



Department of Energy & Environmental Protection
 Bureau of Water Protection and Land Reuse
 Remediation Division

79 Elm Street, Hartford, CT 06106-5127
 (860) 424-3705 www.ct.gov/deep/remediation

DEEP USE ONLY (Date Stamp)

REQUEST FOR APPROVAL FOR USE OF EPH/VPH/APH METHODS AND ASSOCIATED CRITERIA

In accordance with Sections 22a-133k-1 through k-3 (RSRs)

Please submit this completed form when requesting the Commissioner's approval to use site specific clean-up criteria for extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH), and/or air phase petroleum hydrocarbons (APH), as recommended in the July 2012 Technical Support Document titled, "[Petroleum Hydrocarbons Using the EPH/VPH/APH Analytical Methods and Criteria Development](#)". The Commissioner's approval is required pursuant to the Remediation Standard Regulations, Sections 22a-133k-1 through k-3 (RSRs) of the Regulations of Connecticut State Agencies (RCSA), for use of the EPH/VPH/APH Method and criteria listed below, at the below-referenced site.

The use of this form will expedite the approval process of the established methodology and criteria. Upon approval, this form will be returned to the sender to document such approval.

All sections of this form must be filled out, as applicable.

Check the box to indicate the program for which this form is being submitted:

- Connecticut General Statutes (CGS) section 22a-134a(a)-(e), Property Transfer Program
- CGS section 22a-133x, Voluntary Remediation Program
- CGS section 22a-133y, Voluntary Remediation Program
- Other (specify)

Site Identification

Rem ID#

Name of Site:
 Street Address:
 City/Town: State: Zip Code: -
 Groundwater Classification:

Contact Information

Person submitting Request: Title:
 Business Name: E-mail Address:
 Mailing Address:
 City/Town: State: Zip Code: -
 Business Phone: - - Ext. Fax: - -

"I hereby request approval, in accordance with Sections 22a-133k-2(b)(5), 22a-133k-2(c)(6), 22a-133k-3(h)(1), 22a-133k-3(b)(3)(B), and/or 22a-133k-3(c)(4)(B) of the RCSA, to:

- use the Extractable Petroleum Hydrocarbons (EPH) Method, in accordance with the "State of Connecticut Department of Energy and Environmental Protection, Recommended Reasonable Confidence Protocols, Quality Assurance and Quality Control Requirements, Extractable Petroleum Hydrocarbons, by the Massachusetts DEP EPH Method" (May 2009); and/or
- use the Volatile Petroleum Hydrocarbons (VPH) Method, in accordance with the "State of Connecticut Department of Energy and Environmental Protection, Recommended Reasonable Confidence Protocols, Quality Assurance and Quality Control Requirements, Volatile Petroleum Hydrocarbons, by the Massachusetts DEP VPH Method" (May 2009); and/or
- use the Air Phase Petroleum Hydrocarbons (APH) Method, in accordance with the MADEP "Method For The Determination Of Air-Phase Petroleum Hydrocarbons (APH)", December 2008; together with
- the criteria listed in the table below for petroleum hydrocarbons in soil and/or groundwater as additional polluting substances and/or alternative criteria for SWPC and VolC at the site identified above."

Check the box indicating the criteria for which approval is requested. Selection of criteria must correspond to the groundwater classification of the site.

Remediation Criteria for Petroleum Hydrocarbons Using EPH / VPH / APH Methodologies

	Residential Direct Exposure Criteria	Industrial / Commercial Direct Exposure Criteria	GA Pollutant Mobility Criteria	GB Pollutant Mobility Criteria
Hydrocarbon Range	Criterion using EPH / VPH / APH methods (mg/kg)			
Aliphatic Hydrocarbons C5-C8	<input type="checkbox"/> 500	<input type="checkbox"/> 1,000	<input type="checkbox"/> 6	<input type="checkbox"/> 55
Aliphatic Hydrocarbons C9-C12	<input type="checkbox"/> 500	<input type="checkbox"/> 1,000	<input type="checkbox"/> 15	<input type="checkbox"/> 140
Aliphatic Hydrocarbons C9-C18	<input type="checkbox"/> 500	<input type="checkbox"/> 1,000	<input type="checkbox"/> 20	<input type="checkbox"/> 140
Aliphatic Hydrocarbons C19-C36	<input type="checkbox"/> 1,000	<input type="checkbox"/> 2,500	<input type="checkbox"/> 20	<input type="checkbox"/> 200
Aromatic Hydrocarbons C9-C10	<input type="checkbox"/> 500	<input type="checkbox"/> 1,000	<input type="checkbox"/> 5	<input type="checkbox"/> 20
Aromatic Hydrocarbons C11-C22	<input type="checkbox"/> 500	<input type="checkbox"/> 1,000	<input type="checkbox"/> 20	<input type="checkbox"/> 30

	Groundwater Protection Criteria	Surface Water Protection Criteria	Residential Groundwater Volatilization Criteria	Industrial / Commercial Groundwater Volatilization Criteria
Hydrocarbon Range	Criterion using EPH / VPH / APH methods (ug/l)			
Aliphatic Hydrocarbons C5-C8	<input type="checkbox"/> 280	<input type="checkbox"/> 200	<input type="checkbox"/> 100	<input type="checkbox"/> 215
Aliphatic Hydrocarbons C9-C12	<input type="checkbox"/> 700	<input type="checkbox"/> 770	<input type="checkbox"/> 100	<input type="checkbox"/> 160
Aliphatic Hydrocarbons C9-C18	<input type="checkbox"/> 700	<input type="checkbox"/> 770	<input type="checkbox"/> 100	<input type="checkbox"/> 155
Aliphatic Hydrocarbons C19-C36	<input type="checkbox"/> 1,000	<input type="checkbox"/> 530		
Aromatic Hydrocarbons C9-C10	<input type="checkbox"/> 100	<input type="checkbox"/> 200	<input type="checkbox"/> 450	<input type="checkbox"/> 3,300
Aromatic Hydrocarbons C11-C22	<input type="checkbox"/> 140	<input type="checkbox"/> 100	<input type="checkbox"/> 1,710	<input type="checkbox"/> 12,000

Rem ID#

	Residential Soil Vapor Volatilization Criteria	Industrial / Commercial Soil Vapor Volatilization Criteria
Hydrocarbon Range	Criterion using EPH / VPH / APH methods (mg/m ³) / (ppmV)	
Aliphatic Hydrocarbons C5-C8	<input type="checkbox"/> 100 mg/m ³ / 25 ppmV	<input type="checkbox"/> 460 / 120
Aliphatic Hydrocarbons C9-C12	<input type="checkbox"/> 90 / 15	<input type="checkbox"/> 415 / 70
Aliphatic Hydrocarbons C9-C18		
Aliphatic Hydrocarbons C19-C36		
Aromatic Hydrocarbons C9-C10	<input type="checkbox"/> 10 / 2	<input type="checkbox"/> 60 / 15
Aromatic Hydrocarbons C11-C22		

Signature of Person Requesting Approval

_____	/ /
Signature	Date
_____	_____
Printed Name of Signatory	Title (if applicable)

This completed form should be submitted to:

REMEDATION DIVISION, 2nd Floor
BUREAU OF WATER PROTECTION AND LAND REUSE
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Section Below Reserved for DEEP Approval

The Request received by DEEP on / / is hereby approved.

Nothing in this approval shall affect the Commissioner's authority to institute any proceeding, or take any action to prevent or abate pollution, to recover costs and natural resource damages, and to impose penalties for violations of law, if any. If at any time the Commissioner determines that the approved actions have not fully characterized the extent and degree of pollution or have not successfully abated or prevented pollution, the Commissioner may institute any proceeding, or take any action to require further investigation or further action to prevent or abate pollution. This approval applies only to the methodology and criteria identified in this request. In addition, nothing in this approval shall relieve any person of his or her obligations under applicable federal, state and local law.

Patrick F. Bowe
Director
Remediation Division
Bureau of Water Protection and Land Reuse

Date Approved

Section Below Reserved for DEEP Disapproval

The Request received by DEEP on / / is hereby disapproved.

Rationale:

Patrick F. Bowe
Director
Remediation Division
Bureau of Water Protection and Land Reuse

Date Disapproved

You may re-submit the request when the reason(s) for disapproval have been adequately addressed.