

Site Remediation Reform

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Interim SRRA Rules

- Effective upon filing November 4th 09 - effective for 18 months, no public comment period; check SRP website
- Published in December register
- Many provisions are effective 11/4
- Other we have provided operative dates for in the rule; permits, mandatory timeframes, regulatory timeframes.
- ARRCs, UST, ISRA, Tech Regs, NJPDES, LU, EIT, GWQS, Sanitary/Spillfund Claims

ARRCS Subchapters

- Obligations of the person conducting the remediation
- Timeframes and Extensions
- Fees and Oversight Costs
- Remediation Funding Source
- Final Remediation Documents
- Remedial Action Permits
- Site Access

ARRCS Subchapters

- Enforcement
- Technical Assistance Grants
- Hazardous Discharge Site Remediation Fund
- Petroleum Underground Storage Tank Remediation Upgrade and Closure Fund.
- Remediation of Unregulated Heating Oil Tank Systems

Initiating Remediation – “New Cases”

- Section 30(b): 180 days after enactment, anyone **initiating remediation** needs an LSRP; and complies with 1-9.
- New discharges, notification of an ISRA event, new PA,SI,RI,RAW,RAR (key document) which creates a new case in NJEMS, case with existing NFA which is reopened, new person taking over remediation, new deed notice or declaration of environmental restriction.
- Not a “new case” if you pass two prong test:
 - Reported the original discharge/discovery of contamination as required by law, AND
 - Have continuously remediated the site since then.

New cases & Timeframe clock

- A person who takes over remediation from any other person or the DEP is a “new case”.
- LSRP will be required.
- However, the clock will not “restart” for mandatory and regulatory timeframes that have not yet been achieved. New party must meet existing timeframes.
- Timeframes apply to the site not the person conducting the remediation

New cases - Process

- Some new cases will have case manager assigned based on criteria in Section 21; case manager will decide on how to conduct reviews
- All other new cases will go through the new review process
- DEP is still evaluating how it will process cases and communicate the results of our reviews to LSRPs and persons conducting remediation
- New annual fees will apply unless case manager assigned for the entire site

“Shall” perform additional review

- Contamination poses a significant detrimental impact on public health, safety, or environment based on receptor evaluation or is highest priority based on ranking system
- Contamination may impact childcare facility, school, or other sensitive population
- Site is located in low income community
- State grants or loans are being used to remediate the site

“May” perform additional review

- If LSRP did not comply with Sec. 16 of SRRA
- Remedy is not protective or DEP cannot determine whether the remedy is protective
- Site is in BDA
- Remediation is subject to federal oversight
- Person conducting the remediation is out of compliance with site remediation laws or regulations
- Site impacts natural resources
- ACO or other oversight document requires DEP review and approval

“May” perform additional review

- Substantial public interest in the site
- Remedy proposes use of alternative or site specific standard
- Remedy requires issuance of permit by DEP
- Use of site is being changed to residential or mixed use
- Submission may not be in compliance with any applicable rule or regulation

Types of Reviews

- Component Review
 - Only a specific issue(s) or portion of the document will be reviewed
- General Overview
 - Quick review of entire document
 - 1-3 hour review
- Comprehensive Review
 - Complete review of document and other site documents as necessary

Existing cases

- Same traditional oversight process unless you opt into the new paradigm
- Same oversight costs/direct billing
- Mandatory timeframes supersede ACO/RA timeframes
- ACO timeframes may still apply unless trumped by Mandatory timeframe or Regulatory timeframe

Stop Work Points

- LSRP/RP must communicate with DEP before proceeding with remediation under these conditions:
 - IEC conditions
 - Alternative Presumptive Remedy
 - Alternative or site-specific remediation standard that requires modeling
 - Bringing contaminated materials to a site above what is needed for grading.
 - Landfill closures and disruptions
 - Selection of a remedial action that will render the property un-useable.

New Site Remediation Permits

- Issued whenever Institutional or Engineering Controls are utilized
- 2 types:
 - Soil Remedial Action Permit – Issued for deed notice or caps
 - Ground water Remedial Action permit – Issued for:
 - Ground Water Natural Attenuation
 - Ground Water Pump and Treat

New Site Remediation Permits

- Permits for ground water will be issued after initial monitoring confirms “success” with treatment or Natural Remediation
- RAO can be issued at this point and the permit will be used to ensure groundwater cleanup
- Permit can be reopened if cleanup unsuccessful
- Annual fee

New Site Remediation Permits

- DEP will start issuing Remedial Action permits January 2010
- Biennial Certification requirements still apply
- They will be incorporated in permits for new cases
- As Biennial Certs come due for existing cases they will be converted to permits
- Conversion of all Biennial Certs will occur as part of the final rule

LSRPs and Material Reuse Decisions

No DEP involvement (see PDM below)

- Decisions consistent with “Alternative Fill Protocol”
 - “Like-on-like” (contamination and concentration) approach
 - Material is appropriate for anticipated exposure scenarios
 - Volume required to implement the remedial action
 - Volume required to raise elevation above floodplain for redevelopment

DEP involvement

- Departures from “Alternative Fill Protocol”
- Landfill remediation/closure (for closure plan/RAW approval)

“Alternative Fill Protocol” is under revision

Must comply with local/regional requirements (i.e., Pinelands)

PDM use requires ODST approval

Landfills

- Prohibition of single family homes, child care centers and schools in Statute not rule.
- Only Landfills that have to go through SRP process
 - HDSRF funding
 - Structures intended for human occupancy
 - If you want an NFA/RAO

Revisions to the Technical Requirements for Site Remediation

Barry Frasco

11/2/09

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

- **Subchapter 1** - General Information
- **Subchapter 2** - Quality Assurance for Sampling and Laboratory Analysis
- **Subchapter 3** - Preliminary Assessment and Site Investigation
- **Subchapter 4** - Remedial Investigations
- **Subchapter 5** - Remedial Action Selection
- **Subchapter 6** - Remedial Action
- **Subchapter 7** - Permit Identification, Permit Application Schedule and Discharge to Ground Water Proposals
- **Subchapter 8** - Engineering and Institutional Controls
- **Appendices**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- 7:26E-1.1 Scope

- 7:26E-1.2 Liberal Construction

- 7:26E-1.3 Applicability
 - deleted references to Department review of work

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.4 Notification and Public Outreach

- shall notify the Department in writing, on the Confirmed Discharge Notification form, within 5 days after the occurrence of any of the following events:
 - ❖ a discharge of a hazardous substance, or the discovery of a discharge of a hazardous substance
 - ❖ the owner or operator of a regulated tank system:
 - determines that there has been a known or suspected discharge from the regulated tank system, pursuant to N.J.A.C. 7:14B
 - is required to close a regulated underground storage tank system, pursuant to N.J.A.C. 7:14B
 - is otherwise required to conduct a site investigation pursuant to N.J.A.C. 7:14B

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.4 Notification and Public Outreach

- shall notify the Department prior to conducting potable well sampling, and indoor air or sub-slab soil gas sampling on a Potable Well/Indoor Air Sampling Notification form no later than 7 days prior to the scheduled sampling date
- expands limited notification requirements to the remediation of any unregulated heating oil tank
- Sensitive Population and Resource Checklist has been eliminated

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.4 Notification and Public Outreach

- minor changes to changes to signs, notification letters and fact sheets (e.g. inclusion of the name and address of the LSRP)
- proposals to bring contaminated material on to the site in an amount that is in excess of the amount that is needed to complete the remediation requirements, to raise the topographic level in the floodplain, or to construct the engineering controls the person shall obtain the Department's prior approval and comply with the Department's Alternative Fill Protocol

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.4 Notification and Public Outreach

- may implement an alternative notification and outreach plan without Department preapproval if that plan is prepared by a licensed site remediation professional, and that plan meets the intent of this section

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.5 Certifications, Forms and Submissions

- certify, and shall have the licensed site remediation professional certify if applicable pursuant to N.J.A.C. 7:26C-1.5, all forms and documents prepared to pursuant to this chapter
- except as otherwise noted in this chapter, submit all forms and documents to the Department at the address in N.J.A.C. 7:26C-1.6
- all forms are available from the Department at www.nj.gov/dep/srp/srra/forms

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- 7:26E-1.6 Documenting Compliance with the Technical Requirements
 - expands the scope of this section to the entire chapter
 - deletes the “old” variance process
 - new variance process described in 1.7

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.7 Variance from the Technical Requirements and Guidance**
 - may vary from certain technical requirements in N.J.A.C. 7:26E-1 through 8, and Site Remediation guidance unless expressly exempted by the Department
 - submits the following in the applicable remedial phase report:
 - ❖ regulatory citation for the requirement, or the guidance name and version number for the requirement
 - ❖ description of how the work performed deviated from the rule requirement or guidance
 - ❖ rationale for varying from the requirement

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.7 Variance from the Technical Requirements and Guidance

- shall not vary from any non-technical requirements, including but not limited to, the following:
 - ❖ Department notification requirements
 - ❖ regulatory timeframes
 - ❖ requirement to obtain permits
 - ❖ requirement to submit reports that comply with the form and content of this chapter
 - ❖ requirement to comply with applicable remediation standards
 - ❖ requirement to comply with quality assurance laboratory requirements

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

7:26E-1.8 Definitions

➤ New/ modified definitions

- ❖ Area of concern
- ❖ Child care center
- ❖ Day
- ❖ Discharge to ground water proposal
- ❖ Engineered system response
- ❖ Feasibility study
- ❖ Final remediation document
- ❖ Immediate environmental concern
- ❖ Indoor air screening level

- ❖ Licensed site remediation professional
- ❖ Light non-aqueous phase liquid
- ❖ No further action letter
- ❖ Person responsible for conducting the remediation
- ❖ Remediation costs
- ❖ Sanitary landfill” or “landfill
- ❖ School
- ❖ Soil gas
- ❖ Soil gas screening level
- ❖ Timely manner
- Deleted definitions
- ❖ Oversight document
- ❖ Remedial action costs

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.9 General Remediation Requirements**
 - conduct remediation pursuant to the regulatory timeframes and submit all documents, forms, and other submissions as required in this chapter
 - shall comply with the SRP's guidance documents
 - licensed site remediation professional shall conduct the remediation pursuant to N.J.A.C. 7:26C-2.4 (ARRCS).
 - specific submission requirements:
 - ❖ paper and electronic (pdf) copies
 - ❖ analytical data submission via SRP's Electronic Data Interchange guidance
 - ❖ GIS compatible maps

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- 7:26E-1.10 Health and Safety Plan
 - No change
- 7:26E-1.11 Severability
 - No change
- 7:26E-1.12 Control of Ongoing Sources and Implementation of Interim Remedial Measures
 - identify the need for any interim remedial measures and include in each remedial phase report a description of each interim remedial measure implemented

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.12 Control of Ongoing Sources and Implementation of Interim Remedial Measures**
 - **free product removal requirements**
 - ❖ **within 60 days after either March 1, 2010 or LNAPL is identified, whichever is later, initiate the recovery of free product and notify the Department**
 - ❖ **within 270 days after either March 1, 2010 or LNAPL is identified, whichever is later, complete delineation of the free product, complete the installation of a LNAPL recovery system, initiate operational monitoring, and submit an Free Product Interim Remedial Measures Report to the Department**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.13 Requirement for Department Oversight of Remediation**
 - **sites that shall be investigated and remediated with the Department's prior approval include:**
 - ❖ **sites suspected or known to be contaminated with anthropogenic radionuclide contamination of any media**
 - ❖ **sites with immediate environmental concern conditions**
 - ❖ **sites with a landfill, if:**
 - **landfill is slated for redevelopment that includes structures intended for human occupancy**
 - **landfill remediation activities are funded by the Hazardous Discharge Site Remediation Fund, a Brownfield Redevelopment agreement, or the Municipal Landfill Closure and Remediation Reimbursement Program**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.14 Immediate Environmental Concern Requirements

- if an IEC condition is identified:
 - ❖ immediately notify the case manager (if one is assigned) or the Department's hotline
- within 5 days after identifying the IEC condition:
 - ❖ provide bottled water to the residents of each property where contaminant concentrations exceed any remediation standard for class II ground water
 - ❖ mitigate the infiltration of vapors into structures impacted by vapor intrusion
 - ❖ restrict access to soil contaminated above acute levels

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.14 Immediate Environmental Concern Requirements**
 - **within 5 days after identifying the IEC condition submit the following to the Department:**
 - ❖ **a completed IEC Immediate Response Action form**
 - ❖ **a completed IEC Information Spreadsheet**
 - ❖ **a map indicating the location of the site and the location of the IEC condition**
 - ❖ **all analytical results to the Department with full laboratory data deliverables with a Potable Water Data form**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.14 Immediate Environmental Concern Requirements

- within 60 days after identifying the IEC condition, implement the following IEC engineered system response actions:
 - ❖ provide water treatment or an alternative water supply to the residents of each property where contaminant concentrations exceed any remediation standard for Class II ground water
 - ❖ install a vapor mitigation system at each property where contaminant concentrations exceed any applicable vapor intrusion indoor air screening level
 - ❖ otherwise reduce exposure to contaminants or hazardous conditions to acceptable levels as applicable

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.14 Immediate Environmental Concern Requirements**
 - **Within 120 days after identifying the IEC condition, submit an IEC engineered system response action report with an updated IEC Response Action form**
 - **Within 270 days after identifying the IEC condition initiate control of the IEC contaminant source using the Department's IEC guidance, complete the delineation of the IEC contaminant source, and submit an IEC Contaminant Source Control Report with an updated IEC Response Action form**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.15 Receptor Evaluation - General and Reporting Requirements**
 - shall submit an initial receptor evaluation, on a Receptor Evaluation form, by November 26, 2010, or with the submittal of a site investigation report, whichever is later
 - submit an updated receptor evaluation report on a Receptor Evaluation form with the following documents, as applicable:
 - ❖ a remedial investigation report
 - ❖ a remedial action report

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- 7:26E-1.15 Receptor Evaluation - General and Reporting Requirements
 - shall send a copy of each receptor evaluation to the following:
 - ❖ the clerk of each municipality in which the site is located
 - ❖ the designated local health official.
 - a receptor evaluation is not required if an unrestricted remedial action is conducted and a final remediation document is issued or is filed with the Department within 270 days after initiating the remediation.

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.16 Receptor Evaluation - Land Use

- shall identify all current land uses at the site and of each property located within 200 feet of the site boundary
- shall provide the address of each residence, school or child care center, as well as each park, playground or other recreation area that is identified at the site and within 200 feet of the site boundary
- shall generate and submit a map that shows the location of the site and the location of each residence, school or child care center, a park, playground or other recreation area land use
- shall identify and describe any proposed changes of land use at the site and of each property located within 200 feet of the site boundary that the municipality has approved, with a map depicting the location of the change in relation to the areas being remediated

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.17 Receptor Evaluation - Ground Water

- shall conduct a receptor evaluation of ground water when any contaminant is detected in ground water in excess of any Class II ground water remediation standard
- within 90 days after ground water contamination is detected, conduct a well search to identify each well that may be impacted by contamination
- within 120 days after ground water contamination is detected:
- notify the Department prior to conducting potable well sampling
- sample each potable well identified in the well search
- determine if an IEC condition exists
- notify the Department of any IEC condition and conduct all actions pursuant to N.J.A.C. 7:26E-1.14

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.17 Receptor Evaluation - Ground Water**
 - **within 14 days after completing the first round of potable well sampling:**
 - ❖ **continue to delineate ground water contamination**
 - ❖ **continue to identify potential wells and conduct additional sampling**
 - **if no IEC condition:**
 - ❖ **within 60 days after completing sampling, submit all analytical results to the Department with full laboratory data deliverables with the Full Laboratory Data Deliverables form**
 - **shall provide a detailed report of all potable well sampling activities in the applicable remedial phase report that is submitted to the Department**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.18 Receptor Evaluation - Vapor Intrusion

- Triggers to conduct a vapor intrusion investigation:
 - ❖ structures 30/100 feet from edge of ground water plume that contains contaminants that exceed the vapor intrusion ground water screening level
 - ❖ free product is identified in ground water within 100 feet of a building
 - ❖ soil gas or indoor air contamination is detected at concentrations that exceed the applicable vapor intrusion soil gas or indoor air screening levels

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.18 Receptor Evaluation - Vapor Intrusion

- Triggers to conduct a vapor intrusion investigation:
 - ❖ a landfill is located on or adjacent to the site
 - ❖ a wet basement or sump in a building contains free product and/or ground water containing any contaminant listed in Table 1 of the VIG
 - ❖ methanogenic (methane generating) conditions are present that may cause an explosion

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.18 Receptor Evaluation - Vapor Intrusion

- within 60 days:

- ❖ identify all structures and subsurface utilities located within 200 feet of the currently known extent of the shallow ground water that contains contamination at a concentration greater than any vapor intrusion ground water screening level, or within 200 feet of any other trigger condition
- ❖ determine the specific use for each structure identified
- ❖ determine the flow direction of the shallow ground water
- ❖ determine whether free product is present

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.18 Receptor Evaluation - Vapor Intrusion

- within 150 days:
 - ❖ notify the Department prior to conducting indoor air or sub-slab sampling
 - ❖ conduct sampling and analysis of samples
 - ❖ evaluate the results to determine if IEC and/or emergency conditions exist
- if IEC conditions, follow the IEC process
- if indoor air levels in exceed DHSS notification level, contact DHSS

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.18 Receptor Evaluation - Vapor Intrusion**
 - **submit all indoor air analytical results that are less than the indoor air screening level within 14 days after receipt of the analytical results from the laboratory to:**
 - ❖ **the Department with full laboratory data deliverables with the Full Laboratory Data Deliverable form**
 - ❖ **the New Jersey Department of Health and Senior Services**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

➤ 7:26E-1.18 Receptor Evaluation - Vapor Intrusion

- if a licensed site remediation professional is overseeing the remediation, also conduct the following within 30 days after receipt of the analytical results from the laboratory:
 - ❖ notify each party where indoor air or sub-slab soil gas samples were collected, of the sampling results, consistent with the Department's IEC Guidance and the VIG
 - ❖ provide the Department with a copy of each notification letter.

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.18 Receptor Evaluation - Vapor Intrusion**
 - **within 14 days after completing the first round of sampling, continue to:**
 - ❖ **delineate ground water contamination, including the extent of free product**
 - ❖ **identify structures and conduct additional indoor air and/or sub-slab sampling pursuant to the Department's IEC Guidance and the VIG**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 1 - General Information

- **7:26E-1.18 Receptor Evaluation - Vapor Intrusion**
 - the person responsible for conducting the remediation shall provide a detailed report of all vapor intrusion sampling activities in the applicable remedial phase report that is submitted to the Department.
- **7:26E-1.19 Receptor Evaluation - Ecological**
 - the receptor evaluation shall include performance of a baseline ecological evaluation

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 2 - Quality Assurance for Sampling and Laboratory Analysis

- **7:26E- 2.1 Quality Assurance Requirements**
 - soil gas or indoor air samples must be analyzed using a laboratory that is certified for the appropriate analytical method
 - the analysis of samples for petroleum hydrocarbons (PHC) must follow the Department's Protocol for Addressing Extractable Petroleum Hydrocarbons Guidance
 - for any field analytical method, the laboratory or individual conducting the analysis shall be certified for the parameter or category of parameters for field analytical methods for which the Department provides certification

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 2 - Quality Assurance for Sampling and Laboratory Analysis

- **7:26E- 2.1 Quality Assurance Requirements**
 - specifies the methods required to analyze aqueous samples to determine potability
 - specifies additional analyses to be performed in conjunction with analysis of aqueous and nonaqueous samples for hexavalent chromium
 - analytical method(s) shall have analytical sensitivity sufficient to accurately measure concentrations at or below the applicable remediation standard or criteria

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 2 - Quality Assurance for Sampling and Laboratory Analysis

- **7:26E- 2.1 Quality Assurance Requirements**
 - if analytical methods are not available for a contaminant, analysis of indicator parameters can be used without Department prior approval
 - all sample collection, storage, and shipping requirements shall conform to the requirements specified in the Department's Field Sampling Procedures Manual. Note: alternative approaches can be employed without Department preapproval

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 2 - Quality Assurance for Sampling and Laboratory Analysis

- **7:26E- 2.1 Quality Assurance Requirements**
 - other field screening methods may be used if use of the selected method enables the person to meet the sampling goals set forth in this subchapter without Department preapproval
 - deleted option to analyze samples for Priority Pollutant plus 40 (PP + 40)
 - based on prior site sampling, the person responsible for conducting the remediation may, during future sampling events, sample for fewer contaminants than what was initially sampled

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 2 - Quality Assurance for Sampling and Laboratory Analysis

- **7:26E- 2.1 Quality Assurance Requirements**
 - for concrete and other building material that will be recycled, conduct sampling pursuant to Department's Guidance for Characterization of Concrete and Clean Material Certification
 - modified Table 2-1 Analytical Requirements for Petroleum Storage and Discharge Areas

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 2 - Quality Assurance for Sampling and Laboratory Analysis

➤ 7:26E- 2.1 Quality Assurance Requirements

Table 2-1 Categories:

- Leaded Gasoline, Aviation Gasoline
- Unleaded Gasoline
- Light Petroleum Distillates
- Kerosene, Jet Fuel
- Fuel Oil No. 2, Diesel Fuel
- Fuel Oil Nos. 4 & 6, Hydraulic Oils, Cutting Oil, Lubricating Oil
- Crude Oil
- Waste Oil, Unknown Petroleum Hydrocarbons
- Waste Vehicular Crankcase Oil
- Mineral Oil, Dielectric Fluid, Transformer Oil
- Manufactured Gas Plant (MGP) Sites

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 2 - Quality Assurance for Sampling and Laboratory Analysis

- 7:26E- 2.2 Quality Assurance Project Plan
 - a QAPP must be prepared
 - the QAPP is submitted with the associated remediation report (i.e., PA/SI report, RI report, RA report)

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

➤ 7:26E- 3.1 Preliminary Assessments

- aerial photographic history of the site can use photographic coverage from commercial services
- evaluate All waste disposal records for any onsite landfill
- evaluation of All permits issued pursuant to a Solid Waste Operating Permit, or Disruption and Closure Permit
- a child care center shall conduct a preliminary assessment and/or site assessment pursuant to the Department's Environmental Guidance for Licensing of Proposed Child Care Centers
- a person who is required to submit an ISRA general information notice shall submit a preliminary assessment report with a Preliminary Assessment form available from the Department:
 - ❖ by June 1, 2010; or
 - ❖ ninety days after the person responsible for conducting the remediation has notified the Department pursuant to the Industrial Site Recovery Act Rules, whichever is later

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

- 7:26E- 3.2 Preliminary Assessment Report
 - deletion of references to Department approval and oversight
 - submission of a completed case inventory document
 - deletion of Department review of prior work

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

➤ 7:26E-3.3 Site Investigations

- conduct a comparison of all site data with the Department's applicable remediation standards pursuant to the Department's Compliance Guidance
- shall complete the site investigation and submit a site investigation report with a Preliminary Assessment/Site Investigation form by the later of the following:
 - ❖ by November 26, 2010; or
 - ❖ Two hundred seventy days after the initiation of remediation

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

- 7:26E-3.4 Site Investigation - General Sampling Requirements
 - deletion of reference to Department verbal or written preapproval of certain alternative procedures
- 7:26E-3.5 Site Investigation - Building Interiors
 - the person responsible for conducting the remediation shall conduct the site investigation of the vapor intrusion pathway required pursuant to this chapter and the Department's Vapor Intrusion Guidance
- 7:26E-3.6 Site Investigation - Soil
 - No change

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

- 7:26E-3.7 Site Investigation - Ground Water
 - movement of potable well investigation procedures to N.J.A.C. 7:26E-1.17

- 7:26E- 3.8 Site Investigation – Surface Water and Sediment
 - No change

- 7:26E-3.9 Site Investigation - area specific requirements
 - deletion of all references to Department preapproval of certain alternative procedures

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

- 7:26E-3.10 Site Investigation - Background Investigation in Soil
 - No change

- 7:26E-3.11 Site Investigation - Ecological Evaluation
 - No change

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

- **7:26E-3.12 Site Investigation - Landfills and Historic Fill Material**
 - **Landfill SI requirements**
 - ❖ confirm whether a landfill is present
 - ❖ determine if buried containers are present
 - ❖ evaluate the landfill and determine the presence and effectiveness of existing control systems
 - **Historic fill SI requirements**
 - ❖ investigate areas of concern located in historic fill material independently of the historic fill material
 - ❖ if historic fill material is within two feet of the seasonally high water table, collect a minimum of one ground water sample

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

- **7:26E-3.12 Site Investigation - Landfills and Historic Fill Material**
 - **Historic fill SI requirements**
 - ❖ if ground water contaminant concentrations are above an applicable ground water remediation standard:
 - for sites where the historic fill material extends beyond the property boundaries, a classification exception area will be established, using the footprint of the property as the boundaries of the classification exception area
 - for sites where the historic fill material is contained within the property boundaries, conduct a remedial investigation of the ground water

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 3 - Preliminary Assessment and Site Investigation

➤ 7:26E-3.13 Site Investigation Report

- submission of a completed case inventory document
- electronic data deliverables are not required for an area of concern that consists of a storage tank storing heating oil for on-site consumption in a one to four family residential building where there has been no groundwater impact
- the site investigation report shall also include a summary of the vapor intrusion evaluation
- include the results of the baseline ecological evaluation
- include the results of all landfill and historic fill material investigations
- include a summary and rationale for each variance from the requirements of this subchapter or guidance

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 4 - Remedial Investigations

- 7:26E- 4.1 Remedial Investigation Requirements
 - shall use single point compliance to delineate contamination in all media

- 7:26E-4.2 Remedial Investigation Workplan
 - shall prepare a remedial investigation workplan
 - submission of a completed case inventory document

- 7:26E-4.3 Remedial Investigation of Soil
 - No change

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 4 - Remedial Investigations

- **7:26E-4.4 Remedial Investigation of Ground Water**
 - deleted requirement for Department preapproval of alternate well construction
 - any damage or vandalism to a monitoring well or piezometer shall be properly repaired or decommissioned within 14 days after discovering the damage (deletes requirement to notify the Department prior to repairs)

- **7:26E-4.5 Remedial Investigation of Surface Water, Wetlands and Sediment**
 - deleted requirement for Department preapproval to eliminate the need to investigate surface water

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 4 - Remedial Investigations

- 7:26E-4.6 Remedial Investigation of Landfills and Historic Fill Material
 - Landfill RI requirements
 - ❖ determine the horizontal extent of the landfill
 - ❖ determine the vertical extent of the landfill
 - ❖ delineate the location, condition, and contents of buried containers
 - ❖ evaluate each test pit or boring
 - ❖ conduct ground water and leachate sampling
 - ❖ delineate sources of contaminants within and beyond the limits of the landfill

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 4 - Remedial Investigations

- **7:26E-4.7 Remedial Investigation of Ecological Receptors**
 - **No change**

- **7:26E-4.8 Remedial Investigation Report**
 - **shall include a Remedial Investigation Report form**
 - **shall include a copy of the remedial investigation workplan**
 - **shall include a determination whether remedial action is required**
 - **submission of a completed case inventory document**
 - **submission of an updated receptor evaluation**
 - **shall include a vapor intrusion evaluation, if applicable**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 5 - Remedial Action Selection

➤ 7:26E-5.1 Remedial Action Selection

- shall select a remedial action that reduces or eliminates exposure to contamination above the applicable remediation standards based on the following:
 - ❖ health risk and environmental remediation standards
 - ❖ indoor air standards adopted by the Department of Health and Senior Services
 - ❖ any other applicable standards adopted pursuant to law
 - ❖ all applicable New Jersey regulations
 - ❖ the Department's technical guidelines concerning site remediation

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 5 - Remedial Action Selection

➤ 7:26E-5.1 Remedial Action Selection

- if there is no specific requirement provided by any technical standard the Department has adopted, or the Department's guidance is not appropriate or necessary, the person responsible for conducting the remediation may use the following additional technical guidance to make decisions regarding remediation
 - ❖ relevant guidance from the United States Environmental Protection Agency or other states
 - ❖ other relevant, applicable, and appropriate methods and practices that ensure the protection of the public health and safety, and the environment

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 5 - Remedial Action Selection

➤ 7:26E-5.1 Remedial Action Selection

- deletes the requirement for Department preapproval to implement an innovative remedial action technology
- person responsible for conducting the remediation that is remediating a site that is subject to direct Department oversight shall submit a feasibility study, consistent with the USEPA guidance, with a remedial investigation report instead of submitting a remedial action selection report

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 5 - Remedial Action Selection

➤ 7:26E-5.1 Remedial Action Selection

- Presumptive remedies requirements
- effective May 7, 2010 - unless required to do so by the Department for remediation initiated before May 7, 2010
- If new construction of, or a change in use to, a residence, a school, or child care center will occur at a site that is undergoing remediation, must select a remedial action that is:
 - ❖ an unrestricted use remedial action
 - ❖ a presumptive remedial action consistent with the Department's Presumptive Remedy Guidance on presumptive remedial actions
 - ❖ an alternative remedy

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 5 - Remedial Action Selection

- 7:26E-5.1 Remedial Action Selection
 - Department written approval is required before an alternative remedy can be implemented a site that will be used as a residence, a school, or a child care center

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 5 - Remedial Action Selection

- **7:26E-5.2 Remedial Action Selection Report**
 - requires a discussion of why the alternative remedy is equally protective as the presumptive remedy, if applicable
 - submission of a completed case inventory document
 - shall be submitted with the remedial action workplan and the Remedial Action Workplan form

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 5 - Remedial Action Selection

➤ 7:26E-5.2 Remedial Action Selection Report

- not required to submit a remedial action selection report when:
 - ❖ remediation is limited to an unregulated heating oil tank system
 - ❖ it is required to submit a CERCLA feasibility study, or it is required to submit a RCRA corrective measures study
 - ❖ case is subject to the Department's direct oversight
 - ❖ a licensed site remediation professional is used to oversee the remediation unless a remedy that is an alternative to a presumptive remedy is proposed

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 6 - Remedial Action

➤ 7:26E-6.1 Remedial Action Requirements

- allows for LSRP approval of RA workplans (in addition to the Department)
- requires the use institutional controls whenever a restricted use remedy or a limited restricted use remedy is used to remediate a site

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 6 - Remedial Action

➤ 7:26E-6.2 Remedial Action Workplan

- preparation and submission of a RA workplan is required
- submission of a draft deed notice not required if remediation is overseen by an LSRP
- any soil reuse plan submitted shall be prepared pursuant to this section and the Department's Guidance Document for the Remediation of Contaminated Soils
- submission of a completed case inventory document prepared pursuant to the Department's Guidance for the Preparation of the Case Inventory Document

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 6 - Remedial Action

➤ 7:26E-6.3 Specific Remedial Action Requirements

- alternate tank closure plan does not require Department preapproval
- new landfill remediation requirements:
 - ❖ obtain and comply with all permits required by N.J.A.C. 7:26-2A
 - ❖ if any drums, tanks or other waste containers are identified in the landfill, evaluate whether:
 - the integrity of the landfill containment system would be threatened if the drum, tanks or other waste containers are left in place
 - excavation and treatment of these materials would be practicable and result in a reduction in risk at the site

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 6 - Remedial Action

➤ 7:26E-6.3 Specific Remedial Action Requirements

- an active ground water remediation shall include a monitoring plan with a schedule designed to demonstrate that the ground water remedial action is performing as designed
- a ground water remedial action requires a permit
- a ground water remedial action permit includes the submission of the following to the Department:
 - ❖ a completed Ground Water Remedial Action Permit form
 - ❖ ground water monitoring plan, with a schedule, designed to evaluate the effectiveness of the ground water remedial action
 - ❖ a completed CEA/Well Restriction Area (WRA) Permit Fact Sheet form
 - ❖ a ground water remedial action permit application fee

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 6 - Remedial Action

- **7:26E-6.4 Additional Remedial Action Requirements**
 - any soil reuse plan shall be prepared pursuant to this section and the Department's Guidance Document for the Remediation of Contaminated Soils
 - deletion of the need for Department preapproval of reduced sampling frequency
 - a post remedial action implementation monitoring plan is required to determine whether the achieved ground water remediation standards are sustainable and not subject to concentration rebound after remediation standards are met

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 6 - Remedial Action

➤ 7:26E-6.5 Remedial Action Schedule

- schedule timeframes do not need to include/incorporate any time for Department review
- if the remedial action includes ground water remediation, the inclusion of a schedule for the submission of a ground water remedial action permit application

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 6 - Remedial Action

- **7:26E-6.6 Remedial Action Progress Reports**
 - progress reports not required once a remedial action permit has been issued
- **7:26E-6.7 Remedial Action Report**
 - submission of a Remedial Action Report from
 - if applicable, a copy of the “stamped filed” deed notice along with a Remedial Action Permit application and applicable fee
 - submission of an updated receptor evaluation on the Receptor Evaluation form
 - submission of a completed case inventory document

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 7 - Permit Identification, Permit Application Schedule and Discharge to Ground Water Proposals

- **7:26E-7.1 Permit identification**
 - hazardous waste treatment, storage, or disposal facility permits pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and the Hazardous Waste rules at N.J.A.C. 7:26G, shall not be required for any remediation conducted on site pursuant to the Administrative Requirements for the Remediation of Contaminated Sites rules, N.J.A.C. 7:26C

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 7 - Permit Identification, Permit Application Schedule and Discharge to Ground Water Proposals

- 7:26E-7.2 Requirements for discharge to ground water proposals
 - these requirements have been moved from N.J.A.C. 7:26E-6,3(c) with some minor modifications
 - must comply with this section and the Department's Guidance NJPDES Discharges to Ground Water Technical Manual for the Site Remediation Program
 - must submit a DGW proposal with a form available from the Department
 - a draft public notice must use the model in Appendix H

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 7 - Permit Identification, Permit Application Schedule and Discharge to Ground Water Proposals

- 7:26E-7.2 Requirements for discharge to ground water proposals
 - exemption of the notification provisions of this section:
 - ❖ when the proposed discharge is for the remediation of an unregulated heating oil storage tank; or
 - ❖ when the discharge will not exceed 180 days

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.1 General Requirements**
 - **removes the requirement that the Department must approve a remedial action that includes engineering and/or institutional controls**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.2 Deed Notice Requirements**
 - section has been modified such that Department approval of a deed notice is no longer required before the filing of the deed notice
 - map must be GIS compatible and prepared using the Department's GIS guidance at <http://www.state.nj.us/dep/srp/regs/techgis>

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.3 Ground Water Classification Exception Areas**
 - **need to complete a CEA/Well Restriction Area (WRA) Fact Sheet Form**
 - **need to provide data tables that include:**
 - ❖ **surface water quality standards if ground water contaminants in the CEA may discharge to a surface water body**
 - ❖ **applicable vapor intrusion ground water screening levels**
 - ❖ **depth to the water table and thickness of any clean ground water lens**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.3 Ground Water Classification Exception Areas**
 - **fate and transport analysis of ground water contaminants shall include:**
 - ❖ description of software used
 - ❖ potential of contaminant volatilization, migration in the vapor phase and vapor intrusion impacts
 - ❖ evaluation of change in use of the property and vapor intrusion impact
 - ❖ for chlorinated volatile organic compounds, the fate and transport analysis must address sequential reductive dechlorination of the contaminants

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

➤ N.J.A.C. 7:26E-8.3 Ground Water Classification Exception Areas

- maps must be in electronic pdf format and GIS compatible in accordance with Department Guidance
- maps must indicate the known and predicted extent of the most mobile and persistent ground water contaminants
- inclusion of a cross section map
- maps must indicate the location of any area(s) of concern that caused the ground water contamination and the location and name/number of each downgradient monitoring well(s) closest to the area(s) of concern

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.3 Ground Water Classification Exception Areas**
 - **CEA/WRA Fact Sheet Form**
 - ❖ draft prepared by the person responsible for conducting the remediation
 - ❖ final CEA/WRA Permit Fact Sheet issued by the Department
 - ❖ the Department will issue an updated CEA/WRA Permit Fact Sheet if the CEA is revised or reestablished
 - ❖ will contain the effective date establishing the CEA and its expiration date
 - ❖ will contain a list of the names and addresses of those persons impacted by the CEA, including the identification of any persons notified of a potential vapor intrusion risk

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.4 Monitoring, Maintenance, and Biennial Certification – Who Has Obligation and When**
 - requires submission of a certification to the Department, pursuant to this section and consistent with N.J.A.C. 7:26E-1.5 on a Remedial Action Protectiveness Certification form

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.5 Monitoring, Maintenance, and Biennial Certification – Requirements for Deed Notices and Declarations of Environmental Restrictions**
 - **requires the Biennial Certification Report be submitted with a Remedial Action Protectiveness Certification form**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.6 Monitoring, Maintenance, and Biennial Certification – Specific Requirements for Ground Water Classification Exception Areas**
 - exempts CEAs established in areas of widespread historic fill from biennial certification requirements
 - updated well searched can be conducted using the Department's CEA Biennial Certification Compliance: Tools for Performing Well Searches for CEA Biennial Certifications, located at www.nj.gov/dep/srp/guidance/ceacompliance/index.html

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.6 Monitoring, Maintenance, and Biennial Certification – Specific Requirements for Ground Water Classification Exception Areas**
 - any damaged or vandalized monitoring wells can be repaired or decommissioned without prior Department approval
 - clarification that there is a need to conduct additional remediation, modify the remedial action, or propose a revision to the groundwater classification exception area, and apply for a modification of the ground water remedial action permit to ensure that the remedial action remains protective

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.6 Monitoring, Maintenance, and Biennial Certification – Specific Requirements for Ground Water Classification Exception Areas**
 - need to reevaluate if there is any vapor intrusion risk and conduct additional remediation, modify the remedial action, or propose a revision to the groundwater classification exception area, and apply for a modification of the ground water remedial action permit to ensure that the remedial action remains protective

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.6 Monitoring, Maintenance, and Biennial Certification – Specific Requirements for Ground Water Classification Exception Areas**
 - **timeframe within which to collect ground water samples expanded to within 180 calendar days after the projected expiration of the ground water classification exception area**
 - **expansion of the Biennial Certification Report to include results and discussion of the new requirements in 8.6(b)**

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.6 Monitoring, Maintenance, and Biennial Certification – Specific Requirements for Ground Water Classification Exception Areas**
 - requires a certification, in a format as specified in Department guidance and based on the evaluation required by this section, that the remedial action continues to be protective
 - specifies that the Biennial Certification Report must be made available to anyone upon request

Technical Requirements for Site Remediation

N.J.A.C. 7:26E

Subchapter 8 - Engineering and Institutional Controls

- **N.J.A.C. 7:26E-8.7 Monitoring, Maintenance, and Biennial Certification - Engineering and Institutional Controls**

Technical Requirements for Site Remediation

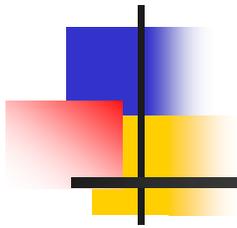
N.J.A.C. 7:26E

Appendices

- Appendix A - Laboratory Data Deliverables Formats
No Change
- Appendix B - **Reserved**
- Appendix C - Mann-Whitney U Test - **No Change**
- Appendix D - Historic Fill Database - **No Change**
- Appendix E - Model Deed Notice - **No Change**
- Appendix F - **Reserved**
- Appendix G - Contour Map Reporting Form - **No Change**
- Appendix H - Model Public Notice for a DGW Proposal
Modified specifically for DGW proposals

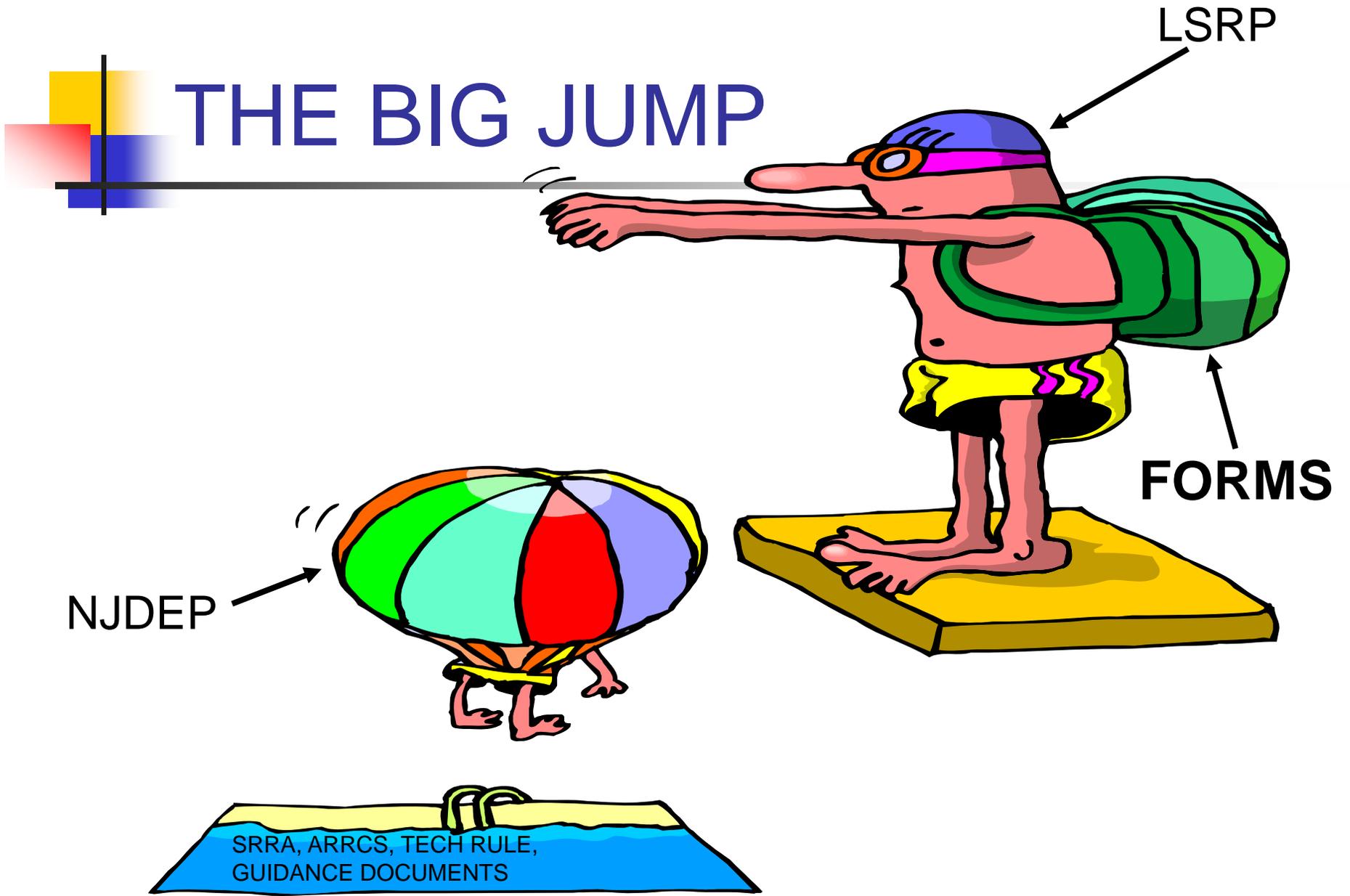
Licensed Site Remediation Professionals

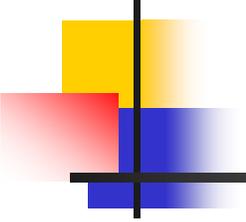
FORMS



Presented By
Myrna I. Champion

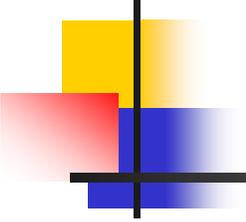
THE BIG JUMP





WHY?

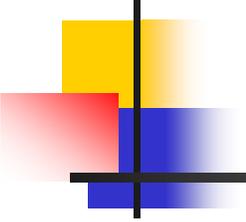
- N.J.S.A. 58:10C-1 et seq. - Site Remediation Reform Act (SRRA)
- N.J.A.C. 7:26C - Administrative Requirements for Remediating Contaminated Sites (ARRCS)
- N.J.A.C. 7:26E - Tech Rule



WHEN?

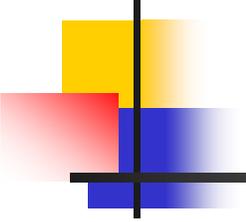
Triggering events:

- Confirmed Discharge
- ISRA GIN
- Opt-in to the LSRP Program
- Key document submissions to the Department
- When an LSRP is retained or dismissed
- Potable, vapor intrusion data
- IECs
- ...



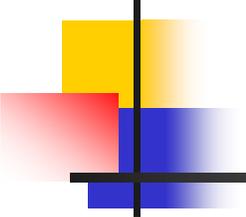
HOW?

- <http://www.state.nj.us/dep/srp/srra/forms/>
- Forms will be in PDF format. You may download the form and save it to your hard drive for future use.



PARTS OF A FORM

- Instructions
- Site Information
- Body of the form:
 - questions specific to the type of document submission/phase of investigation
 - site use, case type
- RP Certification
- LSRP Statement



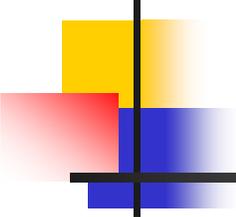
Instructions

Section A. General Instructions

- 1. The NJDEP may update this form periodically. Please ensure you are using the latest version of this form. Download the latest version of this form from the NJDEP Website: www.nj.gov/dep/srp/forms.
- 2. It is **not** required to submit this form in duplicate.
- 3. Applicability: Use this form to request to proceed with the remediation of an existing case without the NJDEP's pre-approval, pursuant to the Site Remediation Reform Act, N.J.S.A. 58:10C-30b(3).
- 4. The form must be signed by the representative of the person responsible for conducting the remediation and must be notarized. See N.J.A.C. 7:26C-1 to determine who can sign the form.

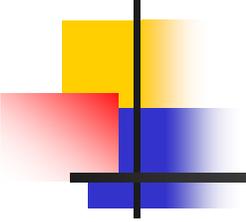
Section B. Specific Instructions by Section

- 1. Section A.
 - Site Name-provide the name of the site i.e. ABC Corporation Site;
 - List all other known names for the site;
 - Provide the street address for the site;
 - Provide the name of the municipality and state if it is a Township, a Borough, or a City;



Site Information

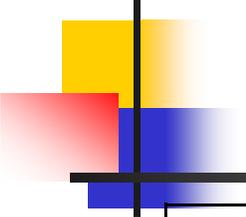
SECTION A. SITE NAME AND LOCATION							
Site Name:							
List All AKAs:							
Street Address:							
Municipality:					(Township, Borough or City)		
County:					Zip Code:		
Mailing Address if different than street address:							
Program Interest (PI) Number(s):					Case Tracking Number(s):		
Municipal Block(s) and Lot(s):							
Block #		Lot #		Block #		Lot #	
Block #		Lot #		Block #		Lot #	
Block #		Lot #		Block #		Lot #	
Block #		Lot #		Block #		Lot #	



Body of the Form

Section C: GROUND WATER REMEDIAL INVESTIGATION INFORMATION

1. Were any monitor wells installed in unconfined aquifers in which the water table is higher than the top of the well screen? Yes No
If "Yes," identify the affected wells _____
2. If ground water in the bedrock aquifer is contaminated, were bedrock cores collected and/or were geophysical logging methods conducted to characterize the bedrock aquifer pursuant to N.J.A.C. 7:26E-4.4(g)5? Yes No NA

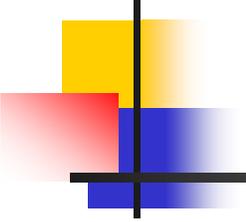


RP Certification

Section F. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION					
Affiliation/Name of Organization:					
First Name of Contact:			Last Name of Contact:		
Title:					
Phone Number:			Ext:	Fax:	
Mailing Address:					
City/Town:			State:	ZIP Code:	
Email Address:					
Developer Certification Included			or Filed	Date of Filing	
<p>This certification shall be signed by the responsible party who is submitting this notification in accordance with SRRRA Section 16 d. and Section 30 b.2. I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.</p>					
RP Signature:			Date Certified:		
RP Name/Title:					
Company Name:					

LSRP Statement

SECTION H. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT							
LSRP ID Number:							
First Name:				Last Name:			
Phone Number:				Ext:		Fax:	
Mailing Address:							
City/Town:				State:		Zip Code:	
Email Address:							
<p>This statement shall be signed by the LSRP who is submitting this notification in accordance with SRRRA Section 16 d. and Section 30 b.2. <i>I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:</i></p> <p>[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]: <i>directly oversaw and supervised all of the referenced remediation, and/or</i> <i>personally reviewed and accepted all of the referenced remediation presented herein.</i></p> <p><i>I believe that the information contained herein, and including all attached documents, is true, accurate and complete.</i> <i>It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.</i> <i>My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.</i> <i>I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.</i></p>							
LSRP Signature:						Date:	
LSRP Name/Title:							
Company Name:							

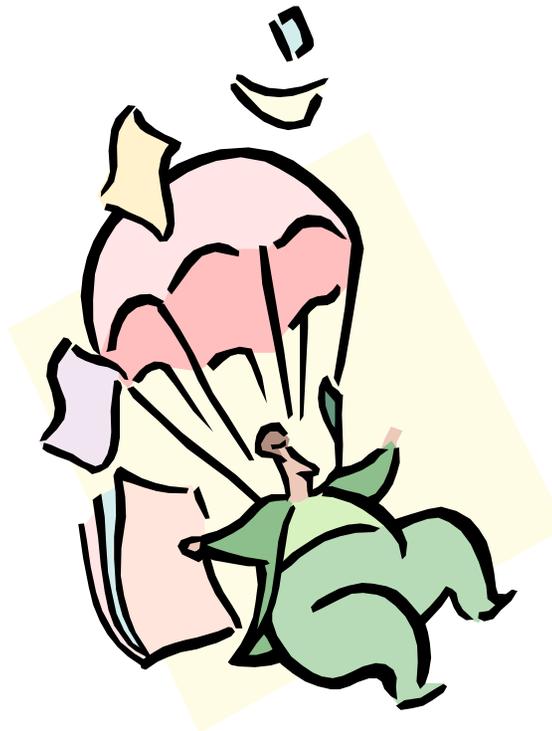


COMING SOON

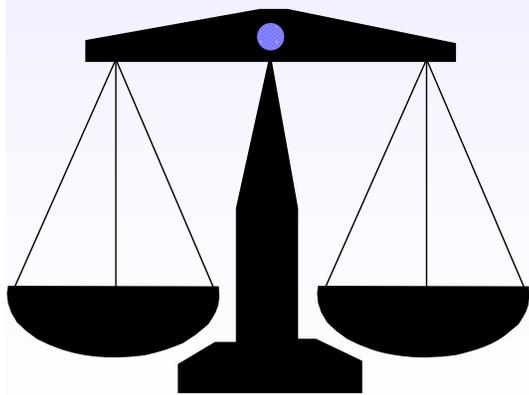
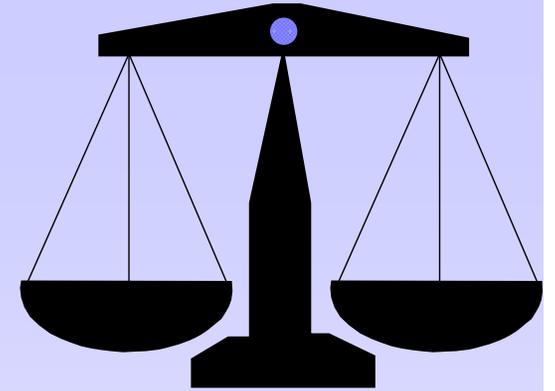
- On-line training for forms (tutorial)
- Web submittal through a portal



THE BIG JUMP



REGULATORY AND MANDATORY TIMEFRAMES



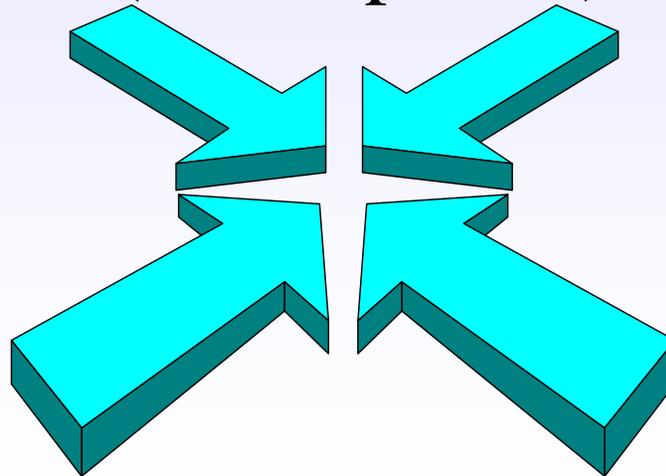
Draft Deliberative

10/30/09

11/4/2009

Regulatory Timeframes

- Are those timeframes provided in the Regulations that have been determined to be appropriate to complete the specific requirement. (Grace period)



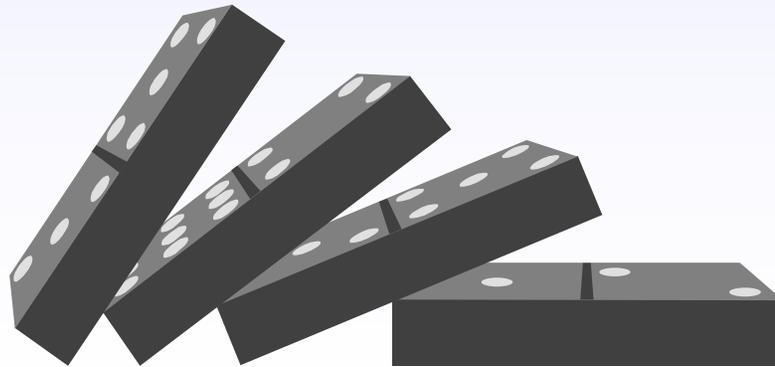
Mandatory Timeframes

- Are those timeframes provided in the ARRCS rule that have been determined by the Department to be inappropriate to exceed (for certain specific requirements) with out appropriate justification.

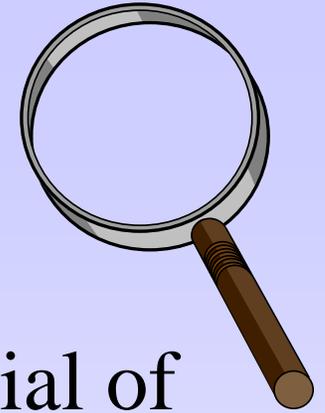


Consequences

- Violation of Regulatory timeframes exposes responsible entity to enforcement actions and penalty exposure.
- Violation of Mandatory timeframes exposes responsible entity to “Direct Oversight.”



Direct Oversight



- Requires Department approval or denial of all documents
- Feasibility Study
- Remedial Action selected by Department
- Remediation Trust Fund
- Department controls disbursements
- Simultaneous submissions to Department and RP

Initial Notifications

- Immediately- from knowledge of a Discharge or as required by UST call Hotline
- 5 days- from ISRA Trigger or Discharge, submit GIN or Confirm Discharge Notification Form
- 45 days- from trigger above submit LSRP Notification of Retention or Dismissal Form

Trigger dates



- Timeframe starts 03/01/10 OR,
- (1) Discovery of a discharge
- (2) IEC condition confirmed
- (3) LNAPL discovery
- (4) ISRA requirement for PA/SI, UST requirement for SI, or specific DEP directive, which ever is later.

Comparison

	Regulatory Timeframe	Mandatory Timeframe
• Receptor Evaluation	9 months	1 year
• IEC source control	9 months	1 year
• LNAPL	9 months	1 year
• PA/SI or UST SIR*	9 months	1 year

* no known discharge



Receptor Evaluation Timeframes

- Initiate upon knowledge of a Discharge
- 9 months or 11/26/10 (existing) - Initial RE
- GW:
 - 3 months -well search
 - 4 months - sample
 - 2 months - submit (from receipt of results)

Receptor Evaluation Timeframes Cont.

- VI: 2 months - ID structures
- 5 months - sample
- 2 weeks - submit data (DEP and DHSS)
- 1 month - notify evaluated parties



Receptor Evaluation Timeframes Cont.

- Any sampling $>$ standard or screening criteria follow IEC Regulation and Guidance, and
- 14 days- Step out delineation and/or sampling



LNAPL

- 2 months- from ID, initiate recovery and notify(form)
- 9 months- complete source delineation and submit report and form





PA/SI and SIR

- Timing of submittal per licensing requirements for child care
- 3 months or 6/1/10 (existing)-Clean PA
- 9 months or 11/26/10- PA/SI or SIR



Regulatory Timeframes

“The rest of the story”

UST

- 9 months or 11/26/09 which ever is later
- SIR - 9 months from, Unk Source, tank conversion, or initiation of closure, SIR&RIR- 9 months after discharge in Wellhead areas.
- RIR - due 9 months from discharge from UST no SI required.

Regulatory Timeframes

“The rest of the story”

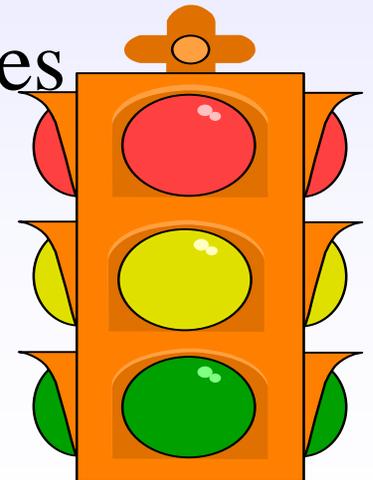
ISRA

- GIN- Due 5 days from trigger
- Clean PA- 3 months or June 1, 2010
whichever is later
- PA/SI - 9 months or November 26, 2010
- RIWP - same as PA/SI



Extension of Mandatory and Regulatory Timeframes

- Mandatory “shalls” in statute
- Some regulatory will be deemed approved if you certify you meet specific conditions in rule
- Extensions for regulatory can not result in non-compliance with Mandatory Timeframes
- DEP can always deny the extension
- Others need DEP prior approval



Guidance for the Issuance of Response Action Outcomes (RAO)

By Kevin F. Kratina, Chief
Bureau of Underground Storage Tanks

(Draft-Deliberative Material)

Today's Presentation

- What is a RAO?
- Define the different RAO Variations
- Who are RAOs issued to?
- When is a RAO issued?
- How is a RAO prepared and structured?

Site Remediation Reform Act – Section 2 and 14

- SRRRA added RAO as the new target
- RAOs and NFAs Collectively known as “Final Remediation Documents”



Location being Remediated

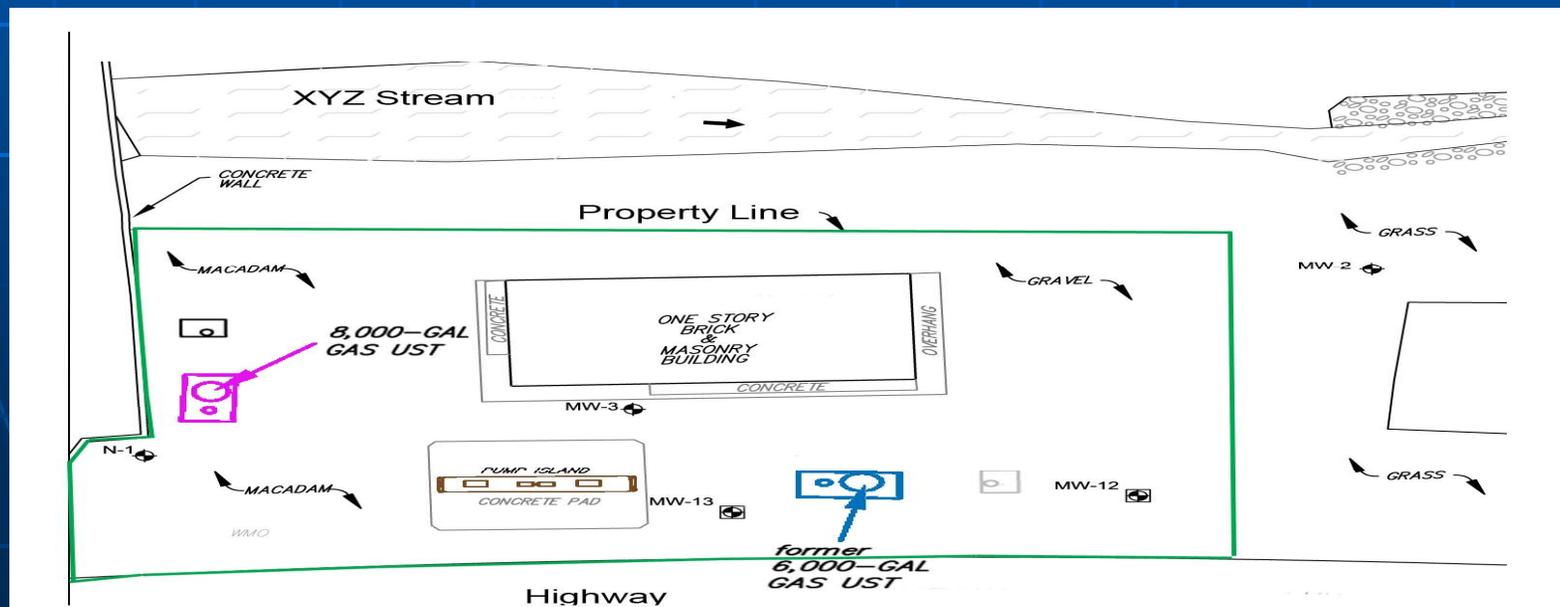
Entire Site

vs.

Area of Concern

Entire Site

Entire Site - The entire parcel subject to remediation. Includes any contamination within that subject parcel and where ever those contaminants have migrated on site or off site, regardless of media impacted.



Area of Concern

- Location of any contamination and where ever those contaminants have migrated on site or off site, regardless of media impacted.



What is a RAO?

LSRP's written professional opinion that the location was remediated in accordance with applicable statutes, regulations and guidance, based on historical use of the site or Area of Concern (AOC), that:

1. There are no* contaminants at a "site" or "AOC"; or

*Notes one "exception" as a matter of policy to be covered later

What is a RAO (continued)?

2. Any contaminants present at a site or AOC have been remediated; and
3. Remedial action is protective of public health, safety, and the environment; and
4. All applicable permits have been obtained.

Response Action Outcome Variations

Factors to Consider:

- 1) Scope of Remediation – Determined by regulation, oversight document, person conducting the remediation and identified discharges. (i.e. ISRA covers the entire “Industrial Establishment”; UST Regs. cover the regulated UST System; Spill Act covers all discharges)

Response Action Outcome Variations Scope of Remediation (cont.)

Results in either:

Entire Site RAO – Always based on the completion of a Preliminary Assessment at a minimum; or

Area of Concern RAO – anything less than an Entire Site RAO. An AOC RAO can be issued while an “Entire Site” cleanup proceeds

Response Action Outcome Variations

Factors to Consider (cont.):

2) Extent of Remediation –

Determined by whether applicable remediation standards\criteria have been met, or if institutional and engineering controls, or an institutional control alone, have been used as part of the remediation.

Response Action Outcome Variations Extent of Remediation

Results in either:

Unrestricted Use RAO – Most stringent remediation standards\criteria met; or

Limited Restricted Use RAO – Institutional Control (IC) only used as part of the remediation (i.e. CEA)

Restricted Use RAO – IC and Engineering Control used as part of the remediation

Response Action Outcome Variations

Six different RAOs

For an Area of Concern

- Unrestricted
- Limited Restricted
- Restricted

For an Entire Site or ISRA Industrial Establishment

- Unrestricted
- Limited Restricted
- Restricted

Who are RAOs Issued To? SRRRA Section 14

“..To the person(s) conducting the remediation....”

When is a RAO Issued?

- After the "entire site" or "AOC" have been remediated in accordance with applicable statutes, rules and regulations protective of public health, safety and the environment."

(Note: Copy simultaneously filed with the Department with 3 electronic copies of remediation related records. Dept. of Children and Families copied on matters involving Child Care Centers)

When is a RAO Issued (Cont.)? New for Ground Water (GW) Impacts

- GW remains > GW Remediation Standards but levels are low and non-decreasing** – *Limited Restricted Use RAO** if conditions in Attachment 2 – Protective GW Remedies with Non-decreasing Levels of GW Contamination under a Natural Attenuation Remedial Action

Notes: *Assumes soils remediated to unrestricted use

** Assumes GW Remedial Action Permit obtained

When is a RAO Issued (Cont.)? New for Ground Water (GW) Impacts

- GW remains > GW Remediation Standards requires engineered containment strategy for portion of the plume and decreasing levels** for other portion. – *Restricted Use RAO*

*Notes: ** Assumes GW Remedial Action Permit obtained*

When is a RAO Issued (cont.) & Contamination Remains

1. Contamination migrating onto the site (PA\SI required) – No site contribution;
2. Natural background;
3. Contamination remediated and remedial action permit obtained;

When is a RAO Issued (cont.) & Contamination Remains

4. Less than an Order of Magnitude Change
 - a. Levels in approved RAW changed $< 10X$ or;
 - b. Site subject to a final remediation document and the difference of the new standard and concentrations of remaining contamination is $< 10X$.

When is a RAO Issued (cont.) & Contamination Remains

5. RAO issued for an AOC while rest of site is undergoing remediation; or
6. The “exception” = “Soils-Only” RAO issued when ground water contamination remains from the site or AOC receiving the soil-only RAO

Miscellaneous

- All Department fees and oversight costs must be paid before RAO is issued.
- Under “Planned Real Estate Development Full Disclosure Act” – RAO for the entire site or portions of the site allows final transfer to occur.
- RAO includes a Covenant Not to Sue (CNS) by Operation of Law. Compliance with Remedial Action Permits required to maintain CNS benefits & prevent RAO revocation

How is a RAO Prepared Structured ?

RAO Format

- Addressee (Person Conducting the Remediation)
- Remedial Action Type (Extent of Remediation)
- Scope of Remediation (AOC vs. Entire Site)
- Location Identifiers
- LSRP Statements
- Conditions (2 possible)
- Notice Section (17 possible)
- LSRP Signature
- CCs



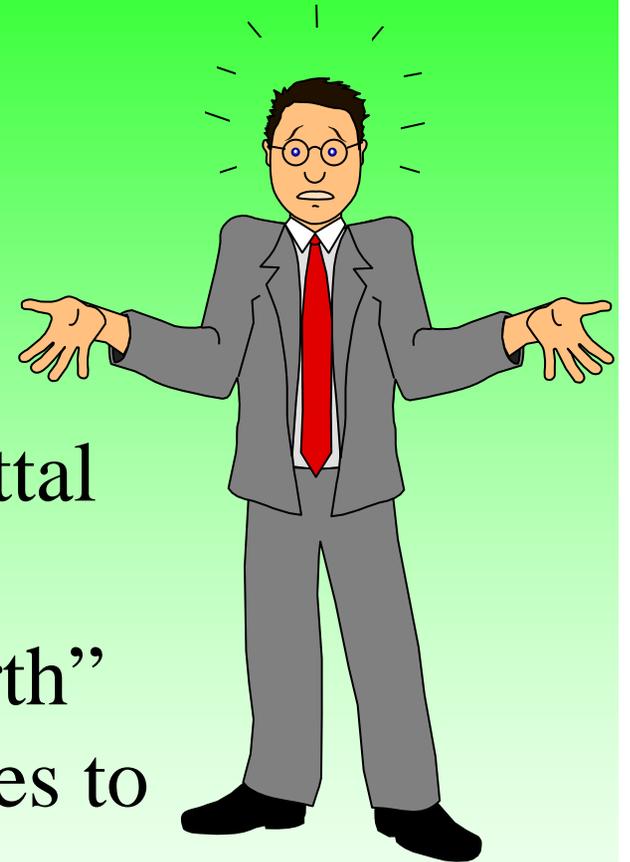
**SRP
GUIDANCE
ON DEVELOPING
ANNUAL REMEDIATION
FEES**

DRAFT DELIBERATIVE

10/30/09

WHY??

- Predictability- budget
- Budget based not Submittal based
- Eliminate “Back and Forth”
- Dedicate limited resources to inspection

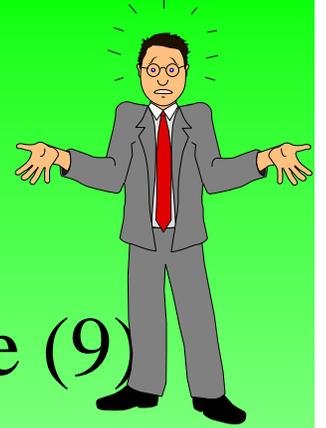


WHO IS SUBJECT?

An Annual Remediation Fees is required for every new case that initiates remediation (post November), including those the choose to “Opt-in“.



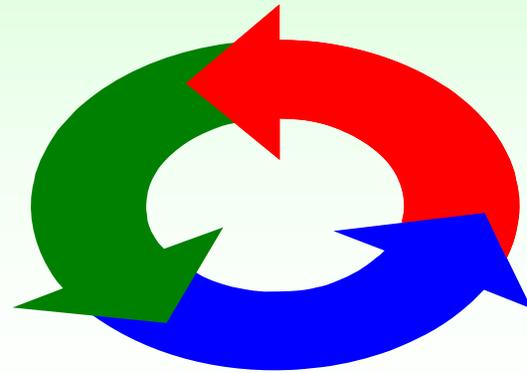
WHEN??



- The first Annual Remediation Fee is due (9) nine months from initiating remediation or with the first key document whichever is earlier.
- First Annual Remediation Fee is based available information as to the fee category, media impacted and defaults as appropriate (UST, Landfill)
- Subsequent Annual Fees are due every 365 days. Invoicing will occur.

Annual Remediation Fee

- is the fee paid to the Department on an annual basis pursuant to NJAC 7:26C 3.2, that is based on the number of Contaminated Areas of Concern and Contaminated Media Additives at any given site, area of concern or discrete discharge



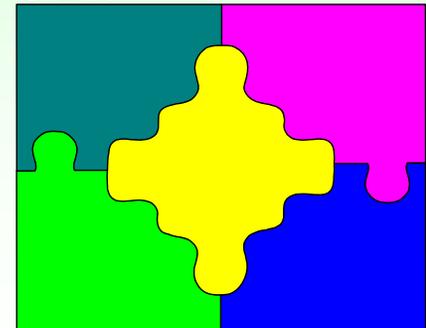
Contaminated Areas of Concern

- the number of Areas of Concern, pursuant to 7:26E-1, at a contaminated site, where contamination has been confirmed to have impacted soil, shall each constitute a separate unit.



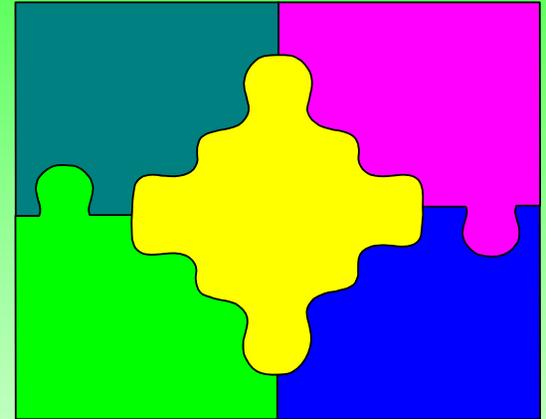
Contaminated Media Additive

- are those impacted environmental media at the site (ground water, surface water, or sediment) that are contamination from any area of concern or site operations. The specific media impacted shall be counted as a discrete fee additive for each media impacted.



Contaminated Media Additives

- Ground Water
- Surface Water Discharge
- Sediment
- Contaminated above the applicable standard from any AOC, or site operations and it has not been demonstrated that the contamination is solely from an off site source.



Developing the Annual fee

Fee Category + Media

- Fee Category I cases: no contamination or single Contaminate AOC (soils only,) Historic Fill.
- Fee Category II cases: 2-10 Contaminated AOC (Reg. UST System, excluding reg. heating oil tanks for onsite consumption)
- Fee Category III cases: 11-20 Contaminated AOC (Landfill)
- Fee Category IV cases: >20 Contaminated AOC

Annual Fee Increases

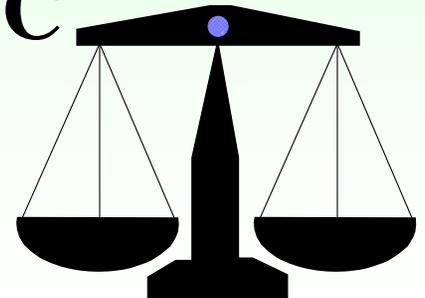
- At any time during the established annual fee cycle, it is determined that additional Contaminated AOC or Contaminated Media Additives exist, the remediating party must notify the department prior to the end of the Annual Fee cycle. The required increase will be reflected in the new Annual fee [see NJAC 7:26C-3.2];

Annual Fee Decreases

- At any time during the established Annual Fee cycle, a Remediation Action Outcome (RAO) is issued, the remediating party must notify the department prior to the end of the Annual Fee cycle, provide copies of the RAO for the specific AOC(s) or Contaminated Media. The requested reduction will be reflected in the new Annual fee [see NJAC 7:26C-3.2];

Annual vs. Permit Fees

- **NOTE:** If a RAO has been issued for all Area(s) of Concern and impacted media and the remaining remediation is being conducted under a Permit, the remediating party will not be required to pay future annual fees, only the existing permit fees as established in NJAC 7:26C-3.2.



Exceptions/Additions to Annual Fee

- IEC portion of case - Direct Bill + Annual Fee
- Entire case in Direct Oversight or has a case manager - Direct Bill NO Annual fee
- Portion of case in Direct oversight-Direct bill + Annual fee

EXAMPLES

- The site has 20 Contaminated AOC and GW is impacted.

Category 3 and GW additive

- Entire Site RAO (soils only) issued
- Category I and **GW fee additive.**

EXAMPLES

- The site is a Gas Station (Category 2) It has been determined there was a discharge from the system.
- 9 Additional AOC are identified and Ground water
(start w/ 1 AOC + 10 AOC=11 AOC)
- Category 3 and GW additive



Annual Fee Amounts

- Fee Category I cases - \$450.00
- Fee Category II cases - \$900.00
- Fee Category III cases- \$5,000.00
- Fee Category IV cases- \$9,500.00

- Contam. Media Additive- \$1,400.00/media

Presumptive Remedies

November 2009

Why we established presumptive remedies

Pursuant to Section 47g of P.L. 2009 c.60 which amends the Brownfields Act (C.58:10B-12), the Department of Environmental Protection (Department) is required to establish presumptive remedies.



When must a presumptive remedy be used?

- for any remediation initiated after May 7, 2010 at a site or area of concern where new construction is proposed for residential purposes, for use as a licensed child care center or as a public school, private school, or charter school, or
- for any remediation initiated after May 7, 2010 at a site or area of concern where there will be a change in the use of the site to residential, child care, or public school, private school, or charter school purposes or another purpose that involves use by a sensitive population.

What is new construction?

- New structures or additions to existing structures that increase the building's footprint.
- New ball fields
- New playgrounds
- New buildings



Can presumptive remedies be used at other sites?

- A presumptive remedy can be used at any site.
- The use of a presumptive remedy will affect the level of review that is conducted on a report.



Are there other options?

- Either remedies listed in the presumptive remedy table
- Unrestricted use remedies,
- Or an alternate remedy that is pre-approved by the Department.

What is an alternate remedy?

- An alternate remedy is a remedy that is submitted to the Department for its review and approval.
- It is used when the presumptive remedy is impractical due to conditions at the site,
- or would be equally protective over time as a presumptive remedy.
- All alternate remedies must be approved by the Department prior to its implementation.

Changes to the Presumptive Remedy Table/Guidance

- Changes will be made to the Presumptive Remedy Table and Guidance document as Alternate Remedies are submitted and approved and
- when new technologies become available.



How to apply for an alternate remedy

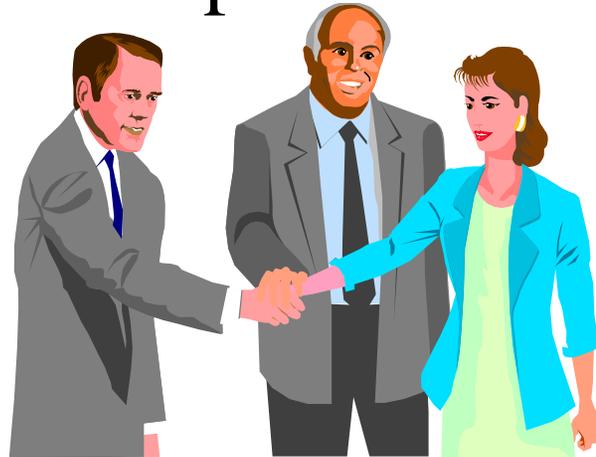
- Included in the Remedial Action Work Plan forms that are required to be submitted with each work plan are questions relating to alternate remedy and presumptive remedies.
- The Department will be available for discussions regarding the alternate remedy prior to its submittal.

Current Versions

- The current version of the Presumptive Remedy Chart can be found at:
http://www.nj.gov/dep/srp/guidance/srra/presumptive_remedy_guidance_DRAFT.pdf
- The guidance document for Presumptive Remedies is still being drafted and will be posted as soon as it is available at:
<http://www.nj.gov/dep/srp/guidance/srra>

Comments Received

- We received many comments on the draft Presumptive Remedy Table.
- We incorporated many of the changes into the revised table that is currently available and into the Presumptive Remedy Guidance document.



Site Remediation Program

Immediate Environmental Concern Guidance

Ed Putnam, Assistant Director

Ed.Putnam@dep.state.nj.us

Immediate Environmental Concern Guidance

- I. Purpose
- II. Overview
 - IEC Receptor Protection and Source Control
 - IEC Receptor Protection
 - IEC Source Control
- III. Definitions
 - Potable Water IEC
 - Vapor Intrusion IEC
 - Direct Contact IEC
- IV. IEC Guidance Procedures
 - A. Potable Water IEC Sites
 - B. Vapor Intrusion IEC Sites
 - C. Direct Contact IEC Sites
- V. Tables
- VI. Attachments
- VI. References

Immediate Environmental Concern Guidance

I. Purpose

- Overall, this IEC guidance is written to aid the person responsible for conducting the remediation, environmental consultants and Licensed Site Remediation Professionals when addressing the more common types of IEC conditions. The requirements for IEC cases apply to the person responsible for conducting the remediation.
- Every IEC case will be assigned to a Case Manager.

Immediate Environmental Concern Guidance

II. Overview

- The person responsible for conducting the remediation usually will identify IEC conditions at known contaminated sites when performing interim remedial measures and receptor evaluation requirements found in the Technical Regulations at 7:26E-1.12 through 7:26E-1.19.

Immediate Environmental Concern Guidance

II. Overview

- There are the two critical components to remediating an IEC condition: receptor control and source control that are contained in the Technical Regulations, 7:26E-1.14. Both measures have specific timeframes for notification, remedial action and reporting. Receptor control and source control must be completed to close an IEC case.

Immediate Environmental Concern Guidance

II. Overview

IEC Source Control

- The overall goal of source control is to eliminate the cause of the IEC condition so that protection of public health does not have to rely solely on receptor controls.

Immediate Environmental Concern Guidance

III. IEC Definitions

Potable Water

- A potable water IEC is a condition where there is contamination at levels at or above the Class II Ground Water Remediation Standards, N.J.A.C. 7:26D-2.2 in wells used for potable purposes where the contamination is associated with a discharge of a hazardous substance(s).

Immediate Environmental Concern Guidance

Appendix Table 1 - Specific Ground Water Quality Criteria

Specific Ground Water Quality Criteria - Class IIA and Practical Quantitation Levels

Constituent	CASRN	Ground Water Quality Criterion	Practical Quantitation Level (PQL) *	Higher of PQL and Ground Water Quality Criterion (ug/L)*
Acenaphthene	83-32-9	400	10	400
Acetone	67-64-1	6,000	10	6,000
Acetophenone	98-86-2	700	10	700
Acrolein	107-02-8	4	5	5

Immediate Environmental Concern Guidance

III. IEC Definitions

Vapor Intrusion

- A vapor intrusion IEC occurs when a discharge of a hazardous substance results in levels of contaminants in indoor air above Indoor Air Screening Levels in the Department's Vapor Intrusion Guidance.

Immediate Environmental Concern Guidance

TABLE 1
NJDEP MASTER TABLE
GENERIC VAPOR INTRUSION SCREENING LEVELS

Chemical	Ground Water Screening Levels µg/L	Soil Gas Screening Levels				Indoor Air Screening Levels			
		Residential		Nonresidential		Residential		Nonresidential	
		µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv	µg/m ³	ppbv
METHOD TO-15 PARAMETERS									
Acetone (2-propanone)	1,900,000	160,000	69,000	230,000	97,000	3,300	1,400	4,600	1,900
Benzene	15	16	5	26	8	2	0.5	2	0.5
Bromodichloromethane	5	34	5	34	5	3	0.5	3	0.5
Bromoethene (vinyl bromide)	0.1	22	5	22	5	2	0.5	2	0.5
Bromoform	370	80	8	180	18	5	0.5	5	0.5
Bromomethane (methyl bromide)	29	260	66	360	92	5	1	7	2
1,3-Butadiene (vinyl ethylene)	0.01	11	5	11	5	1	0.5	1	0.5
2-Butanone (methyl ethyl ketone)	2,700,000	260,000	87,000	360,000	120,000	5,100	1,700	7,200	2,400
Carbon disulfide	710	36,000	12,000	51,000	16,000	730	230	1,000	330
Carbon tetrachloride	1	31	5	31	5	3	0.5	3	0.5
Chlorobenzene	640	2,600	550	3,600	780	51	11	72	16
Chloroethane (ethyl chloride)	4	110	41	250	93	2	0.8	5	2
Chloroform	70	24	5	24	5	2	0.5	2	0.5
Chloromethane (methyl chloride)	240	4,700	2,300	6,600	3,200	95	46	130	64
3-Chloropropene (allyl chloride)	0.8	16	5	34	11	2	0.5	2	0.5
2-Chlorotoluene (o-chlorotoluene)	1,200	3,600	700	5,100	990	73	14	100	20
Cyclohexane	1,200	310,000	90,000	430,000	130,000	6,200	1,800	8,700	2,500
Dibromochloromethane	9	43	5	43	5	4	0.5	4	0.5
1,2-Dibromoethane (ethylene dibromide)	0.4	38	5	38	5	4	0.5	4	0.5
1,2-Dichlorobenzene (o)	5,900	7,300	1,200	10,000	1,700	150	24	200	34
1,3-Dichlorobenzene (m)	600	550	91	770	130	11	2	15	3
1,4-Dichlorobenzene (p)	75	30	5	32	5	3	0.5	3	0.5
Dichlorodifluoromethane (Freon 12)	1,000	9,100	1,800	13,000	2,600	180	37	260	52
1,1-Dichloroethane	3,600	26,000	6,300	36,000	8,800	510	130	720	180
1,2-Dichloroethane	2	20	5	20	5	2	0.5	2	0.5
1,1-Dichloroethene	250	11,000	2,800	15,000	3,900	220	55	310	77
** 1,2-Dichloroethene (cis)	350	1,800	460	2,600	640	36	9	51	13
1,2-Dichloroethene (trans)	300	3,600	920	5,100	1,300	73	18	100	26
1,2-Dichloroethene (total) [†]	190	1,600	410	2,300	580	33	8	46	12
1,2-Dichloropropane	1	23	5	23	5	2	0.5	2	0.5
1,3-Dichloropropane (total) [‡]	1	31	7	72	16	2	0.5	2	0.5
Ethylbenzene	61,000	53,000	12,000	74,000	17,000	1,100	240	1,500	340
Hexachlorobutadiene	1	53	5	53	5	5	0.5	5	0.5

Immediate Environmental Concern Guidance

III. IEC Definitions

Direct Contact

- A direct contact IEC is a situation where contamination exists above the acute health effect levels in the upper two feet of the soil column and there is actual or a potential for human contact via dermal contact, ingestion or inhalation. Acute effect means that an adverse human health impact could result from an exposure of less than two weeks.

Immediate Environmental Concern Guidance

- “Approximately one hour following the site visit, a staff member noticed his shoes felt “uneven.” Upon inspection, it was observed that the bottom soles of both shoes had disintegrated.”



Immediate Environmental Concern Guidance Timeframes

- Call the DEP – Immediately
- Written Notification -5 days
- Initial Mitigation – 5 days
- Receptor control (Engineered system) -60 days
- Receptor report -120 days
- Initiate source control – 270 days
- Mandatory timeframe for initiating source control 1 year.

Enforcement Section of ARRCS rule

- Few changes anticipated to enforcement section other than in the violations table
- Violations table will be updated to reflect new requirements in ARRCS, UST, ISRA & Tech Rules
- Grace Period Law criteria will be applied to determine whether violation of each new requirement is minor or non-minor in context of the SRRA
- Base penalty amounts will be adjusted for uniformity and to better reflect seriousness of violations
- Number of violations will be reduced to remove violations rarely cited, and to reflect less focus on details in Tech Rule



Remediation Funding Source(s)



- In amount equal to or greater than the estimated cost of remediation, **INCLUDING** the Department's fees and oversight costs, but **EXCLUDING** the estimated cost to operate, maintain and inspect engineering controls.
- RFS **MUST** be submitted **WITH** a Remediation Certification.
- **New** RFS Type: Letter of Credit – boiler plate available on web site.
- Self Guarantee Changes:
 - *only accepting audited financial statements with an unqualified opinion; and
 - *Parent company may Self Guarantee for wholly owned subsidiary.
- Parties subject to Direct Oversight may only post a Remediation Trust Fund.
- **ANNUAL** Remediation cost review will be required to be submitted every 365 calendar days from the date the RFS submitted and the RFS increased or decreased.
- Remedial Action Permits will be required to post financial assurance in an amount equal to or greater than the cost of to operate, maintain, and inspect all engineering controls that are part of the permit. Acceptable financial assurance: Letter of Credit, Line of Credit, Remediation Trust Fund and Environmental Insurance Policy. **NO** Self Guarantee. **NO** annual 1% surcharge on financial assurances.

Remediation Certifications (RC)

- RC replaces ISRA Remediation Agreements (RA) which allow ISRA triggering event to occur prior to NFA/RAO or Remedial Action Workplan approval.
- DEP will NOT issue amendments to existing RA or ECRA ACOs. Existing RA's and ACO's will remain effective.
- NO new RA's will be issued after November 2nd.
- RC application is available on the web at

<http://www.nj.gov/dep/srp/srra/forms>

11/4/2009

work in progress

Remediation Certifications (RC)

- The RC form identifies the transaction, owner(s), operator(s) and remediating party(ies). The RC regulations may be found at N.J.A.C. 7:26B-4.3.
- A cost estimate required and must be certified by an LSRP if PA/SI is completed.
- If PA/SI not completed, the \$100,000 and \$250,000 (GW known) default RFS amounts still may be used and no LSRP certification required.
- A cost estimate must be submitted within 30 days of completion of PA/SI.
- Original Remediation Funding Source must be submitted with RC.
- RC's will not be approved by the DEP. Transaction may proceed after submission of RC and RFS to DEP.

DRAFT PROTOCOL FOR ADDRESSING EXTRACTABLE PETROLEUM HYDROCARBON (EPH) CONTAMINATION

Chairpersons

Teruo Sugihara

David Haymes

Committee Members

- ◆ Gary Buchanan
- ◆ Ann Charles
- ◆ Linda Cullen
- ◆ Edward Demarest (Retired)
- ◆ Barry Frasco
- ◆ Diane Groth
- ◆ Nancy Hamill
- ◆ William Hanrahan
- ◆ William Lindner
- ◆ Paul Sanders
- ◆ Kevin Schick
- ◆ Gregory Toffoli
- ◆ Swati Toppin

CURRENT DRAFT PROTOCOL

Type	Category 1		Category 2	
Exposure scenario	Residential	Non-residential	Residential	Non-residential
EPH value	5,100 mg/kg	Calculated	Calculated	Calculated
Contingency	2-MN+Naph [^]	2-MN+Naph [^]	Per TRSR	Per TRSR
Product	8,000 mg/kg	8,000 mg/kg	17,000 mg/kg	17,000 mg/kg
Sheen	Policy	Policy	Policy	Policy
Ecological*	1,700 mg/kg	1,700 mg/kg	1,700 mg/kg	1,700 mg/kg

[^] 2-MN+Naph = 2-methylnaphthalene and naphthalene

* Ecological evaluation not required at most homeowner sites or where there is no significant ecological receptor

COMPOSITION-SPECIFIC EXTRACTABLE PETROLEUM HYDROCARBON (EPH) SOIL REMEDIATION CRITERION (SRC) CALCULATOR (Beta v 1.2)

DATA ENTRY CELLS
 ENTER ALL CONCENTRATIONS AS MILLIGRAMS/KILOGRAM (mg/kg)
 FOR NON DETECT VALUES, ENTER "0" or "ND" (without the quotation marks)
 REMEMBER TO ENTER ACTUAL SAMPLE IDENTIFICATION IN PLACE OF "SAMPLE 1", ETC.
 REMEMBER TO INDICATE WHETHER THE SAMPLE IS "RESIDENTIAL" (R) OR "NON-RESIDENTIAL" (N) [OR USE DROP-DOWN LIST]
 REMEMBER TO INDICATE WHETHER THE SAMPLE IS "#2 FUEL OIL/DIESEL" (#2 F) OR "OTHER" (O) [OR USE DROP-DOWN LIST]
 ALL DATA MUST BE ENTERED FOR EACH SAMPLE FOR THE EPH CRITERION TO BE CALCULATED
 CLICK ON THE "CALCULATE EPH SRC" BUTTON TO CALCULATE THE SAMPLE-SPECIFIC EPH SOIL REMEDIATION CRITERION
 IF YOU CHANGE ANY INPUT DATA, YOU MUST CLICK ON "CALCULATE EPH SRC" AGAIN TO RECALCULATE THE SOIL REMEDIATION CRITERION

EC [^] RANGE / SAMPLE ID	A	B	C	D	E
Enter Residential or Non-Residential	Residential	Residential	Non-Residential	Non-Residential	
Enter "#2 Fuel Oil/Diesel" or "Other"	#2 Fuel Oil/Diesel	Other	#2 Fuel Oil/Diesel	Other	
ALIPHATICS EC10-EC12	300.0	300.0	300.0	300.0	
EC12-EC16	400.0	400.0	400.0	400.0	
EC16-EC21	500.0	500.0	500.0	500.0	
EC21-EC34	600.0	600.0	600.0	600.0	
AROMATICS EC9-EC12	700.0	700.0	700.0	700.0	
EC12-EC16	800.0	800.0	800.0	800.0	
EC16-EC21	900.0	900.0	900.0	900.0	
EC21-EC34	1,000.0	1,000.0	1,000.0	1,000.0	
Total Concentration (mg/kg)	5,200.0	5,200.0	5,200.0	5,200.0	
Calculated EPH SRC[#] (mg/kg)	5,100	2,900	37,000	31,000	
Allowable[%] EPH SRC (mg/kg)	5,100[^]	2,900	8,000[^]	17,000[^]	
ABOVE/BELOW ALLOWABLE EPH SRC (i.e., PASS or FAIL)	ABOVE (FAIL)	ABOVE (FAIL)	BELOW (PASS)	BELOW (PASS)	

[^] = Equivalent Carbon
[#] = Soil Remediation Criterion
[%] = Accounts for residual product
 5,100[^] = Default value for residential #2 Fuel Oil/Diesel
 8,000[^] = Default maximum value for #2 Fuel Oil/Diesel
 17,000[^] = Default maximum value for all other petroleum hydrocarbon mixtures

[Calculate EPH SRC](#)
[Print Results](#)
[Reset Data](#)
[Instructions](#)

Run Date = 10/28/2009

COMMENTS RECEIVED ON DRAFT PROTOCOL

- Preference for a site-specific determined EPH residential remediation standard rather than a designated EPH value for no. 2 fuel oil and diesel (5,100 mg EPH/kg)
- Department is establishing a de facto standard of 1,000 mg EPH/kg for no. 2 fuel oil and diesel and should not do so
- The basis for establishing a residual/free product limit of 8,000 mg EPH/kg for no. 2 fuel oil and diesel is questioned
- Emphasize that the use of a non-residential exposure scenario requires an institutional control

THE FUTURE

- EPH analytical method due to be certified by OQA
- Phase in of guidance
- Continue to collect data and re-evaluate the guidance
- Announcements through Department website and list serve notification system

QUESTIONS

- Contact Teruo Sugihara
 - ◆ Teruo.Sugihara@dep.state.nj.us
 - ◆ 609-633-1356

- Contact David Haymes
 - ◆ David.Haymes@dep.state.nj.us
 - ◆ 609-777-1044

Remedial Actions That Render Property Unusable

Workgroup Members

Ken Kloo

William Lindner

Timothy Bartle

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Remedial Actions That Render Property Unusable

SRRA Section 47g (1):

“The department may disapprove the selection of a remedial action for a site on which the proposed remedial action will render the property unusable for future redevelopment or for recreational use.”

Remedial Actions That Render Property Unusable

- ◆ Permanent fencing or barriers that preclude access
- ◆ Treatment systems (wells and associated plumbing) that occupy greater than 20% of the developable land
- ◆ Interred material or containment systems that present structural challenges/ impediments for greater than 20% of the developable land
- ◆ Remedial actions that result in 30% or greater slope over 20% or more of the developable land

Remedial Actions That Render Property Unusable

- ◆ Remaining levels of contamination that impose regulatory limitations on site reuse, such as PCB contamination as subject to the federal TSCA, or radioactive materials
- ◆ Remaining physical hazards such as munitions and explosives of concern (MEC)
- ◆ Conditions that would result in an IEC if the property is developed including, but not limited to, vapor intrusion issues that cannot be addressed with engineering controls, and acute contaminant concentrations

Remedial Actions That Render Property Unusable

- ◆ LSRPs will certify for each RAO that the selected remedial action does not preclude or substantially restrict the use of a site for future redevelopment or for recreational use.
- ◆ If, in the opinion of the LSRP, a proposed remedy will render the property unusable...

Remedial Actions That Render Property Unusable

The LSRP will...

- ◆ notify the department, and municipality and/or regional authority, as appropriate
- ◆ participate in a public hearing to discuss the proposed remedial action should an elected or appointed official request a hearing
- ◆ not proceed with the selected remedy without municipal and/or regional approval, as appropriate

Remedial Actions That Render Property Unusable

The department will...

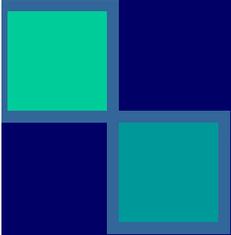
- ◆ review all remedial actions that render a property unusable for future redevelopment or recreational use

The department may...

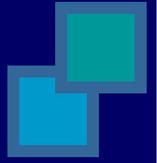
- ◆ invalidate an RAO that renders a property unusable for future redevelopment or recreational use without municipal or regional authority approval



Technical Assistance Grant



A technical assistance grant provides funding to a nonprofit community group to employ an independent LSRP to perform activities designed to help improve a community's understanding of the environmental conditions at, and remediation of, a contaminated site.



These activities include:

- Interpreting and explaining technical reports
- Monitoring site conditions
- Evaluating proposed remedial actions