



Rule Variances

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Tentatively Identified Compounds (TICs) Identified During Analysis of Semi-volatile Organic Compounds in Water Samples

Technical Requirements prior to 8/6/18

3. EPA Target Compound List semivolatile organic compounds excluding phenol and substituted phenols with a library search of the 15 highest TICs that are not alkanes unless otherwise specified by analytical protocol.

Tentatively Identified Compounds (TICs) for semivolatiles - Identify up to 15 organic compounds of greatest concentration which are not surrogates, internal standards, individual alkanes, or targeted compounds listed under TCL. Alkane concentrations attributed to the petroleum product contamination will be summed and reported as total alkanes. For purposes of TIC identification, the total alkanes are treated as one compound.

Technical Requirements since 8/6/18

3. EPA Target Compound List semivolatile organic compounds including 1-Methyl Naphthalene, but excluding phenol and substituted phenols with a library search of the 15 highest TICs that are not alkanes unless otherwise specified by analytical protocol.

Tentatively Identified Compounds (TICs) for semivolatiles - Identify up to 15 organic compounds of greatest concentration which are not surrogates, internal standards, or targeted compounds listed under TCL.





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Tentatively Identified Compounds (TICs) for semivolatiles - Identify up to 15 organic compounds of greatest concentration which are not surrogates, internal standards, or targeted compounds listed under TCL.

HOTSR Rule

4. EPA Target Compound List semi-volatile organic compounds including 1-Methyl Naphthalene, but excluding phenol and substituted phenols with a library search of the 15 highest TICs.

TICs for semi-volatiles - Identify up to 15 organic compounds of greatest concentration that are not surrogates, internal standards, or targeted compounds listed under TCL.





Tentatively Identified Compounds (TICs) Identified During Analysis of Semi-volatile Organic Compounds in Water Samples

The Department will correct this error in the short term through the variance process.

A listserv has been published on the SRP web page with boilerplate variance wording.





Tentatively Identified Compounds (TICs) Identified During Analysis of Semi-volatile Organic Compounds in Water Samples

The person responsible for conducting the remediation shall address this issue through the variance process cited in the Technical Requirements at N.J.A.C. 7:26E-1.7. In the request for a variance, the regulatory citation, description and rationale to be used should be as follows:

"Per the Department's direction as noted in the NJDEP Listserv entitled "[SRRA]: Correction to Technical Requirements for Site Remediation, N.J.A.C. 7:26E, Table 2-1, Footnote 3," N.J.A.C. 7:26E, Table 2-1, Footnote 3 should not have included the phrase "that are not alkanes unless otherwise specified by analytical protocol." As such, no effort was made by the laboratory to specifically differentiate aliphatics as a class of compounds from those compounds determined to be TICs."





Analysis of 1-Methylnaphthalene

In the proposed HOTS Rule, the evaluation of tentatively identified compounds (TICs) in water samples associated with No. 2 heating oil contamination was not required.

In lieu of TIC evaluation, the analysis of 1-methylnaphthalene was required. For consistency, Table 2-1 of the Technical Requirements was amended to be consistent with HOTS Rule.





Analysis of 1-Methylnaphthalene

Proposed HOTS Rule

Type of Heating Oil	Soil	Water
Heating Oil No. 2	Extractable petroleum hydrocarbons (EPH) ¹ Analyze 25 percent of samples that contain EPH greater than 1,000 mg/kg for Naphthalene ⁷ and 2-Methyl Naphthalene ^{7, 8}	VO ² , SVO ⁴

⁴ EPA Target Compound List semi-volatile organic compounds including 1-Methyl Naphthalene, but excluding phenol and substituted phenols.





Analysis of 1-Methylnaphthalene

Proposed Technical Requirements

Petroleum Product	Soil/Sediment	Water
Fuel Oil No. 2 [,Diesel Fuel]	EPH ⁴ Analyze 25 percent of samples where EPH is detected over 1,000 mg/kg for 2-Methyl Naphthalene and Naphthalene ⁸	VO[+TICS] ² SVO[+TICS] ³

³ EPA Target Compound List semivolatile organic compounds **including 1-Methyl Naphthalene, but** excluding phenol and substituted phenols, with a library search of the 15 highest TICs that are not alkanes unless otherwise specified by analytical protocol **(except that analyses of Fuel Oil No. 2 shall not include a library search of the 15 highest TICs, but instead include the analysis of 1,2,4-Trimethylbenzene).**





Analysis of 1-Methylnaphthalene

Adopted HOTS Rule

Type of Heating Oil	Soil	Water
Heating Oil No. 2	Extractable petroleum hydrocarbons (EPH) ¹ Analyze 25 percent of samples that contain EPH greater than 1,000 mg/kg for Naphthalene ⁷ and 2-Methyl Naphthalene ^{7, 8}	VO+TICs ² , SVO+TICs ⁴

⁴ EPA Target Compound List semi-volatile organic compounds including 1-Methyl Naphthalene, but excluding phenol and substituted phenols.





Analysis of 1-Methylnaphthalene

Adopted Technical Requirements

Petroleum Product	Soil/Sediment	Water
Heating Oil No. 2 Diesel Fuel	EPH ⁴ Analyze 25 percent of samples where EPH is detected over 1,000 mg/kg for 2-Methyl Naphthalene and Naphthalene ⁸	VO+TICS ² SVO+TICS ³

³ EPA Target Compound List semivolatile organic compounds **including 1-Methyl Naphthalene, but** excluding phenol and substituted phenols, with a library search of the 15 highest TICs that are not alkanes unless otherwise specified by analytical protocol **(except that analyses of Fuel Oil No. 2 shall not include a library search of the 15 highest TICs, but instead include the analysis of 1,2,4-Trimethylbenzene).**





Analysis of 1-Methylnaphthalene

The Department will correct this error in the short term through the variance process.

A listserv has been published on the SRP web page with boilerplate variance wording.





Analysis of 1-Methylnaphthalene

The person responsible for conducting the remediation shall address this issue through the variance process cited in the Technical Requirements at N.J.A.C. 7:26E-1.7. In the request for a variance, the regulatory citation, description and rationale to be used should be as follows:

“Per the Department’s direction as noted in the NJDEP Listserv entitled “[SRRA]: Correction to Technical Requirements for Site Remediation, N.J.A.C. 7:26E, Table 2-1, Footnote 3 and Heating Oil Tank System Remediation Rules, N.J.A.C. 7:26F, Table 2-1, Footnotes 4 and 5,” semivolatile analysis of water samples associated with petroleum product contamination does not require the specific analysis of 1-methylnaphthalene. As such, no effort was made by the laboratory to analyze for 1-methylnaphthalene as a target compound.”





Submission of Indoor and Ambient Air Analytical Results to the New Jersey Department of Health

The Technical Requirements as part of receptor evaluation for vapor intrusion require the submission of certain information to the New Jersey Department of Health (NJDOH) at N.J.A.C. 7:26E-1.15(h):

(h) Within 14 days of receipt of the analytical results, the person responsible for conducting the remediation shall submit on a CD in Adobe Portable Document Format (PDF), all indoor and ambient air analytical results, including all maps and figures related to the indoor air sampling, and a sample location spreadsheet to the New Jersey Department of Health and Senior Services, Consumer, Environmental and Occupational Health Service, PO Box 360, Trenton, NJ 08625-0360.





Submission of Indoor and Ambient Air Analytical Results to the New Jersey Department of Health

The NJDOH has recently informed the New Jersey Department of Environmental Protection (NJDEP) that it no longer requires the submission of indoor and ambient air analytical results **except for samples collected at educational facilities and child care centers as defined in "Standards for Indoor Environment Certification and for Licensure of Indoor Environmental Consultants," N.J.A.C. 8:50-1.3.**





Submission of Indoor and Ambient Air Analytical Results to the New Jersey Department of Health

The Department will correct this error in the short term through the variance process.

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Submission of Indoor and Ambient Air Analytical Results to the New Jersey Department of Health

Until the Technical Requirements can be amended, the person responsible for conducting the remediation shall address this issue through the variance process cited in the Technical Requirements at N.J.A.C. 7:26E-1.7. For the variance, the regulatory citation, description, and rationale to be used should be as follows:

"Per the Department's direction as noted in the NJDEP Listserv entitled "[SRRA]: Submission of indoor and ambient air analytical results to the New Jersey Department of Health," indoor and ambient air analytical results, including all maps and figures related to the indoor air sampling, and a sample location spreadsheet do not need to be submitted to the New Jersey Department of Health pursuant to N.J.A.C. 7:26E-1.15(h) unless samples are collected at educational facilities or child care centers as defined in "Standards for Indoor Environment Certification and for Licensure of Indoor Environmental Consultants", N.J.A.C. 8:50-1.3."





Submission of Indoor and Ambient Air Analytical Results to the New Jersey Department of Health

Indoor and ambient air samples from educational facilities and child care centers should be sent to NJDOH pursuant to N.J.A.C. 7:26E-1.15(h) to the following address:

**New Jersey Department of Health
Environmental and Occupational Health
Service**

ATTN: Childcare Unit

PO Box 369

Trenton, N.J. 08625-0369





Emerging Chemicals Site Remediation Program Perspective

Questions?

