

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF AIR AND WASTE MANAGEMENT

TANK MANAGEMENT BRANCH

Statutory Authority: 7 Delaware Code, Chapters 60 and 74 (7 **Del.C.** Ch. 60 & 74)

7 **DE Admin. Code** 1351

PROPOSED

SAN # 2008-20 and 2008-23

1351 Regulations Governing Underground Storage Tank Systems

PART E: Requirements For Reporting, Release Investigation, Remedial Action And NO FURTHER ACTION DETERMINATIONS ~~Site Closure No Further Action Determinations~~ For Underground Storage Tank Systems

1.0 Reporting Requirements

1.1 Reporting Requirements for Indicated Releases

1.1.1 Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, environmental contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to:

1.1.1.1 ~~The Department's 24-hour Release Hot Line by calling 800-662-8802 (in-state) or 302-739-9401 (out-of-state)~~ The DNREC Tank Management Branch by calling 302-395-2500, during normal business hours; and

1.1.1.2 ~~The DNREC Tank Management Branch by calling 302-395-2500~~ The Department's 24-hour Release Hot Line by calling 800-662-8802, when required in accordance with 7 **Del.C.** Chapter 60 and the Regulations promulgated thereunder as amended.

1.1.1.3 If the phone numbers listed in these Regulations are not valid it is the responsibility of the ~~Responsible Party~~ Person discovering the Release to take all reasonable steps to ascertain a valid phone number.

1.1.2 The Department may require that the UST System be taken out of service and emptied until the cause of the indication of the Release is determined, if the Department deems such action necessary to protect human health, safety or the environment.

1.1.3 Indicated Releases include, but are not limited to, the following:

1.1.3.1 Stained soils or soils that emit characteristic odors of Regulated Substance compounds which are exposed during digging, boring or excavation activities, ~~#Retrofit, Repair or Upgrade~~ of UST Systems, Removal of an UST System or collection of soil samples around an UST System that is Closed In Place, or results from a Phase I or Phase II environmental site assessment; or

- 1.1.3.2 Water from supply wells, public or private, that exhibit a decrease in water quality, which is shown by subsequent analysis to result from the presence of a Regulated Substance; or
- 1.1.3.3 The appearance of characteristic odors of a Regulated Substance in basements or other enclosed spaces; or
- 1.1.3.4 The appearance of a sheen on a surface water body; or
- 1.1.3.5 The appearance of a sheen or measurable LNAPL in a supply well, monitoring well, or observation tube; or
- 1.1.3.6 Failure of a Tank, ~~line~~ Piping or vapor recovery test; or
- 1.1.3.7 Abnormal operating condition; or
- 1.1.3.8 A laboratory report that indicates a sample collected from an UST excavation, soil boring, monitor well or observation tube contains a Regulated Substance; or
- 1.1.3.9 Notification from the State Emergency Prevention and Response Branch or another State or Federal agency of the discovery of uncontained Regulated Substance compounds; or
- 1.1.3.10 Release Detection required under these Regulations indicates a Release may have occurred.

1.2 Reporting Requirements for Indicated Releases due to Abnormal Operating Conditions

- 1.2.1 Owners and Operators shall report any abnormal operating conditions to the Tank Management Branch, by calling 302-395-2500, within twenty-four (24) hours of discovery or by the next business day. Abnormal operating conditions include, but are not limited to, the following:
 - 1.2.1.1 The sudden loss of product from any portion of the UST System;
 - 1.2.1.2 Inventory control discrepancies;
 - 1.2.1.3 A signal from any Release Detection device or method that indicates a Release may have occurred;
 - 1.2.1.4 Inconclusive statistical inventory reconciliation (SIR) results;
 - 1.2.1.5 Irregular behavior of product dispensing equipment;
 - 1.2.1.6 Equipment failure or malfunction;
 - 1.2.1.7 The unexplained presence of water in the UST System;
 - 1.2.1.8 Evidence of a Release of a Regulated Substance noted during a routine inspection

1.3 Reporting Requirements for Releases

- 1.3.1 Owners and Operators shall not knowingly allow any Release from an UST System to continue.
- 1.3.2 ~~Any Release of a Regulated Substance that is discovered by a~~Any Person, including but not limited to environmental consultants or contractors, utility companies, financial institutions or real

estate transfer companies, that discovers any Release of Regulated Substance, shall be reported the discovery within 24 hours to:

- 1.3.2.1 The Department's 24-hour Release Hot Line by calling 800-662-8802 ~~(in-state)~~ or ~~302-739-9401 (out-of-state)~~; and
- 1.3.2.2 The DNREC Tank Management Branch by calling 302-395-2500, during normal business hours.
- 1.3.3 ~~The National Response Center (800-424-8802) shall be notified immediately of~~ Any Person who discovers a Release of any quantity of a petroleum substance that produces a visible sheen on surface waters shall immediately notify the National Response Center (800)-424-8802.
- 1.3.4 Responsible Parties shall immediately contain the Release and shall complete the Release response, investigation and Remedial Action requirements of this Part as required.
- 1.3.5 Owners and Operators shall comply with the release notification requirements of any other state, federal, or municipal agency.
- 1.4 Reporting Requirements for Regulated Substance excluding Hazardous Substance Spills and Overfills
 - 1.4.1 Owners and Operators shall report any spill or overfill that results in a Release to the environment that exceeds twenty-five (25) gallons to the Department within 24 hours by calling 800-662-8802 ~~(in-state)~~ or ~~302-739-9401 (out-of-state)~~, and shall contact the Tank Management Branch, 302-395-2500, for further instructions. Owners and Operators shall immediately contain and clean up the spill or overfill and shall comply with the Release investigation, hydrogeologic investigation and Remedial Action requirements of this Part as directed by the Tank Management Branch.
 - 1.4.2 Owners and Operators shall immediately contain and clean up any spill or overfill that results in a release to the environment that is less than twenty-five (25) gallons. If cleanup cannot be accomplished within 24 hours, Owners and Operators shall immediately notify the Tank Management Branch (302-395-2500). Owners and Operators shall comply with the Release investigation, hydrogeologic investigation and Remedial Action requirements of this Part as directed by the Tank Management Branch.
- 1.5 Reporting Requirements for Hazardous Substance Spills and Overfills
 - 1.5.1 Owners and Operators shall report any spill or overfill of a Hazardous Substance that results in a Release that equals or exceeds the reportable quantity under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (40 CFR Part 302) or 7 **Del.C.** §6028 to the Department within 24 hours by calling 800-662-8802 ~~(in-state)~~ or ~~302-739-5072 (out-of-state)~~ and shall contact the Tank Management Branch (302-395-2500) for further instructions. Owners and Operators shall immediately contain and clean up the spill or overfill and shall comply with the Release investigation, hydrogeologic investigation and Remedial Action requirements of this Part as directed by the Tank Management Branch.
 - 1.5.2 A Owners and Operators shall report a Release of a Hazardous Substance equal to or in excess of its reportable quantity ~~shall also be reported~~ immediately to the National Response Center under 42 U.S.C., Chapter 103, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and to appropriate state and local authorities under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986.
 - 1.5.3 Owners and Operators of UST systems shall immediately contain and clean up any spill or overfill of a Hazardous Substance in a quantity less than a reportable quantity under CERCLA (40 CFR

Part 302) or 7 **Del.C.** §6028. If cleanup cannot be accomplished within 24 hours, Owners and Operators shall immediately notify the Tank Management Branch (302-395-2500). Owners and Operators shall comply with the Release investigation, hydrogeologic investigation and Remedial Action requirements of this Part as directed by the Tank Management Branch.

1.6 Public Notice Requirements for Confirmed Releases

1.6.1 For each confirmed Release that requires a Remedial Action plan, DNREC shall provide notice to the public by means designed to reach those members of the public directly affected by the Release and the planned Remedial Action. This notice may include, but is not limited to, public notice in local newspapers, block advertisements, public service announcements, publication in a state register, letters to individual households, personal contacts by field staff or posting relevant information on the internet.

1.6.2 The DNREC shall ensure that relevant site release information relating to Remedial Action Plans is available to the public upon request.

2.0 Indicated Release Investigation Requirements

2.1 General Requirements for Indicated Release Investigation

2.1.1 Unless Remedial Action is immediately initiated in accordance with the requirements of this Part, ~~Owners and Operators~~ Responsible Parties shall investigate and confirm, within seven (7) days, any indication of a Release of a Regulated Substance including but not limited to those listed in §1.1 of this Part.

2.2 Indicated Release Investigation Procedures

2.2.1 Upon discovery of an indication of a Release ~~Owners and Operators~~ Responsible Parties shall:

2.2.1.1 Within twenty-four (24) hours begin an investigation to determine the cause of any abnormal operating condition; and

2.2.1.2 Within twenty-four (24) hours initiate an investigation for completion within seven (7) days to determine the presence or absence of a Release by:

2.2.1.2.1 Conducting an UST System tightness test in accordance Part B, §1.13, Part C, §1.13 or Part D, §1.13 as applicable; or

2.2.1.2.2 Measuring for the presence of a Release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations and measurement methods, the type of initial indication of contamination, type of backfill and soil, the depth of groundwater, and other factors appropriate for identifying the presence and source of the Release shall be considered; or

2.2.1.2.3 Other procedures as directed by the Department.

2.2.1.3 If the abnormal operating condition is the result of an equipment failure or malfunction, Owners and Operators shall Repair or replace all faulty equipment in accordance with all applicable portions of these Regulations.

2.2.1.4 If the Release investigation determines that a Release has occurred, Responsible Parties shall comply with the hydrogeologic investigation and Remedial Action requirements of this Part.

~~2.2.2 Within thirty (30) days of completion of any Repairs and indicated Release investigation Responsible Parties and UST contractors shall submit documentation to the Tank Management Branch including, but not limited to, the following:~~

~~2.2.2.1 Repair completion documentation; and~~

~~2.2.2.2 Sampling results; and~~

~~2.2.2.3 Test results as required by the Department.~~

2.3 Indicated Release Investigation Procedures for Inventory Control Discrepancies

2.3.1 Owners and Operators shall initiate an investigation procedure within twenty-four (24) hours of identification of an inventory discrepancy as described in Part B, Part C or Part D of these Regulations. The investigation shall proceed until the cause of the discrepancy has been found. The investigation shall include:

2.3.1.1 Inventory records shall be checked for mathematical errors; and

2.3.1.2 Inventory records shall be checked for error in measurement, substance temperature change, or other variables; and

2.3.1.3 If the significant loss or gain is not reconcilable after the steps in §2.3.1.1 or §2.3.1.2 of this Part are completed, or cannot be affirmatively demonstrated to be the result of pilferage, the UST System shall be checked for damage or leaks; and

2.3.1.4 Release Detection systems shall be checked for signs of a Release; and

2.3.1.5 Correct calibration of the inventory measuring system and any dispensers shall be verified.

2.3.2 If the source of the inventory discrepancy has not been determined from the above procedures, Owners and Operators shall notify the Department ~~shall be notified~~ within twenty-four (24) hours of completion of the investigation procedures in §2.3.1.1, §2.3.1.2, §2.3.1.3, §2.3.1.4, and §2.3.1.5 of this Part, and Owners and Operators shall begin the Release investigation and confirmation steps established in this Part.

2.3.3 If a Release is confirmed the Release notification, response, hydrogeologic investigation and Remedial Action requirements of this Part shall be completed as required.

3.0 Release Response Requirements

3.1 Department Authority to Assume Control of Releases

3.1.1 The Department reserves the right to assume control of any Release or indicated Release situation when it is determined that the Responsible Parties are not responding promptly or effectively. In such cases all liability, including payment to the Department of response costs, will remain with the Responsible Parties.

- 3.1.2 To protect human health, safety and the environment the Department reserves the right for the Department or its contractors to enter and take appropriate actions on affected properties to investigate, abate and remediate contamination.

3.2 Initial Release Response Requirements

- 3.2.1 In response to a Release from an UST System, the Responsible Parties shall promptly take the following steps:

- 3.2.1.1 The cause of the Release shall be promptly identified through UST System tightness testing or other means approved by the Department; and
- 3.2.1.2 If a faulty UST System component is determined to be the cause of a Release, the component or, if necessary, the entire UST System, shall be taken out of service and shall not be returned to service until the UST System is functioning in compliance with all applicable portions of these Regulations; and
- 3.2.1.3 The Regulated Substance contained within the UST System shall be removed unless otherwise directed by the Department; and
- 3.2.1.4 No Responsible Parties shall put back into service any UST System that has caused a Release without prior approval from the Department; and
- 3.2.1.5 An investigation shall be conducted to determine an estimate of the amount and type of Regulated Substance Released; and
- 3.2.1.6 ~~Owners and Operators and~~ Responsible Parties shall implement the following to contain the Release:
- 3.2.1.6.1 If LNAPL is present, LNAPL Corrective Action shall be immediately initiated in accordance with §3.3. of this Part; and;
- 3.2.1.6.2 Nearby receptors shall be protected from impacts of Regulated Substances through recovery and containment measures to by preventing migration of Free and Mobile LNAPL ~~migration through recovery and containment~~. The Department shall be notified of all activities; and
- 3.2.1.6.3 All flammable material shall be properly handled and vapors shall be mitigated to prevent fires, explosions and impacts to receptors.

3.3 LNAPL Corrective Action Requirements

- 3.3.1 At sites where there is a Release of LNAPL, the Responsible Parties shall remove and remediate the LNAPL to the maximum extent practicable following the requirements established in Part E of these Regulations while continuing, as necessary, the Release confirmation steps and the investigation required in Part E of these Regulations.
- 3.3.2 The Responsible Parties shall formulate a LNAPL Conceptual Site Model (LCSM) to determine the most efficient and environmentally protective remedial approach for addressing the Release.
- 3.3.3 The Responsible Parties shall verbally communicate a preliminary LCSM to the Department within forty-eight (48) hours of the discovery of a Release of LNAPL. The preliminary LCSM shall address as many of the criteria listed in §3.3.4 of this Part as possible.

- 3.3.4 The LCSM shall at a minimum address the following factors with regard to the LNAPL Release:
- 3.3.4.1 The feasibility and necessity of an immediate response; and
 - 3.3.4.2 Direct and potential impacts to human health, safety and the environment; and
 - 3.3.4.3 The type and estimated volume of the LNAPL released; and
 - 3.3.4.4 The evidence, or occurrence, of the LNAPL Release (Mobile LNAPL, Free LNAPL in a well, Residual LNAPL discovered during an investigation); and
 - 3.3.4.5 The potential recoverability of all LNAPL phases; and
 - 3.3.4.6 The geometry of the LNAPL Body; and
 - 3.3.4.7 The estimated age and duration of the LNAPL Release; and
 - 3.3.4.8 The characteristics of the subsurface soils; and
 - 3.3.4.9 The chemical and physical properties of the LNAPL; and
 - 3.3.4.10 Groundwater classification for the area such as wellhead protection areas, excellent recharge areas, or source water protection areas.
- 3.3.5 Responsible Parties shall base all short and long term Remedial Action decisions upon the information in the LCSM, which shall be updated, in writing and submitted to the Department, at a minimum of once every three (3) calendar months, or on a schedule approved by the Department.
- 3.3.6 LNAPL removal shall be conducted in a manner that minimizes the spread of contamination, including dissolved and vapor phases, into previously uncontaminated areas by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges or disposes of recovery by-products in accordance with all applicable local, state and federal requirements.
- 3.3.7 If LNAPL recovery is not practicable, and does not support site Remedial Action objectives as determined by the Department, the Responsible Parties may submit a written request for Department approval to discontinue LNAPL recovery. The request shall at a minimum include the following:
- 3.3.7.1 Technical feasibility of other proven groundwater and soil treatment techniques to further reduce LNAPL at the site; and
 - 3.3.7.2 Costs, time frames, and resources involved to further reduce LNAPL levels employing the current and alternative method(s) proposed; and
 - 3.3.7.3 A demonstration that the remaining LNAPL Body is not contributing to any unstable daughter plumes such as a dissolved plume and vapor migration; and
 - 3.3.7.4 A demonstration that remaining LNAPL does not pose any risk to human health, safety, and the environment; and
 - 3.3.7.5 An assessment of the persistence and fate of the LNAPL in the subsurface; and

- 3.3.7.6 A description of the individual site characteristics, including natural rehabilitative processes; and
- 3.3.7.7 Statements regarding current versus future land use of the site.
- 3.3.8 The Department may require the Responsible Parties to follow any applicable guidance or industry referenced standards in order to create a sound LCSM, from which optimal Remedial Action decisions can be made.

4.0 Hydrogeologic Investigation Requirements

4.1 General Requirement for Hydrogeologic Investigation

- 4.1.1 After a Release is confirmed and controlled, and LNAPL Corrective Action has commenced, Responsible Parties shall conduct a hydrogeologic investigation to determine the nature and extent of the Release and to make an initial estimate of any potential risks to human health, safety and to the environment, which are associated with the Release.
- 4.1.2 Responsible Parties shall conduct a hydrogeologic investigation to determine if an UST System is the source of environmental impacts to properties near an UST Facility. These impacts include, but are not limited to, the discovery of Regulated Substances such as the presence of LNAPL, dissolved phase contamination or vapors in soils, basements, sewer and utility lines, and nearby surface and drinking waters that have been observed by the Department or brought to its attention by another party.

4.2 Hydrogeologic Investigation Requirements

- 4.2.1 After a Release is confirmed, Responsible Parties shall conduct a hydrogeologic investigation as the first step in the Corrective Action process unless directed to do otherwise by the Department. The investigation shall at a minimum include the following:
 - 4.2.1.1 Determine the nature of the Release, including the chemical compounds present, their concentrations, quantity released, and their physical and chemical characteristics related to potential human health and environmental impacts and cleanup procedures; and
 - 4.2.1.2 Determine the extent of the Release, both horizontal and vertical, including whether the contaminant is distributed homogeneously or heterogeneously; and
 - 4.2.1.3 Determine the physical characteristics of the site, including characteristics affecting the occurrence, distribution, and movement of the released contaminant and characteristics affecting access to the site, both horizontal and vertical, which may influence the feasibility of various investigatory and remediation procedures; and
 - 4.2.1.4 Evaluate, in accordance with the Delaware Risk-Based Corrective Action Program (DERBCAP) or other Department approved procedures, the potential risks posed by the Release including identification of environmentally sensitive receptors, and an estimate of the impacts to human health and the environment that may occur as a result of the Release.
- 4.2.2 Responsible Parties shall submit the results of the hydrogeologic investigation to the Department no later than one hundred twenty (120) days after a Release is confirmed or other Department approved schedule. The hydrogeologic investigation report shall include recommendations for further action or a request for a no further action determination in accordance with §6.1 of this Part.

- 4.2.3 The results of the hydrogeologic investigation shall be organized in report form in accordance with Department guidance and signed by a professional geologist or professional engineer registered in the State of Delaware as required in 24 **Del.C.** Chapter 36 and the Delaware Board of Registration of Geologists Regulations and 24 **Del.C.** Chapter 28.
- 4.2.4 The Department shall review the report and either accept the conclusions and recommendations of the report or require that within ninety (90) days or other Department approved schedule, the Responsible Parties shall submit additional information or a Remedial Action work plan (RAWP) to the Department.
- 4.2.5 The Responsible Parties may submit hydrogeologic investigation reports for a site separately or as part of a proposed long term Remedial Action work plan in accordance with the requirements of §5 of this Part.

4.3 Quality Assurance and Quality Control Requirements

- 4.3.1 Responsible Parties shall develop and implement a site specific Quality Assurance/Quality Control (QA/QC) plan for the activities to be carried out during the hydrogeologic investigation and the QA/QC plan shall be included in the hydrogeologic investigation ~~work plan~~ report submitted to the Department.

4.4 Site Safety Requirements

- 4.4.1 Responsible Parties shall develop a site specific health and safety plan which shall be ~~included in the hydrogeologic investigation work plan~~ furnished to the Department upon request and shall cover all hydrogeologic investigation tasks. The health and safety plan shall address the site worker protection levels, protection of persons living near the site, and site access control during the investigation.

5.0 Remedial Action Requirements

5.1 Administrative Option For Remedial Action

- 5.1.1 The Department may waive the requirement of a hydrogeologic investigation when the Responsible Parties have taken the appropriate initial response steps to eliminate imminent dangers and to prevent any further Release and have chosen to submit a Remedial Action work plan (RAWP) for remediating contaminated soil, groundwater and/or surface water.
- 5.1.2 If the Department determines that the implementation of Remedial Actions are not achieving adequate protection of human health, safety or the environment, the Department shall require Responsible Parties to take appropriate action.
- 5.1.3 Responsible Parties may, in the interest of minimizing environmental contamination and promoting more effective remediation, begin remediation of soil and groundwater before the Remedial Action work plan is approved provided that the Responsible Parties:
 - 5.1.3.1 Notify the Department of their intention to begin remediation; and
 - 5.1.3.2 Comply with any conditions imposed by the Department, including halting remediation or mitigating adverse consequences from ~~cleanup~~ remedial activities; and
 - 5.1.3.3 Incorporate these self initiated remediation measures in the RAWP that shall be submitted to the Department for approval; and

- 5.1.3.4 Recognize that any actions taken by the Responsible Parties without prior Department approval is at the risk of the Responsible Parties and does not absolve the Responsible Parties of the obligation to comply with the Remedial Action requirements of this Part.

5.2 Remedial Action Work Plan (RAWP) Requirements

- 5.2.1 At any point after reviewing the information contained in the hydrogeologic investigation report, the Department may require the Responsible Parties to submit additional information or to develop and submit a RAWP for responding to contaminated soils, surface water and groundwater.
- 5.2.2 The RAWP shall address the contamination of soils, groundwater and surface water, including all occurrences of LNAPL resulting from a Release, and shall be submitted to the Department in a timeframe specified by the Department. The RAWP shall provide for adequate protection of human health, safety and the environment, and shall establish cleanup goals for the site.
- 5.2.3 Responsible Parties shall modify any RAWP that does not provide for adequate protection of human health, welfare, safety and the environment, as necessary to meet the requirements of Part E of these Regulations.
- 5.2.4 The RAWP shall include sufficient design information that demonstrates that the remedial technology shall meet the cleanup goals approved by the Department and shall include an estimated time to cleanup completion for the remediation method proposed in the RAWP.
- 5.2.5 A RAWP shall propose a Remedial Action method for the site that shall:
- 5.2.5.1 Reduce the contaminant levels at the site to meet the cleanup goals proposed in the Remedial Action work plan and approved by the Department; or
 - 5.2.5.2 Reduce the contaminant levels to achieve the cleanup goals established by the Department; or
 - 5.2.5.3 Monitor the site over time to provide technically based assurance that the site contamination is controlled under natural conditions and that those conditions will not now, or at some future time, adversely impact human health, safety or the environment.
- 5.2.6 The Department shall approve the RAWP when satisfied that implementation of the RAWP provides for measures considered adequate to protect human health, safety, and the environment.
- 5.2.7 The RAWP shall be organized in report form and signed by a professional geologist or professional engineer registered in the State of Delaware as required in 24 **Del.C.** Chapter 36 and the *Delaware Board of Registration of Geologists Regulations* and 24 **Del.C.** Chapter 28.
- 5.2.8 The RAWP shall be of site specific design and shall be based on the results of the hydrogeologic investigation, or contain appropriate investigatory steps if submitted without a prior hydrogeologic investigation having been completed.
- 5.2.9 The RAWP may propose a phased approach to site remediation. If data can justify ~~site closure a~~ no further action determination, Responsible Parties may request ~~site closure a no further action~~ determination in accordance with the requirements of §6 of this Part. Remedial Action will be considered complete only upon the Department's evaluation and approval of a satisfactory ~~closure~~ no further action request.
- 5.2.10 The RAWP shall include a summary of past efforts and a description of any new or continued efforts to effectively remove LNAPL as described in Part E §3.

5.3 Quality Assurance and Quality Control Requirements

- 5.3.1 Responsible Parties shall develop and implement a site specific Quality Assurance/Quality Control (QA/QC) plan for the activities to be carried out during implementation of the RAWP and the QA/QC plan shall be included in the RAWP ~~plan~~ submitted to the Department.

5.4 Site Safety Requirements

- 5.4.1 Responsible Parties shall develop a site-specific health and safety plan which shall be ~~included in the RAWP furnished to the Department upon request and~~ and shall cover all Remedial Action tasks. The health and safety plan shall, at a minimum, address site worker protection levels, protection of persons living near the site, and site access control during the remediation.

5.5 Implementation and Reporting Schedule

- 5.5.1 Upon approval of the RAWP by the Department, the Responsible Parties shall implement the RAWP, including any modifications to the RAWP made by the Department, within the timeframe approved by the Department.
- 5.5.2 The Responsible Parties shall monitor, evaluate and report to the Department the results of implementing the Remedial Action at a minimum of once every three (3) calendar months, or within the time schedule approved in the RAWP. Copies of all records documenting the transport and disposal of any free product, contaminated water and soil, or other waste that is generated at the site while investigation and remedial action work is being performed shall be included in each report.
- 5.5.3 The Responsible Parties shall submit a Remedial Action progress report to the Department once every twelve (12) calendar months that includes an evaluation of the effectiveness of the Remedial Action to determine whether additional measures must be implemented to meet the cleanup goals established in the RAWP. The evaluation shall include an estimate of time to Remedial Action completion.
- 5.5.4 Responsible Parties shall submit recommendations for optimization and improvement as needed to achieve the cleanup goals established in the RAWP, as part of each Remedial Action progress report.

5.6 Post Remedial Monitoring

- 5.6.1 Upon completion of Remedial Action activities the Responsible Parties shall perform four (4) consecutive quarters of groundwater sampling or other sampling schedule as approved by the Department to ensure the contaminant plume is stable and shrinking and that rebounding does not occur.

6.0 ~~Site Closure~~ **No Further Action** Requirements

6.1 ~~Closure Documentation Requirements~~ Request for No Further Action Determination

- 6.1.1 After all ~~RAWP~~ Corrective Actions are complete and cleanup goals have been achieved, the Responsible Parties shall submit a written request to the Department for ~~site closure~~ no further action (NFA). ~~Closure documentation~~ The request for no further action shall include but is not limited to the following documentation:

- 6.1.1.1 A demonstration that the site does not threaten human health, safety and the environment based on current land use of the site and surrounding area; and
- 6.1.1.2 LNAPL does not exist or has been addressed in accordance with §3.3 of this Part; and
- 6.1.1.3 Contaminant levels have been reduced to levels at or below the cleanup goals approved by the Department.
- 6.1.2 The Responsible Parties shall submit all documents, permits, certificates, approvals, etc. relating to the transportation of impacted environmental media and materials from the site including USTs, soils, Regulated Substances, and water that has not been previously submitted to the Department. Documentation shall include tipping fees, waste receipts, bills of lading or any other documentation verifying that all waste has been properly disposed.
- 6.1.3 The request for no further action shall be signed by a professional geologist or professional engineer registered in the State of Delaware as required in 24 Del.C. Chapter 36 and the Delaware Board of Registration of Geologists Regulations and 24 Del.C. Chapter 28, when requested by the Department.
- 6.2 Department Closure Response to a Request for No Further Action
 - 6.2.1 The DNREC Tank Management Branch shall issue a letter requiring no further action (NFA) and documenting that site cleanup objectives have been met. The ~~closure~~ no further action approval does not absolve the Responsible Parties from previously incurred or potential future liability.
 - 6.2.2 The ~~NFA~~ no further action letter applies to site conditions at the time that the ~~closure~~ request for no further action was made. If the risk posed by the site changes in the future, ~~due to~~ including but not limited to land use changes at the site or surrounding area ~~or due to other reasons~~, the Responsible Parties shall perform additional Remedial Action as necessary to eliminate the risk to human health, safety and the environment.
 - 6.2.3 Any Person disturbing any residual contamination at the site by digging, boring, excavating, dewatering, or other means, shall submit a contaminated material management plan to the Department for approval prior to work commencing.