or agents thereof, must not, in the opinion of the Secretary, have intentionally caused the contamination of the property in violation of applicable laws, or be a chronic violator of state or federal environmental laws.~~

~~14.5.1.4 Any Brownfield certification decision is at the sole discretion of the Secretary, or his designee~~

#### ~~14.5.2 Application for Certification.~~

~~14.5.2.1 Brownfield certification shall be provided only to those persons who apply for a certification from the DNREC-SIRB. Such application shall contain the following information:~~

~~14.5.2.1.1 Name and address of the person seeking the certification, and their relationship to the property;~~

~~14.5.2.1.2 Address of the property including tax parcel designation;~~

- 14.5.2.1.3 Current use of the property and its zoning classification;
- 14.5.2.1.4 Intended or proposed development or redevelopment plan; and
- 14.5.2.1.5 Reason(s) to believe that the property may be contaminated, and why such contamination may hinder development or redevelopment.
- 14.5.2.1.6 Upon request by the Secretary, or his designee, the applicant shall provide any and all documentation regarding all environmental investigations of the property, or chronic violator status of the applicant pursuant to ~~7 Del.C. Section 7904.~~
- 14.5.2.2 Brownfield certification shall be provided only to those persons who are willing to enter into the Voluntary Cleanup Program (VCP), or who agree to any other settlement agreement approved by the Department pursuant to HSCA.
- 14.5.3 ~~Effect of Brownfield Certification.~~
  - 14.5.3.1 Certification of all or part of a parcel of real property as a Brownfield places it in the inventory of hazardous substance release sites.
  - 14.5.3.2 Properties certified as being a Brownfield may be considered in the preparation of funding recommendations under Section 14.1 through 14.4.

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### **15.0 Severability**

If any provision of these regulations or its application to any person or circumstances is held invalid, the remainder of these regulations or the application of the provision to other persons or circumstances shall not be affected.

### **1.0 General Provisions**

#### **1.1 Statement of Authority and Purpose**

- 1.1.1 The Regulations Governing Hazardous Substance Cleanup (Regulations) are promulgated in accordance with 7 Del.C. Ch. 91, Delaware Hazardous Substance Cleanup Act (Act), 7 Del.C. Ch. 60, Environmental Control, and 7 Del.C. Ch. 63, Hazardous Waste Management. The goal of these Regulations is to implement the purposes declared in 7 Del.C. §9102.
- 1.1.2 The Delaware Department of Natural Resources and Environmental Control (Department) is responsible for protecting, preserving and enhancing the environmental quality of the water, air, and land of the State. The Hazardous Substance Cleanup Act authorizes the Secretary of the Department to promulgate regulations implementing the provisions of the Act.
- 1.1.3 These Regulations provide a process to accomplish cleanups in order to protect public health or welfare or the environment, and to provide opportunities to encourage remedial activities at facilities to yield economic revitalization and redevelopment within the State.
- 1.1.4 The cleanup levels achieved through action pursuant to these Regulations shall be equivalent irrespective of the program under the Act pursuant to which the cleanup is conducted.
- 1.1.5 No person shall obstruct, hinder, delay or interfere with Department personnel in carrying out their duties under the Act.

#### **1.2 Applicability**

- 1.2.1 The requirements of these Regulations shall apply to any facility with a release or imminent threat of release and any person who conducts an investigation or remedial action at a facility with a release or imminent threat of release.
- 1.2.2 Pursuant to 7 Del.C. §9104(a), the requirements of these Regulations shall not apply to the following:
  - 1.2.2.1 Releases excluded by 7 Del.C. §9103 (21) a-d; or
  - 1.2.2.2 Facilities where the sole contaminants are lead and/or asbestos originating from either lead-based paint or asbestos-containing material applied to or contained within a structure on the facility and where the Department determines the facility is appropriately regulated and adequately addressed by another state or federal agency, statute or regulation.
- 1.2.3 The Department has the discretion to apply these Regulations to a release that is subject to regulation under 7 Del.C. Ch. 74 or 7 Del.C. Ch. 74A under the following circumstances:
  - 1.2.3.1 There is a change in land use from restricted to unrestricted; or
  - 1.2.3.2 At the request of the owner or operator or brownfield developer; and
    - 1.2.3.2.1 There is a release of a hazardous substance that is subject to regulation under these Regulations; or

1.2.3.2.2 The Department determines that the application of these Regulations furthers the purposes of the Act.

1.3 Applicability of other Laws and Regulations

1.3.1 Nothing in these Regulations shall be construed to limit the authority of the Department to act pursuant to other existing laws and regulations.

1.3.2 Any action taken under the authority of these Regulations shall be in compliance with all applicable federal, state and local laws and regulations.

1.4 Severability

1.4.1 If any provision of these Regulations is adjudged to be unconstitutional or invalid by a court of competent jurisdiction, the remainder of these Regulations shall not be affected thereby.

1.5 Oversight

1.5.1 Concurrent Oversight

1.5.1.1 A person may obtain the Department's concurrent oversight of work on any aspect of a remedy by entering into a settlement agreement with the Department for that purpose.

1.5.1.2 By obtaining the Department's concurrent oversight of work, a person will be able to receive the Department's approval that the work which is proposed for a facility satisfies the requirements of the Act, these Regulations, and all applicable policies, procedures, and guidance.

1.5.1.3 The interim action, remedial action, and operation and maintenance portions of a remedy shall not be performed by any person without the concurrent oversight of the Department except as provided under Section 12.0.

1.5.2 Subsequent Oversight

1.5.2.1 A person may perform an initial investigation, facility evaluation, remedial investigation, or feasibility study without the concurrent oversight of the Department.

1.5.2.2 A person may obtain subsequent oversight of work not performed with the Department's concurrent oversight by entering into a settlement agreement with the Department for it to review such prior work and determine whether it can be approved as satisfying the requirements of the Act, these Regulations, and any applicable policies, procedures, and guidance.

1.5.2.3 If the Department determines that any portion of the work does not satisfy the requirements of the Act, these Regulations, and any applicable policies, procedures, and guidance, it may require that additional remedial work be performed prior to approving the person's work or it may disapprove the work entirely.

1.5.3 Emergency Oversight

1.5.3.1 A person may undertake an emergency response action at a facility after initiation of a remedy pursuant to these Regulations without the Department's oversight provided the person notifies the Department of the details of the action taken, within 48 hours of the initiation of the emergency response action. This does not limit or relieve a person's liability under other existing federal or state laws or regulations for undertaking an emergency response action at a facility.

**2.0 Definitions and Usage**

2.1 Definitions – The following words, terms and phrases, when used in this regulation, shall have the following meaning unless the context clearly indicates otherwise.

“Acceptable risk” means a probability of one additional lifetime incidence of cancer in 100,000 ( $1 \times 10^{-5}$ ) or less for carcinogens, and a hazard index of one (1) or less for non-carcinogens, as applicable. For certain contaminants, including lead, where cancer or non-cancer risk does not apply, the Department may approve or require other methods that it determines are appropriate for determining risk.

“Act” means 7 Del.C. Ch. 91, the Delaware Hazardous Substance Cleanup Act.

“All Appropriate Inquiry (AAI)” means the requirements for assessing the environmental conditions of a property prior to its acquisition. Detailed requirements for AAI are presented in the EPA's All Appropriate Inquiries Final Rule (40 CFR Part 312) (Nov. 1, 2005), as amended, or ASTM International's Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-05), as amended.

“Allowable Interest Rate” means a rate of interest 5% over the Federal Reserve discount rate.

“Aquifer” means a geologic formation, group of formations, or a part of a formation capable of yielding groundwater to wells or springs.

**“Background level”** means the concentration of substances widely present in the soil, sediment, air, surface water or groundwater in the vicinity of a facility, or at a comparable reference area, due to natural causes or human activities other than releases from, or activities on, the facility, as determined by the Department.

**“Baseline conditions”** or **“Baseline”** means the condition or conditions that would have existed at the natural resource damage assessment area had the release of hazardous substances under investigation not occurred.

**“Brownfield Developer”** means any person as defined in 7 Del.C. §§9123 (1).

**“Brownfields Development Agreement”** means an agreement between the Secretary and a Brownfields Developer with respect to a certified brownfield that sets forth a scope and schedule of activities to assess and respond to the actual, threatened, or perceived release of hazardous substances at the facility.

**“Brownfields Development Program”** means the remedial process established by the Department under 7 Del.C. Ch. 91, Subchapter II.

**“Brownfields Investigation”** means an evaluation under the Brownfields Development Program which includes the assessment of an actual, threatened, or perceived release of a hazardous substance at a facility to determine the nature, extent, and impact of the actual, threatened, or perceived release, and the evaluation of the feasibility of the proposed development plan to serve as all or a portion of the remedial action.

**“Carcinogen”** means a hazardous substance which causes or induces cancer in humans. The term also includes suspected carcinogen which may cause or induce cancer in humans.

**“CERCLA”** means the Comprehensive Environmental, Response, Compensation and Liability Act of 1980, 42 U.S.C. Sec. 9601 et seq., as amended.

**“Cleanup level”** means the concentration of hazardous substances in the environment that meet the acceptable risk for the land use intended by the owner or developer, or the background level established by the Department.

**“Conditional No Further Action”** means that based on the information available following an initial investigation or facility evaluation, the Department determines that: (a) there has been no release or there is no imminent threat of release; (b) a release has occurred which does not pose a threat to public health or welfare or the environment; or (c) action by another authority is appropriate.

**“Consultant”** means a contractor who is hired to provide professional services for remedies with regard to a facility.

**“Contaminant of concern”** means a hazardous substance identified during a remedy where the concentration exceeds the cleanup level.

**“Contaminant of Potential Concern”** means a hazardous substance identified during a remedy where the concentration exceeds the Department’s screening levels.

**“Data Quality Objectives”** means qualitative and quantitative statements of the overall level of uncertainty that the Department will accept in results or decisions based on environmental data.

**“Day”** means a calendar day; however, when used to determine when a document is due, or an action is required, and the day falls on the weekend or a holiday, the document may be submitted, or the action started, on the first working day after the weekend or holiday.

**“Department”** means the Delaware Department of Natural Resources and Environmental Control.

**“Disposal”** means the discharge, deposit, injection, dumping, spilling, leaking or placing of any hazardous substance into or on any land, water or into the air so that such hazardous substance or any constituent thereof may enter the environment.

**“Emergency response”** means a remedy undertaken to eliminate or control an immediate threat to public health or welfare or the environment.

**“Environment”** means the navigable waters, the waters of the contiguous zone, ocean waters, and any other surface water, groundwater, drinking water supply, land surface or subsurface strata or air within the State.

**“EPA”** means the United States Environmental Protection Agency.

**“Facility”** means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, aircraft or any site or area where a hazardous substance has been generated, manufactured, refined, transported, stored, treated, handled, recycled, disposed of, released, placed or otherwise come to be located. Where there is or has been a release or threat of release on real property, a portion of the real property may be considered a facility for the purpose of performing a remedy. A facility also includes all properties where hazardous substances may have migrated to or come to be located since being released.

**“Facility Closure Determination”** means that the Department has determined that the facility meets all of the requirements of the Act, and that all requirements of the Final Plan of Remedial Action have been met and no restrictions remain on the facility.

**“Facility Evaluation”** means an investigation to identify a release of a hazardous substance and generate data to perform an initial screening and make a decision regarding future action at the facility.

**“Feasibility Study”** means an evaluation to identify the potential remedial alternatives that are applicable to satisfy the remedial action objectives for the facility.

**“Final Plan of Remedial Action”** means the Department’s written determination of the appropriate remedial action under the Act at a facility for the current or anticipated land use to protect public health, welfare and the environment.

**“Free product”** means a hazardous substance which occurs as a non-aqueous phase liquid in surface water, groundwater, the vadose zone, or the ground surface. This term encompasses free, mobile, or residual product.

**“Groundwater”** means water below the land surface in the zone of saturation.

**“Hazard ranking”** means the process of assigning relative rank or priority to a facility using the Delaware Hazard Ranking Model. In ranking facilities, the Department may group them in categories of relative risk.

**“Hazardous substance”** means: (a) any hazardous waste as defined in 7 Del.C. Ch. 63 or any hazardous waste designated by regulation promulgated pursuant to 7 Del.C. Ch. 63; (b) any hazardous substance as defined in CERCLA or regulations promulgated pursuant thereto; (c) any substance determined by the Secretary through regulation to present a risk to the public health or welfare or the environment if released into the environment; (d) any polychlorinated biphenyl; or (e) petroleum, including crude oil or any fraction thereof; however any release of hazardous substances from a storage tank which is regulated by 7 Del.C. Ch. 74 or 7 Del.C. Ch. 74A or regulations promulgated pursuant thereto is not subject to these Regulations except as provided for in Section 1.2. Notwithstanding the Department’s determination under Section 1.2 of these Regulations, any release of petroleum, including crude oil or any fraction thereof, is eligible for funding under the Act.

**“Hourly rate of wages”** means the total annual wages of a State employee divided by 1,650 hours or the monthly wages of an employee divided by the actual number of hours worked by the employee during the month.

**“Imminent threat of release”** means potential for a release which requires action to prevent or mitigate damage to the environment or endangerment to public health or welfare or the environment which may result from such a release.

**“Indirect cost”** means those costs incurred for a common of joint purpose benefitting more than one cost objective, and which are not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved.

**“Indirect cost rate”** means the ratio of indirect cost to the projected costs of salaries for facility remediation.

**“Initial investigation”** means a process for identifying a suspected release or imminent threat of release. It includes review of existing information, facility visits, interviews with facility owner or operator and adjacent property owners, or other persons with knowledge of the facility.

**“Initial screening”** means the comparison of the maximum observed concentrations of analytes found in environmental samples to background levels or risk-based values approved by the Department based on the results of the facility evaluation or equivalent investigation.

**“Injury”** means a measurable adverse change, either long- or short-term, in the chemical, biological or physical quality or the viability of a natural resource, including loss thereof, resulting directly or indirectly from exposure to a release, or from attempts to remedy or mitigate a release.

**“Interim action”** means the containment, cleanup, or removal of a release or imminent threat of release of hazardous substances from a facility, or the taking of other actions, prior to the selection of a remedial action, as may be necessary to prevent, minimize, or mitigate threats to public health or welfare or the environment.

**“Land Disturbing Activity”** means activities that physically take place on the facility and include digging, drilling, excavating, grading, clearing, earth moving, filling, or performing any subsurface work, but excludes all environmental investigation, planning, designing, or engineering work related to the facility, as well as any physical activity performed off the facility in preparation for, or related to, construction and development activities that will occur on the facility.

**“Long-term effectiveness”** means the ability of an implemented remedial action to maintain the desired level of protection over an extended period of time.

**“Long-term Stewardship”** means the long-term management of contaminated environmental media at sites that is necessary to protect human health and the environment. Long-term stewardship generally includes the



establishment and maintenance of physical and legal controls, implementation entities, authorities, accountability mechanisms, information and data management systems, and/or resources that are necessary to ensure that these sites remain protective of public health or welfare or the environment.

“**Maximum Contaminant Level**” or “**MCL**” means the level of a specific chemical promulgated by EPA pursuant to the Safe Drinking Water Act, 42 U.S.C. Sec 300(f), et seq., as amended.

“**Natural Resources**” means land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the State of Delaware, the federal government, other states, any foreign government, any local government, or any Indian tribe.

“**Natural Resource Damages**” or “**Damages**” means the compensation sought by the Department as a result of injury, destruction, or loss of natural resources or services, or the restoration or replacement of such natural resources or services.

“**Natural Resource Damage Assessment**” means the process of collecting, compiling, and analyzing information, statistics, or data to determine natural resource damages.

“**Natural Resource Services**” or “**Services**” means the physical, chemical and biological function performed by the natural resource including the human use or aesthetic value of those functions.

“**Operation and Maintenance**” or “**O&M**” means the activities required by the Department to provide for continued effectiveness and integrity of a Remedial Action.

“**Other employee cost rate**” means the sum of State contributions to pension, unemployment insurance, Federal Income Contribution Act, health insurance, and worker’s compensation for a State employee per year divided by 1,650 hours, or the sum of State contributions to pension, unemployment insurance, Federal Income Contribution Act, health insurance, and worker’s compensation for a State employee per month divided by the actual number of hours worked by the employee during the month.

“**Oversight**” means supervision by the Department of a person’s work on any aspect of a remedy during the performance of that work, including the Department’s review of any work done prior to the Department’s supervision that now requires the Department’s approval.

“**Owner or Operator**” means: (a) any person owning or operating a facility; or (b) any person who previously owned, operated, or otherwise controlled activities at a facility; and (c) the term “owner or operator” does not include an agency of the State or unit of local government that acquired title or control of the facility involuntarily through bankruptcy, tax delinquency, abandonment or other circumstances; (d) the term “control” does not include regulation of the activity by a federal, state or local government agency; (e) the term “owner or operator” does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility; and (f) the term “owner or operator” does not include a person who, without acquiring legal title, conducts or directs activities in connection with the actual or potential acquisition or evaluation of a facility, including due diligence, site inspections, site assessments, all appropriate inquiry or other pre-closing activities in connection with the acquisition of a facility.

“**Pathway**” means the route or medium through which hazardous substances are or were transported from the source of the release to the injured natural resources, the environment, and/or the exposed human population.

“**Person**” means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, state government agency, unit of local government, school district, conservation district, federal government agency, Indian tribe or interstate body.

“**Phase I Environmental Site Assessment**” or “**Phase I**” means an investigation performed in accordance with ASTM International’s Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527), as amended.

“**Phase II Environmental Site Assessment**” or “**Phase II**” means an investigation performed in accordance with ASTM International’s Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (E 1903), as amended.

“**Potentially Responsible Party**” or “**PRP**” means any person identified pursuant to 7 Del.C. §§9105 (a)(1) through (6) as a person liable with respect to a facility.

“**Proposed Plan of Remedial Action**” means a written plan, issued by the Department for public comment, describing the appropriate remedial action under the Act at a facility for the current or anticipated land use to protect public health or welfare or the environment.

“**Priority list**” means the list established by the Department using the Delaware Hazard Ranking Model to rate the relative risk of the facilities based on the risk they pose to the public health or welfare or the environment. In establishing a priority list, the Department may group facilities in categories of relative risk.

“**RCRA**” means Resource Conservation and Recovery Act, 42 U.S.C. Sec. 6901, et seq., as amended.

**“Release”** means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a hazardous substance, pollutant or contaminant into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes: (a) any release which results in exposure to a person solely within his or her workplace, with respect to a claim which such person may assert against his or her employer, provided, however, that this exclusion does not apply to any such release which also results in exposure to the environment; (b) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine; (c) the appropriate application of fertilizers and pesticides; and (d) any discharges in compliance with State permits issued in conformance with Title 7 of the Delaware Code and federally permitted releases under CERCLA.

**“Remedial Action”** means the containment, contaminant mass or toxicity reduction, isolation, treatment, removal, cleanup, or monitoring of hazardous substances released into the environment, or the taking of such other actions, including natural resource damage restoration and replacement, as may be necessary to prevent, minimize, or mitigate harm or risk of harm to the public health or welfare or the environment which may result from a release or an imminent threat of a release of hazardous substances.

**“Remedial Investigation”** means an evaluation of a release or imminent threat of release of a hazardous substance at a facility to determine the nature, extent, and impact of the release and the collection of data necessary to conduct a feasibility study of remedial alternatives.

**“Remedy”** or **“Remedial Activity”** means any action, response or expenditure consistent with the purposes of the Act, or any regulations or guidance developed pursuant thereto to identify, minimize or eliminate any imminent threat posed by any hazardous substances to public health or welfare or the environment including preparation of any plans, conducting of any studies and any investigative, oversight of remedy or monitoring activities with respect to any release or imminent threat of release of a hazardous substance and any health assessments, risk assessments, health effect studies or natural resource damage assessments conducted in order to determine the risk or potential risk to public health or welfare or the environment.

**“Replacement”** or **“Acquisition of the equivalent”** means the substitution for the injury or loss of a resource with another resource that provides the same or substantially similar services when such substitutions are in addition to any substitutions made or anticipated as part of remedial actions, and when such substitutions exceed the level of remedial actions determined appropriate to the facility pursuant to the Hazardous Substance Cleanup Act or the National Oil and Hazardous Substances Contingency Plan (NCP), as amended.

**“Reporting levels”** means the concentrations of hazardous substances in the environment that are at or above the levels established by the Department, except for groundwater for which the reporting level shall be equivalent to the levels contained in the Delaware and federal drinking water standards.

**“Restoration”** means actions undertaken to return an injured resource to its baseline condition, as measured in terms of the injured resource’s physical, chemical or biological properties or the services it provided during its baseline conditions, when such actions are in addition to remedial actions completed or anticipated, and when such actions exceed the level of remedial actions determined appropriate to the facility pursuant to the Hazardous Substance Cleanup Act or the National Oil and Hazardous Substances Contingency Plan, as amended.

**“Risk assessment”** means the analysis of the potential for adverse human health effects or adverse effects on ecological receptors caused by contamination.

**“Screening levels”** means the concentrations of hazardous substances in the environment that are the background levels established by the Department, or ten times lower than the cleanup levels.

**“Secretary”** means the Secretary of the Department or his or her designee.

**“Settlement Agreement”** means a written agreement between one or more persons and the Department in which the terms and conditions are embodied in a consent decree, administrative order on consent, memorandum of agreement, or any other type of agreement approved by the Department.

**“Short-term effectiveness”** means the ability of the selected remedy to maintain the desired level of protection during the implementation phase of the remedy.

**“SIRS”** means the Department’s Site Investigation and Restoration Section.

**“Site Assessment”** means the assessment of a facility or property to determine whether hazardous substances have entered the environment.

**“Site”** means facility.

**“Site Specific Risk”** means the risk of a potential adverse effect to public health or welfare or the environment resulting from exposure to a release of hazardous substances at the site based on its current and potential future use.

**“Surface water”** means the waters of the State of Delaware occurring on the surface of the earth.

“Trustee” or “Natural Resource Trustee” means any Federal natural resources management agency designated in the National Oil and Hazardous Substances Contingency Plan, as amended, and any State agency designated by the Governor of each state, pursuant to section 107(f)(2)(B) of CERCLA and applicable State statute that may prosecute claims for damages under the Act, Clean Water Act, or section 107(f) or 111(b) of CERCLA, or an Indian tribe, that may commence an action under the Act of section 126(d) of CERCLA.

“Voluntary Cleanup Program” or “VCP” means the remedial process established by the Department under 7 Del.C. Ch. 91, into which a party voluntarily enters into, provided the application is approved by the Department, for the purpose of conducting a remedy at a facility.

“VCP Agreement” means a legal and administrative document entered into between the Department and the VCP applicant that provides for the performance of a remedy at a facility, and the reimbursement of the Department’s oversight costs, by the applicant.

2.2 Usage – For the purpose of these Regulations, the following usages shall apply:

2.2.1 Unless the context clearly requires otherwise, the use of the singular shall include the plural and conversely;

2.2.2 “Include” or “including” means including, but not limited to;

2.2.3 “May” means the provision is optional, at the discretion of the Department; and

2.2.4 “Shall” and “will” mean the provision is mandatory.

### **3.0 Facility Identification & Prioritization**

3.1 Notification Requirements

3.1.1 An owner or operator of a facility who has knowledge of a release of a hazardous substance at concentrations at or above the reporting levels must notify the SIRS in writing of the release prior to undertaking land disturbing activities in any area potentially affected by the release.

3.1.2 If during land disturbing activities there is evidence of a release that was not previously reported pursuant to Subsection 3.1.1, the owner or operator of a facility must, within twenty-four (24) hours of learning of a potential release, notify the Department’s 24 Hour Release Hotline by calling 800-662-8802.

3.1.2.1 Evidence of a release includes: appearance of a sheen, soil staining, or odors characteristic of hazardous substances; buried materials that may contain hazardous substances; or presence of free product.

3.1.2.2 For notification made under Subsection 3.1.2 that is referred to SIRS, SIRS will respond to the notice on a priority basis to determine if land disturbing activities can continue in the area potentially affected by the release without entering into a settlement agreement.

3.1.3 If a Brownfield Developer, prospective purchaser, or a person acting on behalf of the Brownfield Developer, the prospective purchaser, or the owner or operator reports a release to the SIRS in compliance with Subsections 3.1.1 and 3.1.2, this notification requirement will be satisfied.

3.1.4 If the Department becomes aware of a release or evidence of a release that requires notification under this section, the Department will notify the owner or operator of the facility.

3.1.5 If notification is required or made under Section 3.1, the owner or operator shall not proceed or continue with land disturbing activities in any area potentially affected by the release without the written approval of the Department, which will not be unreasonably delayed or withheld. The Department may require a remedy before land disturbing activities can proceed or continue.

3.2 The Department shall establish an inventory of hazardous substance release facilities.

3.2.1 Facilities with a release or imminent threat of release of hazardous substances may be identified by the Department through a variety of mechanisms including any of the following:

3.2.1.1 Reports to or from, or investigations by, the Department, including the Site Investigation and Restoration Section, Tank Management Section, Solid and Hazardous Waste Management Section, Emergency Prevention and Response Section, or Division of Water; or from information provided in a Brownfield Certification application by a developer, a prospective purchaser, or a facility owner.

3.2.1.2 Reports to or from, or investigations by, local, state and federal government agencies including the Delaware Department of Health and Social Services, Delaware Department of Transportation, Delaware Emergency Management Agency, State Police or other law enforcement agencies, State Fire Marshal’s Office or any Fire Department, United States Environmental Protection Agency, Department of Defense or other Federal agencies.

3.2.1.3 Reports to the Department from real estate transaction-related environmental assessments as part of all appropriate inquiry (AAI) requirements.

3.2.1.4 Other reporting sources including potentially responsible parties, impacted public, neighboring facilities, contractors, consultants and other persons with sources of information about the existing releases.

3.2.2 A facility may be removed from the inventory of hazardous substance release facilities list and the priority list of facilities after the Department has determined that no further action is required at the facility.

### 3.3 Priority List

#### 3.3.1 Applicability

3.3.1.2 The Department shall establish a priority list of facilities from the inventory of hazardous substance release facilities where a further remedy has been determined to be necessary, based on the relative hazard ranking of the facility into categories using the Delaware Hazard Ranking Model. The relative priorities established in the priority list may be considered in the preparation of funding recommendations, and in determining the priority for remedies among facilities. The Department may conduct or require a remedy at a facility even if it is not included on the list.

#### 3.3.2 Criteria for Placement of Facilities on Priority List

3.3.2.1 Facilities may be placed on the priority list if, after the completion of an initial investigation, the Department has determined that further remedy is required at the facility. Placement of a facility on the priority list does not, by itself, constitute a determination that persons associated with the facility are liable under the Act of these Regulations.

3.3.2.2 Facilities placed on the priority list will be given a hazard ranking. The purpose of the hazard ranking is to estimate the relative potential risk posed by the facility to public health or welfare or the environment based on the information compiled during the initial investigation and subsequent investigations.

3.3.2.3 The Department will objectively assess the relative degree of risk of each facility which is to be placed on the priority list using the Delaware Hazard Ranking Model established by the Department. Information obtained in the initial investigation, and any subsequent investigations and any additional data specified by the Department, will be included in the hazard ranking evaluation.

3.3.2.4 The Department will, upon request, make available to the facility owner and operator and any potentially responsible party known to the Department, the final hazard ranking results for a facility to be placed on the priority list.

### 3.4 Brownfields Certification and Funding

3.4.1 In order to qualify for the Brownfields Development Program, the property must be certified as a Brownfield. To receive a Brownfields Certification, the Brownfield applicant shall submit a Brownfields Certification Application to the Department seeking Brownfield Certification for the property. The property certification request can be initiated by a Brownfields Developer, the current property owner, the Department, or any public agency.

#### 3.4.2 Application for Brownfield Certification

3.4.2.1 Brownfield Certification shall be provided only to those persons who apply for a certification from the Department. Such application shall contain, at a minimum, the following information:

3.4.2.1.1 Name and address of the person seeking the certification, and their relationship to the property;

3.4.2.1.2 Address of the property including tax parcel designation;

3.4.2.1.3 Current use of the property and its zoning classification;

3.4.2.1.4 The proposed development or redevelopment plan;

3.4.2.1.5 Reason to believe that the property may be contaminated and why such contamination may hinder development or redevelopment.

3.4.2.2 Upon request by the Department, the applicant shall provide:

3.4.2.2.1 Documentation regarding environmental investigations of the property, or chronic violator status of the applicant pursuant to 7 Del.C. §7904.

3.4.2.2.2 The factual basis for concluding that the property is abandoned, vacant or underutilized;

3.4.2.2.3 The factual basis for concluding that the facility is contaminated;

3.4.2.2.4 Certification that the Brownfield Developer will comply with all applicable procedural requirements.

- 3.4.2.3 All items contained in the application shall be addressed by either providing the required information or stating that the item is not applicable. In the event that an item is considered not applicable, the Brownfield Developer must include a written justification in the application that demonstrates to the satisfaction of the Department that the item is not applicable to the application.
- 3.4.2.4 After a Brownfield Certification Application is submitted to the Department, the Department shall review the application to determine whether the application is complete. After its review, the Department shall issue a letter to the applicant advising either (1) that the property is certified and/or the developer is approved, (2) that the application is incomplete and identifying the specific information that must be submitted or supplemented to make the application complete, or (3) that the certification is denied.
- 3.4.2.5 The applicant shall promptly update and/or correct information previously submitted as part of the application whenever the applicant discovers that this information is incomplete or inaccurate.
- 3.4.3 Criteria for Brownfields Property Certification
- 3.4.3.1 The Department may certify all or part of a parcel of real property as a Brownfield if the property meets the following criteria:
- 3.4.3.1.1 All or part of the property is abandoned, vacant, or underutilized; and
- 3.4.3.1.2 All or part of the property is subject to either a current or prospective development or redevelopment plan; and
- 3.4.3.1.3 All or part of the property meets any one (1) of the following conditions:
- 3.4.3.1.3.1 The development or redevelopment of the property may be hindered by the reasonably held belief that it may be environmentally contaminated; or
- 3.4.3.1.3.2 The property is or has been used in whole or part as:
- 3.4.3.1.3.2.1 A salvage yard;
- 3.4.3.1.3.2.2 A regulated Tank facility pursuant to 7 **Del.C.** Ch. 74 or 7 **Del.C.** Ch. 74A;
- 3.4.3.1.3.2.3 A drycleaner where any dry cleaning is performed onsite;
- 3.4.3.1.3.2.4 A RCRA (Subtitle C) treatment, storage, or disposal facility for which the US EPA or the State RCRA program has expressed in writing no further interest in remediating under these programs;
- 3.4.3.1.3.2.5 A permitted or non-permitted landfill or dump;
- 3.4.3.1.3.2.6 The land contains potentially contaminated material;
- 3.4.3.1.3.2.7 A known hazardous substance release site that has not been remediated to the standard applicable to the intended land use, including those facilities previously identified by the Department; or
- 3.4.3.1.3.2.8 A National Priority List (NPL) or Federal CERCLIS site that has a “No Further Interest” designation from the US EPA.
- 3.4.3.2 Sites which are subject to an enforcement action from any State or Federal environmental agency, and for which an administrative or judicial order is in effect or is proposed, may not be eligible for Brownfield Certification, unless the enforcement action is resolved to the satisfaction of the Secretary.
- 3.4.3.3 A Brownfields Developer shall be required, at a minimum, to perform a FE of the facility, as approved by DNREC, within 24 months of entering into a BDA.
- 3.4.3.4 Any Brownfield Certification decision is at the sole discretion of the Secretary.
- 3.4.3.5 An inventory of Certified Brownfield sites will be made publicly available.
- 3.4.4 Criteria for Brownfields Developer Eligibility
- 3.4.4.1 In order for a person to obtain the rights and protections and assume the obligations of the status of Brownfields Developer, the person must submit an application to the Department for approval of Brownfields Developer status. At the time of application for the Brownfields Development Agreement, an applicant cannot be a potentially responsible party at the facility pursuant to 7 **Del.C.** §9105(a)(1)-(6), and is not affiliated with any other person that is liable for a release or imminent threat of release at the facility pursuant to 7 **Del.C.** §9105(c)(4)5.
- 3.4.4.2 The Secretary has the discretion to deny Brownfields Developer status to an applicant if the applicant, including any employees or agents thereof, or any entity affiliated with or controlled by the applicant, has been determined to have violated any federal, state, or local environmental law.
- 3.4.4.3 Prior to approval, the application must be complete and must contain all of the information required by the Department, including the information required by Section 3.4.2 of these Regulations.

### 3.4.5 Funding under Brownfield Certification

- 3.4.5.1 Upon the filing of a Brownfield Certification Application (BCA), the applicant may also choose to request financial assistance. Completion of the financial section of the BCA does not guarantee a commitment for funding, nor does it obligate the State of Delaware or any State agency to provide any form of financial assistance.
- 3.4.5.2 Submission of a funding request is optional and the decision to approve funding is at the discretion of the Department.

### 3.5 Facility Tracking

- 3.5.1 The Department may maintain a database recording the actions taken at facilities that have been identified with a release, an imminent threat of release, or an identified potential release of hazardous substances.

### 3.6 Record Keeping

- 3.6.1 The Department shall require the following record keeping procedures:

- 3.6.1.1 Any remedial activities at a facility must be documented by the person performing the action. Such records include factual information or data, relevant decision documents, and any other relevant, facility-specific documents or information. The formats of the documents may include, paper, audio, video, photographs, and electronic files.
- 3.6.1.2 Records shall be retained for at least ten (10) years from the date of completion of remedial action, site closure, or Conditional No Further Action letter.
- 3.6.1.3 Records shall be retained by the person taking remedial action, unless the Department requires that they be submitted.
- 3.6.1.4 The Department shall become the repository of any remedial records if the person files for bankruptcy.
- 3.6.1.5 The Department shall maintain its records in accordance with these Regulations.

## **4.0 Potentially Responsible Parties**

### 4.1 Identification

- 4.1.1 The Department may initiate identification of potentially responsible parties associated with the facility, as soon as practicable.
- 4.1.2 The Department may use existing information-gathering authorities and coordinate such investigation with other state, local, and federal agencies.

### 4.2 Potentially Responsible Party Notification

- 4.2.1 The Department may issue a notice letter to any person or entity it believes to be a potentially responsible party with respect to a facility as provided for in 7 Del.C. §9105. The notice letter shall be sent to the last known address of the potentially responsible party. A copy of the notice letter may be provided to the local unit of government in which the facility is located. The notice letter shall provide the following:
  - 4.2.1.1 The name of the person or entity the Department believes to be potentially liable;
  - 4.2.1.2 A general description of the location of the facility;
  - 4.2.1.3 The basis for the Department's position that the person has a relationship to the facility;
  - 4.2.1.4 The basis for the Department's position that a release or imminent threat of a release of a hazardous substance may pose a threat to public health or welfare or the environment; and
  - 4.2.1.5 The names of other persons or entities to which the Department has sent such a notice letter with respect to the facility.
- 4.2.2 The Department reserves the right to notify additional potentially responsible parties at any time, and to facilitate efforts by potentially responsible parties to identify additional potentially responsible parties.

### 4.3 Notice of Potential Liability

- 4.3.1 In the event that a potentially responsible party for a facility cannot be located, the Department may publish in accordance with Section 8.0 of these Regulations, a public notice regarding a potentially responsible party which shall provide the following:
  - 4.3.1.1 The names and last known addresses of a person that the Department believes to be a potentially responsible party for the facility;
  - 4.3.1.2 The address or a general description of the location of the facility;
  - 4.3.1.3 The basis for the Department's position that a release or imminent threat of a release of a hazardous substance at the facility may pose a threat to public health or welfare or the environment;

4.3.1.4 The basis for the Department's position that the person or entity is a potentially responsible party under 7 Del.C. §9105 for the facility; and

4.3.1.5 The name and contact information of the person within the Department who the potentially responsible party can contact in order to obtain further information about the facility, and to enter into negotiations for a settlement agreement to address the release or imminent threat of release of hazardous substances at the facility.

#### 4.4 Information Request

4.4.1 If the Department determines that there is a reasonable basis to believe that there has been a release or an imminent threat of a release of a hazardous substance, the Secretary may require information or documentation relevant to the release from any person who may have pertinent information as described in 7 Del.C. §9106.

### **5.0 Settlement Agreements & Brownfields Development Agreements**

5.1 Settlement agreements and Brownfields Development Agreements shall include the following:

5.1.1 The name and address of the potentially responsible party, the prospective purchaser, or the Brownfield Developer, and any other affiliated corporation, entity, or other person that will perform or pay for remedial activity at the facility;

5.1.2 The address and tax parcel number of the facility in question;

5.1.3 The name of the current owner of record and/or operator of the facility; and

5.1.4 For agreements which require the performance of a remedy at a facility, the Department may include a description of:

5.1.4.1 The areas of the facility where the remedy is to be conducted;

5.1.4.2 The type of remedy to be performed; and

5.1.4.3 Any financial or oversight resources to be provided by the Department.

#### 5.2 Cost Recovery

5.2.1 The Department may seek to recover costs from the potentially responsible parties or any person requiring oversight or review.

5.2.1.1 Recoverable costs from a potentially responsible party include all remedial costs incurred by the Department, natural resource damages, oversight, indirect and administrative costs, and costs associated with long-term stewardship activities.

5.2.1.2 Recoverable costs from a Brownfield developer include remedial costs incurred by the Department beginning upon its receipt of the application for certification of the site into the brownfield program, including oversight, indirect and administrative costs, and costs associated with long-term stewardship activities as specified in the brownfields development agreement, but excluding natural resource damage assessment and restoration costs not caused by the Brownfield developer and costs incurred by the Department prior to the Brownfield developer's submission of its application for admission into the brownfield program.

5.2.2 Remedial costs with regard to a specific facility are calculated to reflect the actual costs incurred by the Department. Such costs are calculated for each facility as set forth below.

5.2.2.1 The total number of direct hours expended by each employee of the Department with regard to a specific facility is multiplied by the employee's hourly rate of wages and then the figures derived for each employee are added together.

5.2.2.2 The figure derived from Subsection 5.2.2.1 is added to a figure derived by multiplying the total figure from Subsection 5.2.2.1 by the current indirect cost rate.

5.2.2.3 The figure derived from Subsection 5.2.2.2 is added to a figure derived by multiplying the number of hours worked by each employee of the Department with regard to the specific facility by the other employee costs rate for the employee.

5.2.2.4 All payments made by the Department to its contractors, consultants or vendors for the procurement of services, supplies or equipment for the specific facility are added to the figure derived from Subsection 5.2.2.3.

5.2.3 Recoverable costs include interest at the allowable interest rate upon all costs of the Department associated with a release or threat of release from the time they were incurred until the time they are paid.

### **6.0 Consultant Certification**

- 6.1 Consultant certification is required for any person performing, supervising, or designing the following remedies under the Act.
  - 6.1.1 Investigative and remedial action work including facility evaluations, site inspections, remedial investigations, Brownfields investigations, human health risk assessment, feasibility studies, oversight, and long-term stewardship.
  - 6.1.2 Ecological work including ecological risk assessments, and natural resource damage assessments, restorations, and enhancements.
- 6.2 Consultant certification is not required for persons performing visual inspections or other non-technical long-term stewardship activities as approved by the Department.
- 6.3 The Department may disapprove any remedy not performed by a certified consultant under the Act.
- 6.4 Any certified consultant shall notify the Department in writing of any change of name or address of the business, or any change of personnel who were identified in the application for certification or recertification, within sixty (60) days of such change.
- 6.5 A certified consultant shall notify the Department, in writing, within ten (10) days of the date it becomes aware that it or any of its officers, project managers, supervisors, or personnel identified in the application for consultant certification or recertification, working on any matters within this State, have been:
  - 6.5.1 Convicted of a felony or any crime relating to any environmental activities, or for fraudulent conduct of any kind; or
  - 6.5.2 Found liable in any civil litigation or administrative enforcement action relating to environmental activities.
- 6.6 Qualification Requirements for Certification
  - 6.6.1 A consultant may apply for certification to be able to perform investigative and remedial action work, ecological work or any combination of these.
  - 6.6.2 All consultants seeking certification shall submit a complete application with appropriate documentation to the satisfaction of the Department, and provide proof of a valid Delaware business license.
- 6.7 Requirements for Certification for first time applicant
  - 6.7.1 Applications shall be submitted on forms supplied by the Department.
  - 6.7.2 All consultants seeking certification shall submit a complete application with appropriate documentation to the satisfaction of the Department, and provide proof of a valid Delaware business license.
  - 6.7.3 Applications shall contain the appropriate documentation of experience and training as part of the submittal of a qualified consultant seeking certification to perform remedies.
    - 6.7.3.1 To be certified for investigative or remedial action work, an applicant must employ, or contract with, both a Delaware professional engineer (PE) and a Delaware professional geologist (PG).
    - 6.7.3.2 To be certified for ecological work, an applicant must employ, or contract with persons who have demonstrated, to the satisfaction of the Department, competence in biology, wetland delineation and restoration, ecology, eco-toxicology, and environmental economics.
  - 6.7.4 The Department shall notify the applicant in writing of the issuance or denial of the certification, or the need for further information in order to process the application.
  - 6.7.5 Any applicant denied certification may request a public hearing in writing to the Department within twenty (20) days of receipt of denial of certification pursuant to the provisions in Section 6.10.
  - 6.7.6 Certification shall be valid for a period of two (2) years from the date of issuance, unless suspended or revoked in accordance with these Regulations.
  - 6.7.7 The application fee for certification or recertification is \$500.
- 6.8 Standards of Performance for Certified Consultants
  - 6.8.1 All certified consultants are required to meet the following standards of performance:
    - 6.8.1.1 A minimum of one (1) qualified individual, representing the certified consultant, shall be present during the performance of any remedial activities on a site.
    - 6.8.1.2 A certified consultant shall perform remedial activities according to accepted practices and procedures.
    - 6.8.1.3 All required notifications and applications shall be submitted to the Department as specified in the Regulations.
    - 6.8.1.4 Any request to deviate from these Standards of Performance shall be submitted in writing to, and approved by, the Department prior to implementation.
- 6.9 Requirements for Recertification
  - 6.9.1 At least thirty (30) days prior to expiration of the certification, the certified consultant shall submit a letter to the Department requesting recertification and verifying that the application on file is still accurate, or submit



a new application with updated information. The cost of recertification is due at the same time as the request letter.

6.9.2 The Department shall notify the certified consultant in writing of the approval or denial of the request, or the need for further information in order to process the recertification request. The reasons for a denial of certification shall be explained by the Department, in writing, at the time of denial. The Department, at its discretion, may allow an extension of the original certification until all the requirements for recertification are satisfied.

6.9.3 Any certified consultant denied recertification may request a public hearing, in writing, within twenty (20) days of receipt of denial.

6.9.4 Recertification shall be valid for a period of two (2) years from the date of issuance, unless suspended or revoked in accordance with these Regulations.

6.9.5 In the event the certified consultant fails to apply for recertification before the expiration date, the certification will expire at the end of the original two year period. Any certified consultant whose certification has expired shall be required to reapply for certification. If the certification has lapsed for two years or more, the applicant shall apply as a first-time applicant.

#### 6.10 Denial of Certification

6.10.1 The Department may deny certification if it determines that the applicant has not demonstrated the ability to comply fully with applicable requirements or standards of performance. The Department also may deny any request for certification for the following causes:

6.10.1.1 Fraudulent or deceptive information in the application for certification, or in any report or other submission, written or verbal, to the Department;

6.10.1.2 Failure at any time to meet the qualifications for certification or failure to comply with any provision or requirement of any regulation, policy, or guidance adopted by the Department, or any directive issued by the Department to the certified consultant;

6.10.1.3 Denial of certification or decertification by any other state or the federal government;

6.10.1.4 Failure to provide all information required in the application for certification to the satisfaction of the Department;

6.10.1.5 Repeated deficiencies in performing remedial activities under the Act; or

6.10.1.6 Failure to comply with any federal, state, or local law or regulation directly related to the purposes of the Act.

#### 6.11 Suspension or Revocation of Certification or Denial of Recertification

6.11.1 The Department may suspend or revoke any certification or deny recertification in accordance with the Act and these Regulations.

6.11.2 A certified consultant whose certification has been suspended or revoked, or whose recertification has been denied shall not bid on, enter into a contract to perform, or engage in any work involving remedial activities within the State of Delaware during the period of suspension or revocation.

6.11.3 Any employee of a certified consultant whose actions have caused or contributed to the suspension or revocation of the consultant's certification shall not perform remedial activities for any other certified consultant for a period equivalent to the suspension or revocation. No certified consultant shall knowingly employ such a person to perform remedial activities during the period of suspension or revocation of his or her former employer.

6.11.4 In addition to the above, causes for suspension or revocation of certification, or denial of recertification may include the following actions by the consultant or any employee or any entity controlled by the consultant:

6.11.4.1 Providing fraudulent or deceptive information in any report or other submission, written or verbal, to the Department;

6.11.4.2 Failure at any time to meet the qualifications for certification;

6.11.4.3 Failure to comply with any federal, state, or local law or regulation, policy, or guidance directly related to the purpose of the Act;

6.11.4.4 Failure to comply with any applicable Department, Occupational Safety & Health Administration (OSHA) or Environmental Protection Agency (EPA) regulations or procedures at a site regulated under the Act;

6.11.4.5 Failure to follow project specifications or any directive issued by the Department to the certified consultant, or to comply with the standards of performance pursuant to Section 6.8;

6.11.4.6 Failure to comply with the terms of a Secretary's Order issued by the Department;

6.11.4.7 Committing any act of fraud or conviction for an act of fraud;

- 6.11.4.8 Suspension or revocation of certification or denial of recertification in any state or municipality related to the performance of any environmental work of personnel identified in the certification or recertification application;
- 6.11.4.9 Repeated deficiencies in performing remedial activities under the Act; or
- 6.11.4.10 Any other circumstances that the Department determines justify suspension or revocation of certification, or denial of recertification.
- 6.11.5 If the Department suspends or revokes any certification, or denies certification or recertification, under the provisions of this Section, the Department shall promptly notify the certificate holder in writing, by certified mail, of the reason for suspension or revocation.
- 6.11.6 A person whose certification is suspended or revoked under this Section shall surrender the Certificate to the Department within the time period specified in the notice.
- 6.11.7 A person whose certification is revoked may not reapply for certification for two (2) years from the date of revocation.
- 6.12 Public Hearings
  - 6.12.1 Request for Hearing
    - 6.12.1.1 Any consultant who is denied certification, recertification, or whose certification is suspended or revoked may request a public hearing before a hearing officer appointed by the Secretary.
    - 6.12.1.2 This request shall be made in writing to the Department within twenty (20) days of receipt of the notification of denial, suspension or revocation.
    - 6.12.1.3 The Department shall provide a party requesting a public hearing written notice of the scheduled hearing at least twenty (20) days prior to the hearing.
  - 6.12.2 Public Hearing Procedures
    - 6.12.2.1 The hearing shall be conducted by the Secretary.
    - 6.12.2.2 In connection with such hearings, the Secretary shall be empowered to:
      - 6.12.2.2.1 Issue orders for witnesses and other sources of evidence, either at the request of the affected person or on behalf of the Department;
      - 6.12.2.2.2 Administer oaths to witnesses;
      - 6.12.2.2.3 Exclude plainly irrelevant, immaterial, insubstantial, cumulative or privileged evidence;
      - 6.12.2.2.4 Limit unduly repetitive proof, rebuttal and cross-examination; or
      - 6.12.2.2.5 Hold pre-hearing conferences for the settlement or simplification of issues, for the disposal of procedural issues or disputes or to regulate and expedite the course of the hearing.
    - 6.12.2.3 At all such hearings, the burden of proof shall always be upon the person challenging the initial decision of the Department to deny certification or recertification or to suspend or revoke certification. In addition, as to each hearing, all notices, relevant correspondence between the Department and the person challenging the Department's decision, documents admitted into evidence, and all other documentation relied upon by the Secretary, shall be included in the Department's record of the case and retained by it for a period of 10 years.
    - 6.12.2.4 A record of all testimony from which a verbatim transcript can be prepared shall be made of each hearing. Transcripts shall be made at the request and expense of any party to the hearing.
    - 6.12.2.5 The Secretary shall make his decision based upon the entire record of the case.
    - 6.12.2.6 Every decision of the Department shall be incorporated in a final order which may include, where appropriate, the following:
      - 6.12.2.6.1 A brief summary of the evidence;
      - 6.12.2.6.2 Findings of fact based upon the evidence;
      - 6.12.2.6.3 Conclusions of law;
      - 6.12.2.6.4 A concise statement of the Department's determination or action on the case; and
      - 6.12.2.6.5 The signature of the Secretary.
    - 6.12.2.7 Every final order shall be mailed, or otherwise delivered, to each party and any other person requesting it no later than ten (10) days after the date it is issued.
  - 6.12.3 Appeals to the Environmental Appeals Board
    - 6.12.3.1 A person aggrieved by a decision to deny certification or recertification, or to suspend or revoke the person's certification, may appeal the decision to the Environmental Appeals Board within twenty (20) days of receipt of the decision.
    - 6.12.3.2 No appeal shall operate to stay the implementation of the decision regarding denial of certification or recertification, or suspension or revocation of certification; however, for good cause shown, the

Secretary may stay the action pending disposition of the appeal before the Environmental Appeals Board.

- 6.12.3.3 The appeals to the Environmental Appeals Board of all decisions to deny certification or recertification, or to suspend or revoke a person's certification, shall be conducted in conformity with the provisions of 7 Del.C. §6008.

## **7.0 Analytical Procedures**

- 7.1 Analytical procedures must be conducted in accordance with all applicable provisions of the Standard Operating Procedures of the Hazardous Substance Cleanup Act for Chemical Analytical Programs (SOPCAP), as amended by the Department. Other analytical methods, including screening, not addressed under the SOPCAP, which may be necessary to perform the remedy, must be approved by the Department.
- 7.2 Analytical Methods
- 7.2.1 All analytical procedures shall be performed in accordance with the analytical methods identified in the Sampling and Analysis Plan prepared under Section 9.3 of these Regulations.
- 7.2.2 Samples shall be analyzed consistent with methods appropriate for the facility, the media being analyzed, the suspected hazardous substances, and the anticipated use of the data.
- 7.2.3 Upon the Department's approval, the standard analytical methods identified in the Sampling and Analysis Plan may be modified to improve accuracy or achieve greater precision of analytical results.

## **8.0 Public Notification related to Remedial Activities under the Act**

- 8.1 Whenever public notice is required by the Act or these Regulations, the Department shall, at a minimum, provide or require notice as described in this Section. Public notice shall be published in a newspaper circulated in the county of the proposed action by display advertisement, legal notice, or any other appropriate format, as determined by the Department.
- 8.2 Public notice, as required by the Act, shall be provided within twenty (20) days of the following:
- 8.2.1 Commencement of negotiations for a Brownfields Development Agreement (BDA). The date of Brownfields certification by the Department shall be deemed to be the commencement of negotiations for a BDA.
- 8.2.2 Commencement of negotiations for a Voluntary Cleanup Program (VCP) Agreement. The date of receipt of a VCP Application by the Department shall be deemed to be the commencement of negotiations for a VCP Agreement.
- 8.2.3 Determination by the Department that there has been a release or imminent threat of a release of a hazardous substance which will require a remedy.
- 8.3 Public notice, as required by the Act, shall be provided to establish a twenty (20) day comment period for the following:
- 8.3.1 Issuance of a Proposed Plan of Remedial Action;
- 8.3.2 Execution of a Consent Decree; and
- 8.3.3 Execution of a BDA.
- 8.4 Public notice shall be provided upon the adoption of the Final Plan of Remedial Action (FPRA), including a brief description of the selected remedy and where a copy of the FPRA may be obtained.
- 8.5 Public notice shall be provided twenty (20) days prior to public hearings.

## **9.0 Investigation**

- 9.1 Initial Investigation
- 9.1.1 The purpose of the initial investigation is to determine if sufficient information is available for the Department to determine if a release or imminent threat of release of a hazardous substance has occurred, and, if so, to perform an initial hazard ranking of the facility based on the Delaware Hazard Ranking Model as described and specified in Section 3.3 of these Regulations.
- 9.1.2 Information shall be analyzed using quality assurance/quality control procedures to determine if the quality of the information is acceptable to the Department for the objective of the initial investigation.
- 9.1.3 The Department may determine that a Phase I Environmental Site Assessment, all appropriate inquiry (AAI), or a Preliminary Assessment satisfies the requirements of an initial investigation.
- 9.1.4 Based on the information obtained about the facility during the initial investigation or initial hazard ranking of the facility, the Department may:
- 9.1.4.1 Require a facility evaluation or a remedial investigation;

9.1.4.2 Require an interim action;

9.1.4.3 Place the facility on the priority list prepared by the Department;

9.1.4.4 Take any other action determined by the Department to be appropriate; or

9.1.4.5 Issue a Conditional No Further Action Determination.

9.1.5 A Conditional No Further Action Determination pursuant to paragraph 9.1.4.5 of this subsection does not preclude the Department from requiring further action based on additional information or other circumstances as it deems appropriate.

## 9.2 Facility Evaluation

9.2.1 The purpose of the facility evaluation (FE) includes:

9.2.1.1 Developing information and sampling data which will meet the data quality objectives;

9.2.1.2 Confirming the release or imminent threat of release;

9.2.1.3 Identifying the hazardous substances with sufficient data to determine future action at the facility. The FE does not require that the full extent of contamination be identified or that a full risk assessment be performed;

9.2.1.4 Identifying facility characteristics that could result in hazardous substances entering and moving through the environment; and

9.2.1.5 Performing an initial screening as described in Section 9.3 in order to evaluate the threat to public health, welfare, and the environment.

9.2.2 The Department may determine that a Phase II Environmental Site Assessment, a site inspection, site specific assessment satisfies the requirements of a FE; or

9.2.3 The Department may determine that existing information constitutes the equivalent of all or part of a FE.

9.2.4 The scope of the FE will depend on the specific characteristics of the facility. Sufficient information shall be collected to perform an initial screening as defined in Section 9.3.

9.2.5 A FE shall be conducted in accordance with the criteria, procedures, and time schedules established and agreed to by the Department.

9.2.6 Based on the information obtained about the facility during the FE and the initial screening, the Department will:

9.2.6.1 Revise the relative priority of the facility by performing a hazard ranking based on the FE results;

9.2.6.2 Conduct or require the performance of a remedial investigation and/or a feasibility study;

9.2.6.3 Enter into a Settlement Agreement with any person that offers to conduct a remedial investigation and/or feasibility study;

9.2.6.4 Conduct or require an immediate remedial action or interim action;

9.2.6.5 Conduct or require any other action as determined by the Department; or

9.2.6.6 Issue a Conditional No Further Action Determination.

## 9.3 Initial Screening

9.3.1 The methodology described in this Section shall apply to a facility evaluation (FE) or equivalent investigation as specified in Section 9.2 of these Regulations.

9.3.2 The purpose of the initial screening shall be to determine whether, based on available data, a release at a facility poses a potential risk to human health, welfare, or the environment.

9.3.3 The initial screening shall identify the maximum observed concentrations of analytes found in environmental samples. The sample locations shall be in areas of the facility where the highest levels of contamination are likely to exist.

9.3.3.1 Any laboratory confirmed analyte concentration, in excess of the screening levels approved by the Department, may require further evaluation.

9.3.3.2 The scope of the initial screening shall include an ecological screening to determine whether an Ecologically Sensitive Area (ECSA) is present on site or immediately adjacent to the site. If an ECSA is present, further ecological evaluation shall be performed.

## 9.4 Remedial Investigation

9.4.1 The purpose of the remedial investigation (RI) includes:

9.4.1.1 Characterizing the nature and extent of the release or the potential release of hazardous substances;

9.4.1.2 Collecting data to perform a risk assessment as specified in Section 10.0; and

9.4.1.3 Identifying the specific conditions that require potential remediation.

- 9.4.2 A Department approved Sampling and Analysis Plan (SAP), as specified in Section 9.6, is required prior to conducting a RI.
- 9.4.3 The Department may determine that the existing information regarding a facility satisfies all or part of the requirements of a RI.
- 9.4.4 The scope of the RI will depend on the specific characteristics of the facility and will meet the data quality objectives specified in the SAP.
- 9.4.5 A RI shall be conducted in accordance with the criteria, procedures, and time schedules determined by the Department.
- 9.4.6 The results of the RI will be evaluated to determine if data quality objectives, as described in the SAP, have been met.
- 9.4.7 Based on the information obtained about the facility during the RI and risk assessment, the Department may:
  - 9.4.7.1 Require a Feasibility Study, as specified in Section 12.4, to evaluate potential remedies for the facility;
  - 9.4.7.2 Require or conduct additional investigation or remedy (interim action); and/or
  - 9.4.7.3 Issue a Proposed Plan of Remedial Action.

## 9.5 Brownfield Investigation

- 9.5.1 The Brownfield investigation, which is applicable to certified Brownfield sites, shall meet the requirements of the RI as specified in Section 9.4.

## 9.6 Sampling and Analysis Plan – The following requirements are applicable to all stages of investigation:

- 9.6.1 Analytical procedures, including field screening methods, must be conducted in accordance with all applicable provisions of the Standard Operating Procedures of the Hazardous Substance Cleanup Act for Chemical Analytical Programs (SOPCAP), as issued or amended by the Department, or other methods or procedures preapproved by the Department.
- 9.6.2 Data shall be evaluated against accepted quality assurance/quality control parameters to determine data usability.
- 9.6.3 Sampling of the environmental media should be performed to collect representative samples that reflect the data quality objectives of the investigation.

## **10.0 Risk Assessment**

- 10.1 The methodology described in this section shall apply to the results of a remedial investigation as described and specified in Section 9.4 of these Regulations.
- 10.2 The purpose of the risk assessment is to characterize the nature and magnitude of health risks to humans and adverse effects to ecological receptors caused by the release of hazardous substances at a facility.
- 10.3 The methods of risk assessment shall conform to formally issued guidance and policy of the Department or to other methods preapproved by the Department.
- 10.4 The risk assessment shall use exposure assumptions that result in an overall exposure assessment that is conservative and consistent with the current and potential future use of the facility.
- 10.5 Toxicological data and exposure assumptions used in risk calculations shall appear in the risk assessment report. The toxicological data shall be from the Integrated Risk Information System or other sources approved by the Department.

## **11.0 Remedial Action Objectives & Cleanup Levels**

### 11.1 Remedial Action Objectives

- 11.1.1 During or following the remedial investigation, remedial action objectives shall be developed by a potentially responsible party, any person conducting the investigation, or the Department. Remedial action objectives will include qualitative and quantitative objectives. At the Department's discretion, remedial action objectives may be revised based on additional information.
- 11.1.2 Qualitative objectives describe, in general terms, how the remedial action will address specific threats to public health or welfare or the environment.
- 11.1.3 Based on the qualitative objectives, quantitative objectives will be developed that define specific remedial actions.
- 11.1.4 Remedial action objectives shall consider factors including current and potential land use, natural resource use, use of surrounding properties, background levels, facility specific risk assessment, specific environmental issues, and any applicable local, state and federal laws and regulations.

## 11.2 Cleanup Levels

11.2.1 Cleanup levels shall meet the acceptable risk.

11.2.2 Cleanup levels shall be based on site specific risks caused by releases of hazardous substances.

11.2.3 The future use of the facility shall be incorporated in a determination of cleanup levels based on site specific risks.

11.2.4 When multiple contaminants of concern (COCs) are present or multiple environmental media are contaminated, then the total cumulative risk from all of the COCs in all appropriate pathways of exposure shall not exceed the acceptable risk, except that:

11.2.4.1 The cumulative non-carcinogenic effect of COCs shall be evaluated in relation to target organs.

11.2.4.2 At its discretion, the Department may allow the maximum contaminant levels (MCLs) to be used as the cleanup levels for groundwater at a facility.

11.2.4.3 When the background level of a contaminant exceeds the concentration corresponding to the acceptable risk, the background level shall be the cleanup level.

## **12.0 Remedial Actions**

12.1 At any facility where the Department determines that a release has occurred, or a release is imminent, the Department may require a person to undertake appropriate remedial actions to reduce the risk of a release or imminent threat of release of hazardous substances to the acceptable risk level.

### 12.2 Department Oversight of Remedial Actions

12.2.1 A person shall not perform a remedial action without the Department's concurrent oversight, unless the activity is being performed pursuant to another state or federal environmental regulatory authority.

12.2.2 A person must enter into a settlement agreement with the Department in order to obtain oversight from the Department for the remedial action.

### 12.3 Interim Actions

12.3.1 The Department may require or permit an interim action at a facility prior to issuing the Proposed Plan of Remedial Action for the facility where the Department determines that it is consistent with or will not interfere with potential or final remedial actions.

12.3.2 Interim actions include spill response, drainage controls, site stabilization, removal of drums, tanks or bulk storage containers, free product removal, and excavation of contaminated material.

12.3.3 For any facility at which an interim action has occurred, the Proposed Plan of Remedial Action shall include a description of the interim action and a determination of whether additional remedial action is needed to meet the remedial action objectives.

12.3.4 The Department may adopt an interim action as all or part of the chosen final remedial action for a facility if it determines the interim action is protective of public health or welfare or the environment.

### 12.4 Remedial Alternative Selection

12.4.1 Prior to the selection of a remedial action, the Department may require a feasibility study depending on site specific factors including the nature of the contamination and the complexity of the facility. The feasibility study shall address each contaminated medium identified in the remedial investigation or risk assessment.

12.4.2 The Department, or any person who has entered into an agreement with the Department concerning a facility, shall propose one or more remedial alternatives for the facility which meet the criteria in 12.4.4.

12.4.3 The Department will evaluate and select the proposed remedial alternatives for the facility according to the threshold and balancing criteria.

12.4.4 At a minimum, an approved remedial action shall meet the following initial threshold criteria:

12.4.4.1 Protection of public health or welfare or the environment;

12.4.4.2 Attainment of remedial action objectives, including applicable, relevant and appropriate local, state, and federal laws and regulations; and

12.4.4.3 Control sources of contamination.

12.4.5 The Department shall consider the following balancing criteria in selecting a preferred remedial action from alternatives meeting the initial threshold criteria:

12.4.5.1 Incorporation of sustainability principles including low energy inputs, restoration of habitat, preservation of cultural resources, land reuse, materials recycling, infrastructure reuse, reduced run-off, permanence and protectiveness without an environmental covenant;

12.4.5.2 Reduction of contaminant toxicity, mobility or volume;

12.4.5.3 Comments or input from the community in which the facility is located;

12.4.5.4 Ease of implementation;

12.4.5.5 Short-term effectiveness;

12.4.5.6 Long-term effectiveness;

12.4.5.7 Life-cycle costs including present and future direct and indirect capital costs, operation and maintenance costs, compliance monitoring costs, and other foreseeable costs.

12.4.6 For remedial action alternatives that satisfy the criteria of 12.4.4 and after the Department considers the balancing criteria of 12.4.5, preference shall be given to the remedial action which is most cost effective.

12.4.7 A remedial action may not be considered cost effective if the incremental cost of the remedial action is substantial and disproportionate to the incremental degree of protection it would achieve.

12.4.8 Upon selection of the remedial alternative, the Department shall issue a Proposed Plan of Remedial Action.

## 12.5 Proposed Plan of Remedial Action

12.5.1 The Department shall issue a Proposed Plan of Remedial Action describing the proposed remedial action prior to implementation of the remedial action for a facility. When the Department requires or approves an interim action as described in Section 12.3 of these Regulations, the Department may issue a Proposed Plan of Remedial Action after the implementation of the interim action.

12.5.2 The Department shall provide public notice of the Proposed Plan of Remedial Action and the details of the public comment period as described in Section 8.0 of these Regulations.

12.5.3 At the conclusion of the public comment period, the Department shall evaluate questions and comments on the Proposed Plan of Remedial Action.

## 12.6 Final Plan of Remedial Action

12.6.1 The Department shall issue a Final Plan of Remedial Action with due consideration of the comments on the Proposed Plan of Remedial Action and any additional study or investigation the Department deems useful.

12.6.2 The Proposed and Final Plans of Remedial Action and the basis for them, as well as all comments received by the Department, shall constitute the remedial decision record of the Secretary.

12.6.3 The Department shall provide public notice of the Final Plan of Remedial Action as described in Section 8.0 of these Regulations.

## 12.7 Remedial Action

12.7.1 No person shall implement a remedial action at a facility without concurrent oversight from the Department.

12.7.2 All of the phases of the remedial action require prior written approval from the Department.

### 12.7.3 Remedial Action Work Plan

12.7.3.1 A Remedial Action Work Plan (RAWP) shall be prepared for any remedial action. The level of detail of the RAWP will depend on the nature and complexity of the Remedial Action, and will require the Department's written approval prior to implementation. The Department may require the submission of the following documents as part of the RAWP, which may be combined into one document:

12.7.3.1.1 Information as required by the Department including treatability studies, and pilot studies; and

12.7.3.1.2 Construction plans and specifications which shall describe in detail the remedial action to be performed. The plans and specifications shall be prepared in conformity with the currently accepted engineering practices and techniques. Any applicable or required permits shall be documented in the construction plans and specifications.

12.7.3.2 Any revisions to plans and specifications shall require the Department's prior written approval.

12.7.3.3 The Department will require and review a Health and Safety Plan (HASP). The HASP will include criteria to adequately monitor the protection of public health or welfare or the environment.

### 12.7.4 Remedial Action Implementation

12.7.4.1 Implementation of the remedial action shall be conducted in accordance with the approved Remedial Action Work Plan.

12.7.4.2 Upon request by the Department, interim progress reports for the remedial action must be submitted.

12.7.4.3 The Remedial Action Completion Report (RACR) shall contain as-built drawings and documentation of all aspects of the implementation of the remedial action approved by the Department. The RACR shall be certified by a Delaware licensed professional engineer and/or geologist, as appropriate, based on testing results and inspections as to whether the remedial action work has been implemented in compliance with the Proposed and Final Plans of Remedial

Action, the plans and specifications, and other related documents. The RACR is subject to the approval of the Department.

12.7.4.4 The Department may conduct inspections of the facility at any time to ensure compliance with the Final Plan of Remedial Action and long-term stewardship requirements.

#### 12.7.5 Long-Term Stewardship

12.7.5.1 Long-term stewardship (LTS) is addressed in a LTS Plan approved by the Department, and includes operation and maintenance, monitoring, environmental covenant, and periodic review requirements.

##### 12.7.5.2 Operation and Maintenance

12.7.5.2.1 Operation and maintenance refers to measures initiated after the remedial action is determined to be operational and functional. Operation and maintenance includes all activities necessary to ensure the integrity and functionality of the remedial action.

12.7.5.2.2 Any person responsible for operation and maintenance must obtain any necessary permits before initiating activities which require a permit under State or Federal or local laws and regulations. Possession of such permits shall be required for initial, and continuing, Department approval of the operation and maintenance plan.

12.7.5.2.3 Failure to perform operation and maintenance in compliance with a Department approved operation and maintenance plan may result in an enforcement action up to and including rescission of the Certification of Completion of Remedy.

##### 12.7.5.3 Remedial Action Monitoring

12.7.5.3.1 Remedial action monitoring is required to measure the long-term effectiveness of the remedial action.

12.7.5.3.2 Remedial action monitoring ensures the attainment of the cleanup level and confirms the long-term effectiveness of the remedial action objectives.

12.7.5.3.3 Remedial action monitoring requirements are contained in the LTS Plan which is subject to the approval of the Department.

##### 12.7.5.4 Environmental Covenant

12.7.5.4.1 The Department may require the placement of an Environmental Covenant (EC) on a facility, as provided for in 7 Del.C. §§7907-7920, the Uniform Environmental Covenants Act (UECA), as all or part of the remedial action.

12.7.5.4.2 An EC may be used in order to reduce the potential for exposure to hazardous substances, and may include land use restrictions, activity restrictions, groundwater use restrictions, operations and maintenance requirements, or other institutional controls.

##### 12.7.5.5 Periodic Review

12.7.5.5.1 The Department may require periodic review consisting of an evaluation of the continuing long-term effectiveness and protectiveness of the remedial action.

12.7.5.5.2 If the Department selects or approves a remedial action that results in hazardous substances remaining at a facility at concentrations which exceed applicable cleanup levels, the Department shall periodically review the remedial action as it deems necessary to ensure that public health or welfare or the environment is protected.

#### 12.8 Interference with Remedy

12.8.1 This section will apply to the following:

12.8.1.1 A facility for which any person has received notice pursuant to 7 Del.C. §9107;

12.8.1.2 A facility which is the subject of an application for entry into the Voluntary Cleanup Program or the Brownfields Development Program;

12.8.1.3 A facility undergoing an interim action;

12.8.1.4 A facility undergoing a remedial investigation or remedial action;

12.8.1.5 A facility for which an order has been issued pursuant to 7 Del.C. §9106(b) or 7 Del.C. §9109(b);  
or

12.8.1.6 A facility that has restrictions required by the Final Plan of Remedial Action.

12.8.2 No person shall perform any work or construction activities that may interfere with the remedial action at the facility, unless authorized by the Department as part of the remedial action, without doing all of the following:

12.8.2.1 Providing notice to the Department of any such planned work or construction activities;



- 12.8.2.2 Providing copies of all plans and a description of the planned work or construction activities to be performed at the facility;
  - 12.8.2.3 Providing an explanation of how and why the planned work or construction activities will not interfere with any part of the remedy; and
  - 12.8.2.4 Obtaining the Department's prior written approval for any work or construction activities to be performed at the facility.
- 12.8.3 For the purpose of Section 12.8, "work or construction activities" shall include:
- 12.8.3.1 Any building, constructing, drilling, digging, excavating, grading, filling, landscaping, earthmoving, agricultural or any other land disturbing activities;
  - 12.8.3.2 Storage, bulk or not, of inventory, equipment, or materials which limit access to remedial activities; or
  - 12.8.3.3 Any activities that may cause additional or new releases or exacerbation of site conditions.
- 12.8.4 This subsection shall not apply to any work or construction activities performed in a facility or areas of a facility where any drilling, digging or excavation is carried out to collect samples in accordance with any appropriate plan approved by the Department.

### **13.0 Remedy Completion and Site Closure**

#### 13.1 Remedy Completion

- 13.1.1 In order to obtain a Certification of Completion of Remedy (COCR) pursuant to 7 **Del.C.** §9108, a person seeking a COCR shall submit to the Department a signed request for the COCR. The request for certification must be accompanied by the following documentation supporting the request:
- 13.1.1.1 Proof that any Environmental Covenant, if required by the Final Plan of Remedial Action, has been filed with the Recorder of Deeds in the county in which the facility is located;
  - 13.1.1.2 Proof of payment of all Department costs as defined in a settlement agreement;
  - 13.1.1.3 The Department's written approval of a long-term stewardship plan, if required by the Final Plan of Remedial Action; and
  - 13.1.1.4 The Remedial Action Completion Report, if required, indicating that all requirements specified within the Final Plan of Remedial Action have been fulfilled.
- 13.1.2 A COCR may be amended when a change in site conditions warrants a change in any restrictions imposed by the COCR.
- 13.1.3 A person will be ineligible to receive a COCR from the Department until a remedial action in accordance with the Act is approved by the Department and has been completed at the facility.

#### 13.2 Facility Closure

- 13.2.1 All facilities addressed under 7 **Del.C.** Ch. 91 will be eligible for facility closure. A facility is eligible for closure when the Department determines that all requirements of the Final Plan of Remedial Action have been completed and no restrictions remain on the facility. The Department may require additional remedial activities at the facility after it has achieved closure if circumstances change or if any new information becomes available which shows that the completed remedial action is no longer protective of public health or welfare or the environment.
- 13.2.2 Facility closure is achieved through the issuance of a facility closure determination by the Department under the following conditions:
- 13.2.2.1 The Final Plan of Remedial Action requires no remedial activities at the facility; or
  - 13.2.2.2 A Certification of Completion of Remedy is issued or amended by the Department and the Department determines that the remedial action, as described in the Final Plan of Remedial Action, is completed and no restrictions remain on the facility.

#### 13.3 Archiving Facilities

- 13.3.1 At its discretion, the Department will remove sites from the current inventory of hazardous substance release facilities to the archive of closed facilities.

### **14.0 Natural Resource Damage Assessment and Restoration**

#### 14.1 Purpose and Applicability

- 14.1.1 To ensure comprehensive assessment of injuries or losses to natural resources and natural resource services resulting from a release of hazardous substances or results from required actions to prevent, mitigate, or remedy such a release.

14.1.2 To ensure restoration, replacement, or compensation for all lost or injured natural resources and natural resource services resulting from the release of a hazardous substance, or required actions to prevent, mitigate, or remedy such a release, that would not otherwise be restored or replaced as part of any remedial action.

14.1.3 A brownfield developer that does not cause or contribute to a release related to the site is not liable for natural resource damage assessment and restoration costs related to the release at the site, and such brownfield developer shall not be subject to or limited by any other provision of these Regulations relating solely to natural resource damages.

#### 14.2 Restoration, Replacement, and Compensation

14.2.1 The Department may require restoration, replacement and/or compensation for lost or injured natural resources and natural resource services. Restoration, replacement and compensation may include costs of monitoring, maintenance, and/or corrective activities necessary to sustain the restoration project in perpetuity.

14.2.1.1 The Department may require the restoration of an injured resource as nearly as practicable to its baseline condition. The baseline condition shall be determined in terms of the injured resource's physical, chemical, and biological properties or the services it provided prior to the release.

14.2.1.2 The Department may require replacement or acquisition of the equivalent of any injured natural resource or natural resource service.

14.2.1.3 The Department may require compensation for an injury to natural resources and natural resource services, including compensation for lost uses or services during the entire period prior to re-attainment of the baseline condition. If any restoration or replacement efforts ultimately fail, the Department may require compensation for any periods after such failure, until baseline conditions are restored.

14.2.2 The Department may recover all the Department's costs of performing the natural resource damage pre-assessment, assessment, and post-assessment.

#### 14.3 Agreements with other Persons

14.3.1 The Department may enter into agreements with persons for the assessment, restoration, replacement, and/or compensation for damages to natural resources and natural resource services. These agreements include:

##### 14.3.1.1 Cooperative Assessments

14.3.1.1.1 Cooperative assessments are performed by the Department and other persons to jointly assess damages to natural resources and/or natural resource services.

14.3.1.1.2 Agreements for cooperative assessments with a person may include a provision obligating the person to pay the Department's costs of assessment on a periodic basis while the assessment is in progress.

##### 14.3.1.2 Restoration in Anticipation of Unquantified Claims

14.3.1.2.1 The Department may elect to enter into an agreement with a person to allow the person to conduct restoration at a site, with oversight by the Department, before a damage assessment is completed. Upon completion of the restoration work, as approved by the Department, the Department may grant credit to the person to offset all or a portion of the person's liability for the natural resource damage at the site.

14.3.1.2.2 The Department may permit a credit granted to a person for restoration at a site or sites to be used to offset the person's liability at other sites in Delaware or at sites outside the State which have injured Delaware's trust resources.

#### 14.4 Pre-Assessment Phase

14.4.1 Upon identification of a release or threat of a release of a hazardous substance, the Department may conduct a preliminary review to determine whether there are any natural resources affected or potentially affected by the release or threat of release. Upon finding that a release of a hazardous substance may injure, or may have injured, trust resources of the State, the Department may conduct, either alone or in cooperation with trustee agencies of the Federal government, tribes, or other states:

14.4.1.1 A pre-assessment screen to determine whether the release justifies a natural resource damage assessment;

14.4.1.2 Sampling and data collection for the purpose of obtaining evidence which would otherwise be lost; or

14.4.1.3 Emergency response activities to the extent the Department deems appropriate to prevent or reduce actual or potential injuries to natural resources.

#### 14.4.2 Pre-Assessment Screen

- 14.4.2.1 The pre-assessment screen includes a review of existing information, preliminary identification of natural resources potentially at risk, sampling, preliminary identification of the substances released, preliminary identification of pathways of exposure, and costs of performing an assessment.
- 14.4.2.2 Based on information gathered pursuant to the pre-assessment screen, the Department may make a preliminary determination that the following criteria are substantially met before proceeding with an assessment:
  - 14.4.2.2.1 A release of a hazardous substance has occurred or may occur:
  - 14.4.2.2.2 Natural resources for which the State may assert trusteeship have been or are likely to have been adversely affected by the release or potential release:
  - 14.4.2.2.3 The quantity and concentration of the released or potentially released hazardous substances is potentially sufficient to cause injury to those natural resources:
  - 14.4.2.2.4 Data sufficient to pursue an assessment are readily available or likely to be obtained at reasonable cost; or
  - 14.4.2.2.5 Remedial actions, if any, carried out or planned, do not or will not sufficiently remedy the injury to natural resources without further action.

#### 14.5 Assessment Phase

- 14.5.1 If a damage assessment is determined to be appropriate in the pre-assessment phase, the Department, alone or in conjunction with other Trustees or PRPs, may develop a damage assessment plan. Assessments may be conducted using the procedures outlined in 43 CFR Part 11, as amended, or by other procedures determined to be appropriate by the Department. The damage assessment plan may be incorporated into the remedial investigation work plan.
- 14.5.2 The assessment is conducted in the following three stages: injury determination, quantification, and damage determination.
  - 14.5.2.1 Injury Determination: This determines whether an injury to one or more natural resources or natural resource services may have occurred, and whether the injury may have resulted from the release of a hazardous substance.
  - 14.5.2.2 Quantification: If it is determined that there may be an injury to a natural resource or natural resource service, the magnitude of the injury may be evaluated.
  - 14.5.2.3 Damage Determination: This determines the damages resulting from the release of a hazardous substance based upon the information provided in the injury determination and quantification stages. Restoration Valuation, and one or both of the additional valuation approaches outlined below, may be used in the Damage Determination.
    - 14.5.2.3.1 Restoration Valuation: This methodology consists of damage estimation based on restoration or replacement of the injured natural resource due to the release of a hazardous substance. An evaluation of restoration alternatives may be conducted. The evaluation considers a range of actions to restore the injured services over various recovery periods, and may include a "no-action" or natural recovery alternative. The expected net present value of each restoration alternative shall be determined; and
    - 14.5.2.3.2 Use Value Valuation: These methodologies consist of damage estimations based on the reduction of use values, including hiking, fishing, hunting, boating, or camping. The use values of the injured resource may be estimated by using approaches specified by the Department; and/or
    - 14.5.2.3.3 Nonuse Value Valuation: These methodologies consist of damage estimations based on the reduction of nonuse values, including aesthetics. The nonuse values of the injured resource may be estimated by using approaches specified by the Department.
- 14.5.3 The results of an assessment performed by other persons shall be submitted to the Department for its approval.

#### 14.6 Post-Assessment Phase

- 14.6.1 Upon completion of the assessment, the Department may, as appropriate:
  - 14.6.1.1 Require persons to provide compensation for the injury to natural resources and natural resource services;
  - 14.6.1.2 Seek compensation from an appropriate trust fund;
  - 14.6.1.3 Select an appropriate restoration alternative pursuant to 14.6.2;

14.6.1.4 Develop, or require a person to develop, a restoration plan. The plan describes the specific actions to be taken to restore, replace, and/or provide compensation for the injured natural resources and natural resource services;

14.6.1.5 Implement, or require a person to implement, the approved restoration plan;

14.6.1.6 Recover its costs for assessment, restoration planning, restoration, and post-restoration activities from a person or appropriate trust fund.

14.6.2 In the evaluation of restoration alternatives, the Department may:

14.6.2.1 Consider whether the proposed restoration projects serve to restore, replace, or acquire the equivalent of the natural resources and natural resource services injured as a result of the subject releases; or

14.6.2.2 Consider projects benefitting the watershed, aquifer, populations, or species injured, and projects benefitting other watersheds, aquifers, populations, or species. Preference may be given to projects that benefit the affected watershed, aquifer, populations, or species.

**5 DE Reg. 1618 (2/1/02)**

**16 DE Reg. 218 (08/01/12) (Final)**