

the purposes of this chapter, a Target Compound List + 30 scan means the analysis of a sample for Target Compound List compounds and up to 10 non-targeted volatile organic compounds and up to 20 non-targeted semivolatile organic compounds using GC/MS analytical methods. Non-targeted compound criteria shall be pursuant to the version of the EPA "Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration" in effect as of the date on which the laboratory is performing the analysis.

"Tentatively identified compound" or "TIC" means a non-targeted compound detected in a sample using a GC/MS analytical method which has been tentatively identified using a mass spectral library search. An estimated concentration of the TIC is also determined.

"Timely manner" means in compliance with all mandatory time frames, expedited site specific time frames, and regulatory time frames set forth in these rules and in the Administrative Requirements for the Remediation of Contaminated Sites rules, N.J.A.C. 7:26C.

"Underground storage tank" means any one or combination of tanks, including appurtenant pipes, lines, fixtures, and other related equipment, used to contain an accumulation of hazardous substances, hazardous wastes or pollutants, the volume of which, including the volume of the appurtenant pipes, lines, fixtures and other related equipment, is 10 percent or more beneath the surface of the ground.

"Unknown compound" means a non-targeted compound which cannot be tentatively identified. Based on the analytical method used, the estimated concentration of the unknown compound may or may not be determined.

"Unrestricted use remedial action" means any remedial action for soil that does not require the continued use of either engineering or institutional controls to meet the established health risk or environmental standards.

"Unrestricted use standard" means a numeric soil remediation standard that, when achieved, restores the contaminated soil to a condition or quality suitable for any use. The unrestricted use standard is the lowest of any numeric standard, without limitation, any residential soil remediation standard, any non-residential soil remediation standard and any applicable impact-to-groundwater soil standard.

"UST" means the New Jersey Underground Storage of Hazardous Substances Act, N.J.S.A. 58:10A-21 et seq.

"Volatile organics" means organic compounds amenable to analysis by the purge and trap technique. For the purposes of this chapter, analysis of volatile organics means the analysis of a sample for those target compounds identified as volatiles in the version of the EPA "Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration" in effect as of the date on which the laboratory is performing the analysis.

"Waste oil" means a petroleum based or synthetic oil which, through use, storage or handling has become unsuitable for its original purpose due to the presence of impurities or loss of original properties.

"Waters" means the ocean and its estuaries to the seaward limit of the State's jurisdiction, all springs, streams and bodies of surface or ground water, whether natural or artificial, within the boundaries of this State.

"Wetland" means any freshwater or coastal wetland.

"WPCA" means the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.

Amended by R.1997 d.124, effective May 19, 1997 (operative July 18, 1997).

See: 28 N.J.R. 1098(a), 28 N.J.R. 2298(a), 29 N.J.R. 2278(b).

Added "Active ground water remediation", "Background ground water contamination", "Contamination", "Damages", "Effective solubility", "Engineering controls", "Environmentally sensitive area", "Historic fill material", "Immediate environmental concern", "Injury", "Institutional controls", "Mineral oil", "Natural background soil level", "Natural ground water remediation", "Non-permanent remedial action", "Order of magnitude", "Permanent remedial action", "Region of the site", "Remedial action costs", "Remedial action selection", "Remedial action selection report", "Residual product", "Residual saturation point", "Restricted use standard", "Retardation", "Specific discharge event", "Unrestricted use standard" and "Waste oil"; amended "Applicable remediation standard", "Area of concern", "Commissioner", "Contaminated site", "Department", "Diligent inquiry", "Discharge", "Fill material", "Free product", "Person responsible for conducting the remediation", "Preliminary assessment", "Remedial action", "Remedial investigation", "Remediation", "Site investigation", "Surface water", "Tank", "Targeted compound", and "Underground storage tank"; and deleted "Contaminant", "ECRA", "Hazardous constituent", "Hazardous substance", "Innovative and emerging treatment technologies", "Permanent remedy", and "Remedial alternative analysis".

Amended by R.1997 d.499, effective November 17, 1997.

See: 29 N.J.R. 46(a), 29 N.J.R. 4957(a).

Added "Declaration of environmental restrictions".

Amended by R.1999 d.241, effective August 2, 1999.

See: 30 N.J.R. 2373(a), 31 N.J.R. 2167(a).

Rewrote the section.

Amended by R.2003 d.29, effective February 3, 2003.

See: 34 N.J.R. 170(a), 35 N.J.R. 710(a).

Rewrote the section.

Amended by R.2003 d.198, effective May 19, 2003.

See: 34 N.J.R. 3703(a), 35 N.J.R. 2319(a).

Rewrote "Area of concern".

Administrative correction.

See: 37 N.J.R. 4245(a).

Special amendment, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Rewrote definitions "Area of concern", "Immediate environmental concern", "No further action letter", "Person responsible for conducting the remediation" and "Timely manner"; added definitions "Child care center", "Day", "Discharge to ground water proposal", "Engineered system response", "Feasibility study", "Final remediation document", "Indoor air screening level", "Licensed site remediation professional", "Light non-aqueous phase liquid", "Remediation costs", "Sanitary landfill", "School", "Soil gas" and "Soil gas screening level"; substituted definition "Ground water use area" for definition "Groundwater use area"; and deleted definitions "Oversight document" and "Remedial action costs".

Administrative correction.

See: 42 N.J.R. 778(a), 1862(a).

Amended by R.2011 d.072, effective February 22, 2011.

See: 42 N.J.R. 2297(a), 42 N.J.R. 2360(a), 43 N.J.R. 389(c).

Rewrote paragraph 2 of definition "Immediate environmental concern"; and added definition "Rapid action level".

**Case Notes**

In cases involving environmental cleanup, an entity may be strictly liable under the New Jersey Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 through 58:10-23.24, for damages for the loss of use of natural resources adversely affected by its discharge of hazardous substances. *New Jersey Dep't of Envtl. Protection & Administrator v. Exxon Mobil Corp.*, 393 N.J. Super. 388, 923 A.2d 345, 2007 N.J. Super. LEXIS 174 (App.Div. 2007).

**7:26E-1.9 General remediation requirements**

(a) The person responsible for conducting the remediation shall conduct remediation pursuant to the regulatory timeframes established in this chapter and shall submit all documents, forms, and other submissions as required in this chapter. That person may, based on site specific conditions or circumstances, request an extension of a regulatory timeframe pursuant to the Administrative Requirements for the Remediation of Contaminated Sites rules at N.J.A.C. 7:26C-3.1.

(b) The person responsible for conducting the remediation shall comply with the Site Remediation Program's guidance documents in effect at the time that the work is conducted. All guidance documents can be found in the Site Remediation Program's Guidance Library on the Department's web site at <http://www.nj.gov/dep/srp/srra/guidance>.

(c) The person responsible for conducting the remediation shall direct each licensed site remediation professional he or she hires to conduct the remediation pursuant to N.J.A.C. 7:26C-2.4.

(d) The person responsible for conducting the remediation shall make submissions to the Department pursuant to this chapter as follows:

1. One paper copy and three copies on CD in Adobe portable document format (PDF) of all forms, applications and documents, except as provided in (d)2 through 4 below;
2. One copy on CD of the site-specific health and safety plan pursuant to N.J.A.C. 7:26E-1.10; quality assurance project plan, pursuant to N.J.A.C. 7:26E-2.2, with each remedial phase report as applicable;
3. Three electronic copies of all analytical data using the format outlined in the Site Remediation Program's Electronic Data Interchange guidance;
4. One paper copy of all required maps and one electronic copy of all GIS compatible electronic maps prepared using the Department's GIS guidance;
5. Three electronic copies of all full laboratory data deliverables on CD in Adobe portable document format (PDF) or in a format determined by the Department and one paper copy of all full laboratory deliverables for drinking water, indoor air, chromium and dioxin samples; and
6. Any forms, applications or documents required by this chapter that can be submitted in an electronic format

shall be submitted electronically 90 days after the date that the Department informs the public in the New Jersey Register that the relevant electronic application is functional. The notice shall also include a notice of administrative change that amends this subsection accordingly.

Special New Rule, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Former N.J.A.C. 7:26E-1.9, Health and safety plan, was recodified as N.J.A.C. 7:26E-1.10.

Administrative correction.

See: 42 N.J.R. 1862(a).

**7:26E-1.10 Health and safety plan**

Any person conducting remediation activities shall prepare a site-specific health and safety plan which shall be adhered to by all personnel involved in the remediation. The plan shall be in accordance with the most recently adopted and applicable general industry (29 CFR 1910) and construction (29 CFR 1926) standards of the Federal Occupational Safety and Health Administration (OSHA), U.S. Department of Labor, as well as any other Federal, State or local applicable statutes or regulations.

Special recodification from N.J.A.C. 7:26E-1.9 by R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Former N.J.A.C. 7:26E-1.10, Severability, was recodified as N.J.A.C. 7:26E-1.11.

**7:26E-1.11 Severability**

If any section, subsection, provision, clause or portion of these regulations is adjudged invalid or unconstitutional by a court of competent jurisdiction, the remainder of these regulations shall not be affected thereby.

Special recodification from N.J.A.C. 7:26E-1.10 by R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Former N.J.A.C. 7:26E-1.11, Bias for action, was recodified as N.J.A.C. 7:26E-1.12.

**7:26E-1.12 Control of ongoing sources and implementation of interim remedial measures**

(a) As a first priority, the person responsible for conducting the remediation shall:

1. Identify the need for any interim remedial measures necessary to remove, contain, or stabilize a source of contamination to prevent contaminant migration and exposure to receptors; and
2. Whenever site-specific data support the need for an interim remedial measure, include in each remedial phase report a description of each interim remedial measure implemented and each interim remedial measure that is planned.

(b) The person responsible for conducting the remediation shall follow the Department's Light Non-aqueous Phase

Liquid (LNAPL) Free Product Interim Remedial Measures guidance concerning free product removal as follows:

1. 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 on a form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms); and

2. Within one year after either March 1, 2010 or LNAPL is identified, whichever is later, complete the installation of an LNAPL interim remedial measure, initiate operational monitoring, and submit a Free Product Interim Remedial Measures Report with a form, found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms), to the Department that documents the actions taken pursuant to this subsection.

Amended by R.2008 d.262, effective September 2, 2008.  
See: 39 N.J.R. 2687(a), 40 N.J.R. 5010(a).

Rewrote the section.  
Special recodification from N.J.A.C. 7:26E-1.11 and amended by R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).  
See: 41 N.J.R. 4467(a).

Section was "Bias for action". Rewrote the section. Former N.J.A.C. 7:26E-1.12, Requirement for Department oversight of remediation, was recodified as N.J.A.C. 7:26E-1.13.

Amended by R.2011 d.072, effective February 22, 2011.

See: 42 N.J.R. 2297(a), 42 N.J.R. 2360(a), 43 N.J.R. 389(c).

In (b)1, substituted "found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms)" for "available from the Department"; and rewrote (b)2.

**7:26E-1.13 Requirement for Department oversight of remediation**

(a) The person responsible for conducting the remediation shall investigate and remediate contaminated sites with the Department's prior approval, in the following circumstances:

1. Sites suspected or known to be contaminated with anthropogenic radionuclide contamination of any media;
2. Sites with immediate environmental concern conditions; and
3. Sites with a landfill, if:
  - i. The landfill or any portion thereof is slated for redevelopment that includes structures intended for human occupancy;
  - ii. When landfill remediation activities are funded, in whole or part, by the Hazardous Discharge Site Remediation Fund pursuant to the Brownfield and Contaminated Site Remediation Act at N.J.S.A. 58:10B-4 through 9, a Brownfield redevelopment agreement pursuant to the Brownfield and Contaminated Site Remediation Act at N.J.S.A. 58:10B-27 through 31, or the Municipal Landfill Closure and Remediation Reimbursement Program pursuant to the Solid Waste Management Act at N.J.S.A. 13:1E-116.1 through 116.7; or
  - iii. The person conducting the remediation wants a final remediation document.

New Rule, R.1997 d.124, effective May 19, 1997 (operative July 18, 1997).

See: 28 N.J.R. 1098(a), 28 N.J.R. 2298(a), 29 N.J.R. 2278(b).  
Special recodification from N.J.A.C. 7:26E-1.12 and amended by R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).  
See: 41 N.J.R. 4467(a).

Rewrote the section. Former N.J.A.C. 7:26E-1.13 was reserved.

**7:26E-1.14 Immediate environmental concern requirements**

(a) The person responsible for conducting the remediation that identifies an immediate environmental concern (IEC) condition shall follow the Department's IEC guidance and address the IEC condition pursuant to this section.

(b) The person responsible for conducting the remediation that identifies an IEC condition shall:

1. Immediately notify the case manager if one is assigned. If no case manager is assigned or if the case manager is not available, immediately call the Department's hotline at 1-877 WARNDP or 1-877-927-6337;
2. Mitigate the IEC impacts as applicable as follows:
  - i. For potable water immediate environmental concerns, within five 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;
  - ii. For vapor intrusion immediate environmental concerns, within 14 days after identifying the IEC condition, mitigate the infiltration of vapors into structures impacted by vapor intrusion; and
  - iii. For soils contaminated above acute levels, within five days after identifying the IEC condition, restrict access to soil contaminated above acute levels;
3. Within 14 days after identifying the IEC condition, submit the following to the Department:
  - i. A completed form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms);
  - ii. A completed IEC Information Spreadsheet found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms);
  - iii. A map indicating the location of the site and the location of the IEC condition; and
  - iv. All analytical results with full laboratory data deliverables, pursuant to N.J.A.C. 7:26E-2.1(a)16, with an appropriate form for the type of IEC condition found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms);
4. Within 14 days after identifying the IEC condition submit the analytical results from all indoor air sampling to the New Jersey Department of Health and Senior Services at the following address:

NJDHSS  
Indoor Environments Program  
135 E. State Street  
PO Box 369  
4th Floor  
Trenton, NJ 08625-0369; and

5. Within 60 days after identifying the IEC condition, implement the following IEC engineered system response actions:

i. Provide water treatment or an alternative water supply to the residents of each property where contaminant concentrations in their potable well exceed any remediation standard for Class II ground water quality standard;

ii. When contaminant concentrations in indoor air are detected above the indoor air screening level, determine whether the contaminant concentrations also exceed the rapid action levels listed in the Department's Vapor Intrusion Guidance, or, if no rapid action level exists for a contaminant in the Department's Vapor Intrusion Guidance, contact the Department to have a site-specific rapid action level determined for the contaminant, and if the rapid action level is exceeded install a vapor mitigation system at each property where indoor air levels exceed the rapid action level; and

iii. Otherwise reduce exposure to contaminants or hazardous conditions to acceptable levels as applicable.

(c) Within 120 days after identifying the IEC condition, the person responsible for conducting the remediation shall submit an IEC engineered system response action report with an updated form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms), that includes the following:

1. A description of all immediate response actions and engineered system response actions that have been completed, including the date that each action that was conducted pursuant to (b) above;

2. A summary of all analytical data related to the IEC and the engineered system response action;

3. All maps and figures related to the IEC and the engineered system response action;

4. A description of the contaminant source control that will be implemented as required pursuant to (d) below; and

5. A GIS compatible map of the estimated area of ground water contamination prepared pursuant to the Department's IEC Guidance.

(d) Within one year after either March 1, 2010 or identifying the IEC condition, whichever is later, the person responsible for conducting the remediation shall initiate control of the IEC contaminant source using the Department's IEC Guidance and submit an IEC contaminant source control report, with an updated form found on the Department's

website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms) that includes descriptions of each of the following:

1. Remedial actions being implemented to remediate the IEC contaminant source;

2. A monitoring plan for the mitigation system; and

3. A monitoring plan for the wells or structures that are located downgradient of the wells or structures that are impacted by the IEC condition.

Special New Rule, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Administrative correction.

See: 42 N.J.R. 778(a), 1862(a).

Amended by R.2011 d.072, effective February 22, 2011.

See: 42 N.J.R. 2297(a), 42 N.J.R. 2360(a), 43 N.J.R. 389(c).

Rewrote (b)2; in the introductory paragraph of (b)3 and of (b)4, substituted "14" for "five"; in (b)3i, (b)3ii, (b)3iv and in the introductory paragraph of (c), substituted "found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms)" for "available from the Department"; in (b)3iv, substituted "a Potable Water Data" for "an appropriate"; rewrote (b)5ii; in the introductory paragraph of (c), deleted "IEC Response Action" following "an updated"; and rewrote the introductory paragraph of (d).

#### 7:26E-1.15 Receptor evaluation—general and reporting requirements

(a) The person responsible for conducting the remediation shall conduct a receptor evaluation pursuant to the requirements of N.J.A.C. 7:26E-1.16 through 1.19.

(b) The person responsible for conducting the remediation who completes an unrestricted use remedial action is not required to conduct a receptor evaluation when a final remediation document is either issued by the Department or is filed with the Department by a licensed site remediation professional within one year after initiating the remediation.

(c) The person responsible for conducting the remediation shall submit an initial receptor evaluation, on a form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms), by March 1, 2011 or one year after the initiation of remediation, pursuant to N.J.A.C. 7:26C-2.2(b), whichever is later, which shall contain the information that is known by the person responsible for conducting the remediation at the time the report is submitted.

(d) The person responsible for conducting the remediation shall submit an updated receptor evaluation report on a form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms) with the following documents, as applicable:

1. A remedial investigation report submitted pursuant to N.J.A.C. 7:26E-4.8; and

2. A remedial action report submitted pursuant to N.J.A.C. 7:26E-6.7.

(e) The person responsible for conducting the remediation shall also send a copy of each receptor evaluation to the following:

1. The clerk of each municipality in which the site is located; and
2. The designated local health official.

Special New Rule, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).  
 See: 41 N.J.R. 4467(a).  
 Amended by R.2011 d.072, effective February 22, 2011.  
 See: 42 N.J.R. 2297(a), 42 N.J.R. 2360(a), 43 N.J.R. 389(c).  
 Rewrote (b), (c) and (d).

**7:26E-1.16 Receptor evaluation—land use**

- (a) The person responsible for conducting the remediation shall identify all current land uses at the site and of each property located within 200 feet of the site boundary.
- (b) The person responsible for conducting the remediation 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.
- (c) The person responsible for conducting the remediation 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 that is identified pursuant to (b) above.

(d) The person responsible for conducting the remediation 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.

Special New Rule, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).  
 See: 41 N.J.R. 4467(a).

**7:26E-1.17 Receptor evaluation—ground water**

(a) The person responsible for conducting the remediation 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 as follows:

1. Within 90 days after ground water contamination is detected, conduct a well search to identify each well that may be impacted by contamination that has or may have emanated from the site as follows:
  - i. Locate all wells by conducting a file search of all available Department, county and local records for all monitoring and potable wells located within one-half mile of each point of ground water contamination, and all irrigation, industrial wells, and wells with water allocation permits located within one mile of each point of ground water contamination;
  - ii. If the person responsible for conducting the remediation finds any of the wells described in (a)li

above, that person shall conduct a door-to-door survey by following the Department’s well search guidance;

iii. For each well located, identify the type (potable, irrigation, noncontact cooling water) and the status of the well (active, inactive, properly abandoned pursuant to N.J.A.C. 7:9D), including, as available, total depth, casing length, open bore hole or screened interval, and obtain copies of well records and/or well logs on file with the Department’s Bureau of Water Systems and Well Permitting, and any additional records available in county or municipal records;

iv. Document all sources used in conducting the well search, including the names of any agency that was unable to provide the information requested; and

v. For each point of ground water contamination, determine if the ground water contamination is located within a Tier 1 or a Tier 2 well head protection area; and

2. Within 120 days after ground water contamination is detected at the site above a Class II ground water remediation standard, the person responsible for conducting the remediation shall:

- i. Notify the Department, pursuant to N.J.A.C. 7:26E-1.4(e), prior to conducting potable well sampling;
- ii. Sample each potable well identified by the well search that is located within 1000 feet of any point of ground water contamination, or if ground water flow direction is known, limit sampling to wells 250 feet upgradient, 500 feet sidegradient and 1,000 feet down-gradient from any point of ground water contamination; and
- iii. Sample irrigation wells identified by the well search when there are concerns about exposure or when information about the characteristics of the plume is needed.

(b) If the person responsible for conducting the remediation determines that a contaminant concentration is detected in any potable well sample in excess of any Class II ground water remediation standard pursuant to N.J.A.C. 7:26D-2.2(a)1, the person shall:

1. Notify the Department of the IEC condition and conduct all actions pursuant to N.J.A.C. 7:26E-1.14; and
2. Within 14 days after completing the first round of potable well sampling, the person responsible for conducting the remediation shall:
  - i. Continue to delineate ground water contamination, including the extent of free product, pursuant to N.J.A.C. 7:26E-4.4; and
  - ii. Continue to identify potential wells and conduct additional sampling pursuant to the Department’s IEC Guidance.

(c) If no contaminant concentration is detected in any potable well sample in excess of any Class II ground water remediation standard, within 14 days after receipt of the analytical results from the laboratory, the person responsible for conducting the remediation shall:

1. Submit all analytical results to the Department with full laboratory data deliverables pursuant to N.J.A.C. 7:26E-2.1(a)16 with the form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms); and

2. If a licensed site remediation professional is overseeing the remediation, conduct the following:

- i. Notify each person whose potable well was sampled of the analytical results; and
- ii. Provide the Department with a copy of each notification letter.

(d) The person responsible for conducting the remediation shall provide a detailed report of all potable well sampling activities in the applicable remedial phase report that that person submits to the Department.

Special New Rule, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Administrative correction.

See: 42 N.J.R. 1862(a).

Amended by R.2011 d.072, effective February 22, 2011.

See: 42 N.J.R. 2297(a), 42 N.J.R. 2360(a), 43 N.J.R. 389(c).

In (c)1, substituted "form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms)" for "Full Laboratory Data Deliverables form available from the Department".

#### 7:26E-1.18 Receptor evaluation—vapor intrusion

(a) The person responsible for conducting the remediation shall conduct a vapor intrusion investigation pursuant to this section and Department's Vapor Intrusion Guidance (VIG) when any of the following conditions exist in shallow ground water:

1. A ground water plume containing petroleum hydrocarbon contamination at a concentration greater than any vapor intrusion ground water screening level, is identified within 30 feet of a building;

2. A ground water plume containing volatile contamination that is not petroleum based at a concentration greater than any vapor intrusion ground water screening level is identified within 100 feet of a building;

3. Free product is identified in ground water within 100 feet of a building; or

4. When any of the following conditions are identified:

i. Soil gas or indoor air contamination is detected at concentrations that exceed the applicable vapor intrusion soil gas or indoor air screening levels;

ii. A landfill is located on or adjacent to the site;

iii. 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;

iv. Methanogenic (methane generating) conditions are present that may cause an explosion; or

v. Any other information that indicates that human health may be impacted via the vapor intrusion pathway.

(b) Within 60 days after determining the need to conduct a vapor intrusion investigation pursuant to (a) above, the person responsible for conducting the remediation shall:

1. 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 condition listed in (a)3 or 4 above;

2. Determine the specific use for each structure identified, including the presence of residences, schools or child care centers, whether each structure has a basement, crawl space, or is constructed on a slab, and the approximate square footage of each building footprint;

3. Determine the specific use, depth of the invert, diameter, and construction specifications of all subsurface utilities identified;

4. Determine the flow direction of the shallow ground water pursuant to N.J.A.C. 7:26E-3.7(e)3; and

5. Determine whether free product pursuant to N.J.A.C. 7:26E-2.1(a)14 is present at each ground water sampling location.

(c) Within 150 days after determining the need to conduct a vapor intrusion investigation pursuant to (a) above, the person responsible for conducting the remediation shall:

1. Notify the Department prior to conducting indoor air or sub-slab sampling pursuant to N.J.A.C. 7:26E-1.4(e); and

2. Implement the Vapor Intrusion Guidance, including, but not limited to:

i. If indoor air samples are to be collected, remove sources of potential background volatile organic chemicals from inside the structure, if possible;

ii. Determine the number and locations of indoor air and/or sub-slab samples;

iii. Collect indoor air and sub-slab samples at structures that may be impacted by vapor intrusion;

iv. Collect other vapor intrusion related samples such as soil gas samples, background samples and ground water samples as necessary to fully evaluate the vapor intrusion pathway;

v. Analyze indoor air samples and sub-slab soil gas samples and any other samples collected using certified analytical methods; and

vi. Evaluate the results of indoor air sampling as follows:

(1) If the results are greater than the Department's vapor intrusion indoor air screening level, the person shall determine whether the contaminants are also greater than the rapid action levels as determined pursuant to N.J.A.C. 7:26E-1.14(b)5ii, and if so determine whether the contaminants are likely to be associated with a discharge at the site or may be attributed to background sources;

(2) If the results are greater than the vapor intrusion rapid action level as determined pursuant to N.J.A.C. 7:26E-1.14(b)5ii, the person shall immediately notify the Department of an immediate environmental concern condition and conduct all actions required pursuant to N.J.A.C. 7:26E-1.14;

(3) If the results are greater than the Department's Health Department Notification Levels for indoor air the person shall immediately notify:

(A) The Department of an immediate environmental concern condition and conduct all actions required pursuant to N.J.A.C. 7:26E-1.14; and

(B) The New Jersey Department of Health and Senior Services at 609-631-6749;

(4) If the person identifies potentially explosive conditions in a structure or subsurface utility, the person shall immediately notify:

(A) 911 and report explosive conditions to the local emergency response agency;

(B) The Department of the emergency condition at 1-877-WARNDEP or 1-877-972-6337; and

(C) The New Jersey Department of Health and Senior Services at 609-631-6749;

(d) If no contaminant concentration is detected in any indoor air sample in excess of any Department indoor air screening level, within 14 days after receipt of the analytical results from the laboratory, the person responsible for conducting the remediation shall:

1. Submit all analytical results to the Department with full laboratory data deliverables pursuant to N.J.A.C. 7:26E-2.1(a)16 with the Full Laboratory Data Deliverables form available from the Department;

2. Submit all analytical results to the New Jersey Department of Health and Senior Services at the following address:

NJDHSS  
Indoor Environments Program  
135 E. State Street  
PO Box 369  
4th Floor  
Trenton, NJ 08625-0369; and

3. If a licensed site remediation professional is overseeing the remediation, conduct the following:

i. Notify each person whose indoor air was sampled of the analytical results; and

ii. Provide the Department with a copy of each notification letter.

(e) If the person responsible for conducting the remediation identifies vapor intrusion IEC conditions pursuant to (c) above, within 14 days after completing the first round of sampling, the person shall continue to:

1. Delineate ground water contamination, including the extent of free product, pursuant to N.J.A.C. 7:26E-4.4; and

2. Identify structures and conduct additional indoor air and/or sub-slab sampling pursuant to the Department's IEC Guidance and the VIG.

(f) If the person responsible for conducting the remediation determines that no IEC condition exists, but the vapor intrusion pathway is still of concern, the person shall:

1. If the results are between the indoor air screening level and the rapid action level determined pursuant to N.J.A.C. 7:26E-1.14(b)5ii:

i. Within 14 days of receipt of data showing exceedances of the indoor air screening levels, notify the Department of the exceedances on a form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms);

ii. Within 60 days of receipt of data showing exceedances of the indoor air screening levels, submit a plan to the Department to mitigate the exposure;

iii. Within 120 days of receipt of data showing exceedances of the indoor air screening levels, implement the plan; and

iv. Within 180 days of receipt of data showing exceedances of the indoor air screening levels, submit a mitigation response action report, with a form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms), that includes the following:

(1) A description of all mitigation actions that have been completed, including the date that each action that was conducted;

(2) A summary of all analytical data related to the vapor intrusion investigation and mitigation response; and

(3) All maps and figures related to the vapor intrusion investigation and mitigation response; or

2. If the results are below the indoor air screening levels, or are above the indoor air screening levels but below the rapid action levels and a determination has been made that a mitigation system is not necessary, complete a vapor intrusion investigation as part of the site investigation or remedial investigation, as applicable.

(g) 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.

(h) If the person responsible for conducting the remediation determines that the vapor intrusion pathway is not a concern at or adjacent to the site, the person shall provide a technical rationale supporting that conclusion.

Special New Rule, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Administrative correction.

See: 42 N.J.R. 1862(a).

Amended by R.2011 d.072, effective February 22, 2011.

See: 42 N.J.R. 2297(a), 42 N.J.R. 2360(a), 43 N.J.R. 389(c).

Rewrote (c)2vi(1), (c)2vi(2) and (f); and in (c)2vi(3), substituted "than" for "then".

### 7:26E-1.19 Receptor evaluation—ecological

As part of the receptor evaluation the person responsible for conducting the remediation shall conduct a baseline ecological evaluation pursuant to N.J.A.C. 7:26E-3.11, in order to determine whether a remedial investigation of ecological receptors is required pursuant to N.J.A.C. 7:26E-4.7.

Special New Rule, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

## SUBCHAPTER 2. QUALITY ASSURANCE FOR SAMPLING AND LABORATORY ANALYSIS

### 7:26E-2.1 Quality assurance requirements

(a) The person responsible for conducting the remediation shall ensure that the following quality assurance procedures are followed for all sampling and laboratory analysis activities.

1. Laboratories performing analyses shall conform to the following:

i. For the analysis of any aqueous samples for a parameter or category of parameters for which laboratory certification exists pursuant to N.J.A.C. 7:18, the laboratory shall be certified for that specific parameter or category of parameters pursuant to N.J.A.C. 7:18;

ii. For the analysis of non-aqueous samples using specific analytical methods contained in the EPA Publication SW-846, "Test Methods for Evaluating Solid Waste", third edition, update IIB, January 1995, as amended and supplemented, for a parameter or category of parameters for which certification exists pursuant to N.J.A.C. 7:18, the laboratory shall be certified for that specific parameter or category of parameters pursuant to N.J.A.C. 7:18 or, at a minimum, have obtained temporary approval to analyze regulatory samples pursuant to N.J.A.C. 7:18-2.5(c);

iii. For the analysis of samples using USEPA Contract Laboratory Program (CLP) analytical methods for a parameter or category or parameters for which certification exists pursuant to N.J.A.C. 7:18, the laboratory shall be certified for that specific parameter or category of parameters pursuant to N.J.A.C. 7:18 or, at a minimum, have obtained temporary approval to analyze regulatory samples pursuant to N.J.A.C. 7:18-2.5(c);

iv. For the analysis of aqueous and non-aqueous samples for parameters or categories of parameters not contained in (a)1i through iii above, the person responsible for conducting the remediation is also responsible for ensuring that the selected laboratory is capable of performing the analysis. At such time as N.J.A.C. 7:18 incorporates procedures for parameters or categories of parameters not contained in (a)1i through iii above, the procedures in N.J.A.C. 7:18 shall be followed;

v. For the analysis of soil gas or indoor air samples collected to investigate the vapor intrusion pathway for a parameter or category of parameters for which certification exists pursuant to N.J.A.C. 7:18, the laboratory shall be certified for that specific parameter or category of parameters pursuant to N.J.A.C. 7:18 or, at a minimum, have obtained temporary approval to analyze regulatory samples pursuant to N.J.A.C. 7:18-2.5(c);

vi. For the analysis of samples for petroleum hydrocarbons (PHC) follow the Department's Protocol for Addressing Extractable Petroleum Hydrocarbons; and

vii. 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. If the Department does not provide certification for a field analytical method, the laboratory or person shall obtain a site-specific certification for the field analytical method from by the Department's Office of Quality Assurance;

2. The person responsible for conducting the remediation shall reject analytical data as follows:

i. For laboratories performing analyses pursuant to (a)1i above, decertification or suspension of a laboratory pursuant to N.J.A.C. 7:18 for any given parameter or

category of parameters shall result in the rejection of all analytical data for that given parameter or category of parameters generated after the date of decertification or suspension.

ii. For laboratories performing analyses pursuant to (a)1ii above, decertification or suspension of a laboratory pursuant to N.J.A.C. 7:18 for any given parameter or category of parameters shall result in the rejection of all analytical data for that given parameter or category of parameters generated after the date of decertification or suspension.

iii. For laboratories performing analyses pursuant to (a)1iii above, decertification or suspension of a laboratory pursuant to N.J.A.C. 7:18 for any given parameter or category of parameters shall result in the rejection of all analytical data for that given parameter or category of parameters generated after the date of decertification or suspension.

3. Except as provided in (a)5 below, analytical methods used shall have been published or approved by organizations with recognized expertise in the development of standardized analytical methods. These organizations include, without limitation:

- i. The EPA;
- ii. The American Society for Testing and Materials (ASTM);
- iii. The American Public Health Association (APHA);
- iv. The National Institute for Occupational Safety and Health (NIOSH);
- v. The Association of Official Analytical Chemists (AOAC);
- vi. The U.S. Army Toxic and Hazardous Materials Agency (USATHAMA);

vii. The American Water Works Association (AWWA);

viii. The Department;

ix. The United States Department of Defense;

x. The United States Department of Energy; and

xi. The United States Department of Interior.

4. Non-aqueous samples to be analyzed for volatile organics shall be sampled using the procedures specified in either USEPA SW846 Method 5035 (USEPA Publication "Test Methods for Evaluating Solid Waste," third edition, final update III, December 1996, incorporated herein by reference, as amended and supplemented) or the USEPA Contract Laboratory Program Statement of Work for Organic Analysis, Multi Media, Multi Concentration, Revision OLMO4.2, incorporated herein by reference, as amended and supplemented. All samples are to be preserved in the field with the appropriate preservation solution except for the following:

i. Samples that contain high levels of carbonates which would result in rapid or vigorous reaction when the sample is added to the vial containing sodium bisulfate may be shipped in vials without preservative;

ii. Oily waste samples when the solubility of the waste is unknown may be shipped in vials without preservative; or

iii. Samples collected using a field core sampling/storage device (that is, En Core<sup>®</sup> or equivalent. En Core<sup>®</sup> is a product of En Novative Technologies Inc. of Green Bay, Wisconsin.) and the samples are shipped to and analyzed by the laboratory within 48 hours of sampling or the samples are shipped to the laboratory and transferred to vials containing the appropriate preservation

- (1) The name and address of agency that initiated the enforcement action;
- (2) Date of the enforcement action;
- (3) The section of statute, rule or permit allegedly violated;
- (4) The type of enforcement action;
- (5) A description of alleged violations;
- (6) The resolution or status of violation and enforcement action; and
- (7) A description of any potential environmental impact which may have resulted from the alleged violation;

xiv. All areas where non-indigenous fill materials were used to replace soil or raise the topographic elevation of the site, including the dates of emplacement;

xv. All waste disposal records for any onsite landfill that describes the nature, quantity, location, and date of the placement in the landfill. Include waste disposal records for all wastes, drums, tanks, pressurized gas cylinders and all hazardous wastes; and

xvi. All permit requirements pursuant to a Solid Waste Operating Permit, or Disruption and Closure Permit granted pursuant to N.J.A.C. 7:26, including a description of permit requirements completed to date and a description of permit requirements not yet completed.

2. The person conducting the preliminary assessment shall conduct a site visit to verify the findings in (b)1 above.

(c) The person responsible for conducting the remediation who is conducting an evaluation of a child care center pursuant to N.J.S.A. 52:27D-130.4 and N.J.A.C. 10:122 shall conduct a preliminary assessment and/or site assessment pursuant to the Department's Environmental Guidance for Licensing of Proposed Child Care Centers.

(d) If any potentially contaminated areas of concern are identified during the preliminary assessment, the person responsible for conducting the remediation shall conduct a site investigation pursuant to N.J.A.C. 7:26E-3.3 through 3.13.

(e) If no potentially contaminated areas of concern are identified during the preliminary assessment, no further remediation is required at the site except that the person who is required to submit an Industrial Site Remediation Act general information notice pursuant to N.J.A.C. 7:26B-3 shall submit a preliminary assessment report with a Preliminary Assessment form available from the Department:

- 1. By June 1, 2010; or

2. Ninety days after the person responsible for conducting the remediation has notified the Department pursuant to the Industrial Site Recovery Act rules, at N.J.A.C. 7:26B-3.2, whichever is later.

Amended by R.1997 d.124, effective May 19, 1997 (operative July 18, 1997).

See: 28 N.J.R. 1098(a), 28 N.J.R. 2298(a), 29 N.J.R. 2278(b).

In (a), substituted "remediation" for "action"; inserted new (c)1i(6), (c)1ix and (c)1xiv; recodified former (c)1ix through xii as (c)1x through xiii; and in (c)1iii and v, deleted reference to hazardous constituents.

Amended by R.1999 d.241, effective August 2, 1999.

See: 30 N.J.R. 2373(a), 31 N.J.R. 2167(a).

In (c)1ii, deleted "industrial/commercial" following "The", and deleted "or utilized as farmland" following "vegetated".

Amended by R.2005 d.222, effective July 5, 2005.

See: 37 N.J.R. 405(a), 37 N.J.R. 2499(a).

Special amendment, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Rewrote (a); deleted former (b); recodified former (c) as (b) and rewrote (b); and added new (c), (d) and (e).

**7:26E-3.2 Preliminary assessment report**

(a) The person responsible for conducting the remediation who is required to conduct a preliminary assessment pursuant to the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et seq., shall prepare a preliminary assessment report which:

1. Presents and discusses all of the information identified, evaluated or collected pursuant to N.J.A.C. 7:26E-3.1;

2. Is presented in a format that corresponds to the outline of N.J.A.C. 7:26E-3.1(b);

3. Shall also include:

i. Scaled site plans detailing lot and block numbers, property and leasehold boundaries, construction or destruction of buildings, areas where fill or cover material has been brought onsite, paved and unpaved areas, vegetated and unvegetated areas, all areas of concern and active and inactive wells; and

ii. Scaled historical site plans and facility as-built construction drawings, if available;

iii. A copy of the United States Geologic Survey (USGS) 7.5 minute topographic quadrangle that includes the site and an area of at least a one mile radius around the site. This map shall be the most recent USGS revision and shall clearly note the facility location and property boundaries. When a portion of the USGS quadrangle is used, the scale (including a bar scale), north arrow, contour interval, longitude and latitude, along with the name and date of the USGS quadrangle shall be noted on the map; and

iv. A summary of the data and information evaluated pursuant to N.J.A.C. 7:26E-3.1(b)1vii, viii, ix, and x shall be presented by area of concern and all phases of work for a particular area of concern shall be integrated into a single discussion of that area;

4. For each area of concern identified at the site that has not been remediated, the report shall contain a recommendation that either:

i. The area of concern is potentially contaminated, and thus additional investigation or remediation is required; or

ii. The area of concern is not believed to contain contaminants above the applicable remediation standards, in which case the preliminary assessment report shall include documentation for this belief;

5. For each area of concern identified at the site, for which a final remediation document was filed or issued, the person responsible for conducting the remediation shall compare the contaminant concentrations remaining in the area of concern with the Department's applicable remediation standards at the time of comparison, and the report shall contain a recommendation that either:

i. The area of concern contains contaminants above the numerical remediation standard applicable at the time of comparison; however, no further remediation is required because:

(1) The contaminant concentrations remaining in the area of concern or the site are less than an order of magnitude greater than the numerical remediation standard applicable at the time of comparison;

(2) The area of concern was remediated using engineering and institutional controls and these controls are still protective of public health, safety and the environment; or

(3) The area of concern was remediated to a site specific remediation standard and all of the factors and assumptions which are the basis for deriving the site specific remediation standard remain valid for the site;

ii. The area of concern contains contaminants above the numerical remediation standards applicable at the time of comparison and further remediation is required because:

(1) The contaminant concentrations remaining in the area of concern or the site are more than an order of magnitude greater than the numerical remediation standard applicable at the time of comparison;

(2) The area of concern was remediated using engineering and institutional controls and these controls are no longer protective of public health, safety and the environment; or

(3) The area of concern or the site were remediated to an approved site specific remediation standard and some or all of the factors and assumptions which were the basis for deriving the site specific remediation standard are no longer valid;

iii. The area of concern or site does not contain contaminants above the numerical remediation standard applicable at the time of comparison and no further remediation is required; or

iv. The contaminant concentration remaining in the area of concern or the site is more than order of magnitude greater than the numerical remediation standard applicable at the time of comparison. Any person who is liable for contamination pursuant to N.J.S.A. 58:10-23.11g may be required to conduct further remediation; and

6. Includes a completed case inventory document prepared pursuant to the Department's Guidance for the Preparation of the Case Inventory Documents. The case inventory document shall be provided at the front of the report.

(b) The documentation required for (a)5 above shall include a table comparing the levels of contaminants remaining in the area of concern, the numerical remediation standards which are contained in the remedial action workplan that was approved by the Department or was prepared by a licensed site remediation professional and the numerical remediation standards applicable at the time of comparison. The table shall contain all sampling results, including, but not limited to, sample location, sample media, field and laboratory identification numbers, method detection limits as necessary, and analytical results for the area of concern.

Amended by R.1997 d.124, effective May 19, 1997 (operative July 18, 1997).

See: 28 N.J.R. 1098(a), 28 N.J.R. 2298(a), 29 N.J.R. 2278(b).

In (a)3iv, inserted additional N.J.A.C. references; in (a)4, inserted "which has not been remediated under Department oversight,"; added (a)5; inserted new (b); and recodified former (b) as (c).

Amended by R.1999 d.241, effective August 2, 1999.

See: 30 N.J.R. 2373(a), 31 N.J.R. 2167(a).

In (a)5iv, rewrote the last sentence.

Amended by R.2003 d.29, effective February 3, 2003.

See: 34 N.J.R. 170(a), 35 N.J.R. 710(a).

In (a)3iii, inserted "(including a bar scale)" following "the scale".

Special amendment, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

Section was "Preliminary assessment". Rewrote the section.

Amended by R.2011 d.072, effective February 22, 2011.

See: 42 N.J.R. 2297(a), 42 N.J.R. 2360(a), 43 N.J.R. 389(c).

In the introductory paragraph of (a), inserted "who is required to conduct a preliminary assessment pursuant to the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et seq.,".

### 7:26E-3.3 Site investigation

(a) The purpose of a site investigation is to determine if any contaminants are present at the site, or as necessary, have emanated or are emanating from the site above any of the applicable remediation standards or if no further remediation is required. If such contaminants are present at the site, then additional remediation is necessary.

(b) A site investigation shall be conducted based upon the information collected pursuant to the preliminary assessment

requirements in N.J.A.C. 7:26E-3.1 and shall satisfy all of the following requirements:

1. The general sampling requirements in N.J.A.C. 7:26E-3.4;
2. The building interior sampling requirements in N.J.A.C. 7:26E-3.5, if applicable;
3. The soil sampling requirements in N.J.A.C. 7:26E-3.6;
4. The ground water sampling requirements in N.J.A.C. 7:26E-3.7, if applicable;
5. The surface water and sediment sampling requirements in N.J.A.C. 7:26E-3.8, if applicable;
6. The area specific sampling requirements in N.J.A.C. 7:26E-3.9;
7. The background soil sampling requirements in N.J.A.C. 7:26E-3.10, if applicable;
8. The ecological evaluation requirements in N.J.A.C. 7:26E-3.11; and
9. The landfill and historic fill requirements in N.J.A.C. 7:26E-3.12, if applicable.

(c) If required pursuant to an oversight document or other applicable rule, the person responsible for conducting the remediation shall submit reports pursuant to N.J.A.C. 7:26E-3.13 in accordance with the schedules contained in the oversight document or other applicable rule.

(d) The person responsible for conducting the remediation shall conduct a comparison of all site data with the Department's applicable remediation standards, pursuant to the Department's Compliance Guidance, to determine if contaminated areas of concern are present.

(e) The person responsible for conducting the remediation who is required to conduct a site investigation pursuant to the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et seq., or the New Jersey Underground Storage of Hazardous Substances, N.J.S.A. 58:10A-21 et seq., shall complete the site investigation and submit a site investigation report with a form found on the Department's website at [www.nj.gov/dep/srp/srra/forms](http://www.nj.gov/dep/srp/srra/forms) by the later of the following:

1. By March 1, 2011; or
2. One year after the initiation of remediation, pursuant to N.J.A.C. 7:26C-2.2(b).

Amended by R.1997 d.124, effective May 19, 1997 (operative July 18, 1997).

See: 28 N.J.R. 1098(a), 28 N.J.R. 2298(a), 29 N.J.R. 2278(b).

In (a), inserted "unrestricted use", substituted "remediation is required" for "action is required" and deleted "prior to a Department determination that no further action is necessary" following "remediation is necessary"; added (b)7 through (b)9; and in (c), amended N.J.A.C. reference.

Amended by R.2003 d.29, effective February 3, 2003.

See: 34 N.J.R. 170(a), 35 N.J.R. 710(a).

In (a), inserted "or, as necessary, have emanated or are emanating from the site" preceding "any of the applicable".

Special amendment, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

In (a), deleted "unrestricted use" following "applicable"; in (b)9, inserted "landfill and"; rewrote (d); and added (e).

Amended by R.2011 d.072, effective February 22, 2011.

See: 42 N.J.R. 2297(a), 42 N.J.R. 2360(a), 43 N.J.R. 389(c).

Rewrote the introductory paragraph of (e); in (e)1, substituted "March 1, 2011" for "November 26, 2010"; and in (e)2, substituted "One year" for "Two hundred seventy days".

**7:26E-3.4 Site investigation—general sampling requirements**

(a) Sampling shall be conducted in all potentially contaminated areas of concern to determine whether or not any contaminants are present above the applicable unrestricted use remediation standard.

1. Sampling shall be biased to the suspected location of greatest contamination.

2. Samples shall be biased based on professional judgment, area history, discolored soil, stressed vegetation, drainage patterns, field instrument measurements, odor, or other field indicators.

3. Sampling locations shall comply with requirements listed in N.J.A.C. 7:26E-3.5 through 3.9.

4. If access to sampling locations required pursuant to N.J.A.C. 7:26E-3.5 through 3.12 is impractical due to physical obstructions or safety hazards, and no practical sampling alternatives are available, the person responsible for conducting the remediation shall provide the rationale for alternative sampling location in the site investigation report.

(b) All sampling methods and laboratory analyses shall be conducted pursuant to N.J.A.C. 7:26E-2.1.

(c) Composite sampling shall not be conducted, except as necessary for waste classification pursuant to N.J.A.C. 7:26G-5.

Amended by R.1997 d.124, effective May 19, 1997 (operative July 18, 1997).

See: 28 N.J.R. 1098(a), 28 N.J.R. 2298(a), 29 N.J.R. 2278(b).

In (a), inserted "unrestricted use" and added (a)4.

Special amendment, R.2009 d.361, effective November 4, 2009 (to expire May 4, 2011).

See: 41 N.J.R. 4467(a).

In the introductory paragraph of (a), deleted "whether relating to current or former uses of the site" following "concern"; and rewrote (a)4.

Administrative correction.

See: 42 N.J.R. 778(a).

**7:26E-3.5 Site investigation—building interiors**

The person responsible for conducting the remediation shall conduct a site investigation of building interiors when contaminants inside the building have the potential to migrate to the environment outside the building or when contaminants outside the building have the potential to migrate into the building. The person responsible for conducting the remediation shall conduct the site investigation of the vapor in-

trusion pathway required pursuant to this chapter and the Department's Vapor Intrusion Guidance.

Amended by R.1997 d.124, effective May 19, 1997 (operative July 18, 1997).  
See: 28 N.J.R. 1098(a), 28 N.J.R. 2298(a), 29 N.J.R. 2278(b).  
Rewrote section.

### 7:26E-3.6 Site investigation—soil

(a) The site investigation shall satisfy the following requirements for all soil investigations:

1. A survey for buried drums, tanks or waste using test pits, ground penetrating radar, magnetometry electromagnetics, or other techniques capable of detecting metal containers and other waste to an average depth of 20 feet or deeper shall be conducted if:

- i. There have been any reports of buried drums, tanks or waste;
- ii. Ground water contamination is detected and no source has been identified; or
- iii. Aerial photographic history of the site indicates the presence of drums, tanks or waste in or adjacent to regraded and/or filled areas.

2. Soil samples shall be collected for chemical analysis and to provide a profile of subsurface conditions. The profile shall meet the following:

- i. Logs shall be prepared for all soil samples to document subsurface conditions including, without limitation, soil types and description of non-soil materials, field instrument measurements, depth to ground water, if ground water is encountered and document, if present, soil mottling, presence of odor, vapors, soil discoloration, and free and/or residual product, as determined pursuant to N.J.A.C. 7:26E-2.1(a)14;
- ii. Soil shall be classified according to one of the standard systems (for example, Burmeister, Unified, or United States Department of Agriculture);
- iii. All borings shall be performed in accordance with the Subsurface and Percolating Waters Act, N.J.S.A. 58:4A-4.1 et seq. In addition, a monitoring well permit shall be obtained from the Department prior to drilling any soil boring greater than 25 feet below grade. For soil borings to a depth of less than 25 feet below grade, the Department recommends soil not be returned to the boring hole. If contaminated materials are returned to the boring hole, then the person responsible for conducting the remediation shall address the presence of this contamination as part of the remedial action workplan; and
- iv. Soil sample locations may be photo-documented.

3. Initial characterization soil samples (except samples being analyzed for volatile organics) shall be collected at zero to six inches below grade except as required pursuant to N.J.A.C. 7:26E-3.9 (Area Specific).

4. All soil samples to be analyzed for volatile organics shall be collected as follows:

- i. A bulk sampling device that will collect an intact core (for example, splitspoon) shall be used to minimize contaminant loss during sampling; and
- ii. Each core shall be screened with a properly calibrated direct reading instrument equipped with a photo-ionization detector (PID), flame ionization detector (FID), or other suitable instrument capable of detecting the contaminants pursuant to N.J.A.C. 7:26E-2.1(b) to select samples of volatile organics analysis using the following criteria:

(1) If field measurement readings are detected above background:

(A) The coring shall be extended until either background readings are achieved, groundwater is encountered, or bedrock is encountered; and

(B) An undisturbed sample from the six-inch interval registering the highest field measurement reading shall be collected, at a minimum, using the appropriate sample collection method and sampling device for volatile organics analysis pursuant to the requirements specified in N.J.A.C. 7:26E-2.1(a)4; or

(2) If all intervals register the same field measurement reading or all field measurement readings do not exceed backgrounds:

(A) The coring shall be extended to groundwater, bedrock, or 10 feet, whichever is encountered first; and

(B) One undisturbed sample at a minimum, from the six-inch interval at the bottom of the soil boring shall be collected, using the appropriate sample collection method and sampling device for volatile organics analysis pursuant to the requirements specified in N.J.A.C. 7:26E-2.1(a)4; and

iii. Contaminants that cannot be detected with field-screening instruments shall be sampled in accordance with the requirements at N.J.A.C. 7:26E-3.4(a).

5. In all cases, samples shall be collected in discrete six inch increments. If more or less than a six inch increment is sampled because of poor sample recovery or other field logistical problems, an explanation shall be provided in the soil log.

6. Additional sampling of increments below those specified in (a)3 and 4 above shall be completed in cases where the surface has been regraded or if physical evidence in borings indicate the possible presence of contamination.

7. If the designated soil sampling point is within the saturated zone, a sample of the saturated soil shall be collected, when sample recovery is possible, and analyzed.