



Environmental Condition Assessment Form (ECAF) Instructions

Purpose:

The Environmental Condition Assessment Form (ECAF) is a stand-alone document to provide basic site information to DEEP and the public, with no reference made to attachments (except site maps and receptor surveys). An ECAF must accompany Forms I, III, and IV for the [Property Transfer Program](#) (PTP) and [Voluntary Remediation Program](#) (VRP) filings submitted to DEEP. The ECAF is used by DEEP to determine whether DEEP oversight of the investigation and remediation at a specific site is necessary, or whether a Licensed Environmental Professional (LEP) may verify that site investigation has been performed in accordance with prevailing standards and guidelines and that site remediation has been performed in accordance with the [Remediation Standard Regulations](#) (RSRs).

In making a determination whether a LEP may verify the investigation and remediation of the site, DEEP considers 1) the potential risk to human health and the environment posed by a release; 2) the degree of environmental investigation at the site; 3) the proximity of the site to significant natural resources; 4) the land uses surrounding the site; 5) the complexity of the environmental condition of the site; and 6) any other factor the Commissioner deems relevant. The information that DEEP staff need to consider and review in the determination process is to be included on the ECAF. DEEP recognizes that for some sites, some of the information requested on the ECAF might not be available at the time the ECAF is submitted. DEEP recommends that all available information be used to complete this form, as is required by CGS section 22a-134a(d).

Part I: Site Identification

Name and Address of Site - Provide the full, legal company/firm name (If [registered with the Secretary of the State](#), fill in the name exactly as it is shown on the registration.). If identifying an individual's property, provide the person's full legal name. Provide the full and exact street address of the location of the site. If the property is in more than one town or is comprised of a number of parcels, please attach that information to the ECAF.

Location Map - A figure, based on US Geological Survey (USGS) quadrangles, delineating the limits of the property and an area extending at least ½ mile from the property line in all directions. The location map should include a title block listing the site name, street address, town, map scale, the date prepared or revised, names of the USGS maps utilized, and a reference to the ECAF to which it is attached. Where applicable, the location map should also illustrate the location of sensitive receptors and off-site impacts.

Part II: Contact Information

1. *Name of Business/Person* - The authorized representative listed here **must sign and certify the ECAF** at the end of the Form:
 - For a **corporation**, the authorized representative must be a responsible corporate officer (i.e., president, vice president, secretary, or treasurer of the corporation) in charge of a principle business function, or any other person who performs similar policy or decision-making functions for the corporation.
 - For a **partnership or sole proprietorship**, the authorized representative must be a general partner or proprietor, respectively. For a LLC, the authorized representative must be a member of the LLC.
 - For a **municipality or government entity**, the authorized representative must be a person authorized to make decisions about the site.
2. *Primary Contact* - Provide contact information of the individual to whom DEEP's technical correspondence and inquiries should be directed, which may be the LEP of record.
3. *Parcel Owner* - Provide the name of the property owner as recorded in the Town or City land records, including the owner's full mailing address, e-mail address, and phone number.

Part IV: Site History

1. *DEEP Program Involvement*
 - *Previous Filings* - List all PTP, VRP, and RCRA Corrective Action [RCSA § [22a-449\(c\)-105\(h\)](#)] filings submitted to DEEP. For PTP filings, include the type of Form submitted (I, III or IV).
 - *Verifications* - List all verifications that have been submitted for the site. Identify the type of Verification [Final, Interim, Portion, Release Area, Form IV Supporting, 133y, etc.], the Ver#, and the Primary Rem# associated with the verification.
 - *Significant Environmental Hazard Notifications* - List all [Significant Environmental Hazard Notifications](#) (SEHN) submitted to DEEP under CGS § 22a-6u, including the SEHN date and, if applicable, the date Certification of Abatement of the hazard was issued by DEEP or DEEP notification that no further abatement action was required (Resolution Date).
 - *Enforcement Actions* - Indicate if an Enforcement Action has been taken by either EPA or DEEP. List the type(s) of enforcement action, (Notice of Violation, an Administrative Order, a Consent Order, a Cease and Desist Order, a court judgment, a removal action under CERCLA, or any other type of corrective action). Include the enforcement identification number, the type of action, the date of issuance, the party it was issued to, and the current status of the action.
 - *Other DEEP Involvement* - Briefly list any other DEEP involvement with the site that is not included above and give timeframes for each activity. Such activities may include, for

example, permitting activities, in which case the permit identification number should be provided (e.g., wastewater discharge permit WPC#000000).

2. *RCRA* - Specify whether the site is or has been a treatment, storage or disposal facility (TSDf); a large quantity generator (LQG); or a small quantity generator (SQG) and provide the nine-digit EPA Identification Number assigned to the facility under RCRA (e.g., EPA ID #CTD000000000). Specify whether the permit status of the RCRA regulated units is “operating” and/or under “long-term stewardship”.
3. *Releases Reported to DEEP* - Specify whether any spills of petroleum or chemicals at the site have been reported to DEEP Emergency Response and Spills Prevention Division. If so, provide information regarding the location, notification date, material, and quantity released.
4. *Briefly summarize the current and historical industrial and/or commercial use(s) of the site* - This should include the types of products manufactured, processed, or repaired and the types of services rendered. Also, list other corporate names under which information may be available concerning the site.
5. *Briefly summarize the hazardous wastes and hazardous substances (including petroleum products) presently and formerly handled at the site* - Specify where and how the hazardous substances were stored, handled, and disposed of at the site and if they were present as raw materials, intermediate/final products, byproducts, or used as a chemical additive or treatment (substance in quantities greater than five gallons). See [Appendix B and D of RCRA Section 22a-430-4, Title 40 of the Code of Federal Regulation \(40 CFR\) Part 261, and 40 CFR Part 116.4](#) for listed hazardous wastes and hazardous substances. Include present and former barrel storage areas, underground and above ground storage tanks, dispensing areas, degreasers, solvent stills, waste oil storage areas, discharge pipes, drywells, leachfields, floor drains, service or storage areas, pits, ponds, piles, lagoons, and landfills used for waste disposal or storage on the site. Indicate when specific methods were initiated or ceased. The Site Plan described in Part I.5. should depict the location of these activities.
6. *Emerging Contaminant Considerations* – Answer the questions to indicate whether [emerging contaminants](#) could be present, either because they were manufactured or were used, applied, or otherwise present as a result of activities or incidents at the site. Indicate if emerging contaminants not mentioned here were used onsite and indicate the potential contaminant and associated site use.

Part V: Environmental Setting - Physical

1. *Geologic and Hydrogeologic Summary* - Briefly describe the overburden material and bedrock at the site (e.g., “glacial till” and “schist”, respectively). Indicate the ranges of depths to groundwater (feet) and depths to bedrock (feet). Provide information about the seasonal low water table, the groundwater flow direction and rate (feet/year), and the horizontal hydraulic conductivity (feet/day). This information may be gathered through environmental investigation of the site and supplemented by published information. If this information is not yet known, type “UNK”.

2. *Surface Water* - Name the nearest surface water body, including wetlands, to which groundwater from the site may discharge and indicate the distance from the site to the nearest surface water body. Provide the surface water classification, which can be found on the [Water Quality Classification Maps of Connecticut](#).
3. *Ecological Considerations* – Check the boxes to indicate if an Ecological Risk Assessment (ERA) was conducted or not, the level of assessment, and if further assessment of impact to ecological receptors is needed or not. Provide the date the ERA was completed, if applicable. Supplemental information on ecological considerations may be found in the SCGD and at [Ecological Risk Assessment](#).

Part VI: Environmental Setting – Cultural

At a minimum, it is necessary to conduct an assessment of the environmental setting for the site. As described in Section 3.2.5 of the [SCGD](#), this gathering of information is included as part of the Phase I Environmental Site Assessment. In some cases, establishing the environmental setting for a site may be sufficient to determine that no potential receptors exist or that there is no exposure pathway to these receptors. Since information about the environmental setting is necessary for DEEP to make a determination to delegate a site to a LEP, if information in Part VI.1. through 5. is not complete at the time of ECAF submittal, DEEP is more likely to maintain oversight because of the potential for risk to receptors.

1. *Surrounding Land Uses* - Check as many boxes as apply for the area within a ¼-mile radius of the site. Sensitive water resources include shellfish beds, public fishing areas, significant wetland complexes, public water supplies, and sites found in the Natural Diversity Database (NDDB sites).
2. *Sensitive On-site Land Uses* - Check as many boxes as apply for cultural or natural features on-site that may be particularly sensitive to impacts from pollution at the site.
3. *Groundwater* - Identify the most stringent groundwater classification/groundwater classification goal for groundwater at and downgradient of the site ([Water Quality Classification Maps of Connecticut](#)). If the groundwater at the site is used as a water supply, indicate for what purpose the water is being used (if not used, check none).

If known, provide the address and the distance to the closest off-site water supply well downgradient of the site. The distance should be measured from the edge of the closest release area to the well. Indicate if a [public water supply regulated by the Connecticut Department of Public Health \(DPH\)](#) exists onsite and if the site is within the zone of contribution for a public water supply well.

Indicate whether any part of this site is within a Level A or B [Aquifer Protection Area \(list of towns with Aquifer Protection Areas\)](#).

4. *Public Utilities* - Indicate whether a public water supply service is provided to the site and whether public water is provided to all developed areas within a ¼-mile radius of the site (this

should be confirmed by the potable well survey). Provide information pertaining to current and historic on-site drinking water supply wells, including the dates that these were in use. Indicate whether the site is connected to municipal sewer services and provide information pertaining to current and historic on-site septic systems, including the dates that these were in use.

5. *Potential Exposure Pathways* - Based on the CSM, provide information in the table pertaining to each type of potential receptor. The presence of drinking water receptors, such as public and private wells and aquifer protection areas, present the potential for risk to human health. The presence of soil pollution concentrations in excess of the RSR Residential Direct Exposure Criteria and groundwater or soil vapor pollution concentrations in excess of the Residential Volatilization Criteria presents the potential for risk to human health. The presence of ecological receptors, such as aquatic (surface water) and terrestrial (sediment) life, presents the potential for risk to the environment. If soil, groundwater, or soil vapor pollution concentrations are in excess of the [Significant Environmental Hazard Threshold Criteria](#), they present the potential for short-term risk to human health, and DEEP must be notified (CGS section 22a-6u).

Check the box marked “yes” if a pathway *potentially* exists to the specified type of receptor. Check the box marked “no” if information about a site is sufficient to indicate that an exposure pathway does not exist or the potential for an exposure pathway does not exist. Check the box marked “unknown” if there is insufficient information available to determine whether or not an exposure pathway exists. If there was a Significant Environmental Hazard Notification for which DEEP has issued a Certification of Abatement, provide the date of Certification.

6. *Receptor Surveys* – A [receptor survey](#) is an assessment conducted to determine the potential for pollution to reach receptors, which may present a risk to human health or the environment. The specific type of receptor survey that may be necessary depends on the type of receptor(s) at risk (e.g., water supply wells, human contact as a result of direct exposure to polluted soils or vapors, aquatic or terrestrial receptors).

Check the applicable boxes to indicate if a potable well, vapor intrusion, and/or surface water receptor surveys have been completed and the coverage of each survey. **If a receptor survey(s) is warranted and has not been completed at the time of the ECAF, DEEP is more likely to maintain oversight because of the potential for risk to receptors.**

Part VII: Environmental Assessment

1. *Phases of Environmental Investigation/Remediation Completed* - Provide dates (month and year) for the different phases of field investigation (described in DEEP’s [Site Characterization Guidance Document](#)).
2. *Soil Investigation* - Provide the number of samples that were analyzed versus the number of soil samples where pollution was detected above laboratory reporting limits during environmental investigation of the site.

3. *Soil Vapor Investigation* - Provide the number of soil vapor samples that were analyzed versus the number of soil vapor samples where pollution was detected above laboratory reporting limits during environmental investigation of the site. (This information should correlate with Part VI.5.)
4. *Sediment Investigation* - If sediment investigation is not needed, explain why.
5. *Groundwater Investigation* - Indicate if the three-dimensional extent of each plume has been fully delineated (i.e. that the limit of detectable contamination has been determined).
6. *Surface Water Investigation* - Check the boxes to indicate that a surface water investigation was completed; and if, based on that investigation, there was any impact to surface water or no impact to surface water.
7. *Data Gap Evaluation* - Check the box indicating whether a data gap evaluation, in context of the conceptual site model (CSM) and in accordance with the SCGD, was completed or is pending and whether or not these data gaps are significant, insignificant, or if there are none remaining. Briefly describe the work that remains to be conducted, as indicated by the data gap evaluation.

Part VIII: Contaminants in the Environment

The table of Contaminants in the Environment should provide a brief summary of the releases identified in each area of concern (AOC). This information should correlate with that provided in Part VII., but in an expanded manner. List VOCs, SVOCs, metals, PFASs, and pesticides individually (e.g., PCE, As, chlordane, PFOA). Compounds that are PCBs and petroleum hydrocarbons may be listed as sums of each contaminant grouping. An instruction table, [example table](#), and [abbreviation key](#) are provided below. DEEP requests only contaminant levels over the RSR criteria (or APS Fast-Track) be listed, as DEEP uses that information to evaluate the magnitude of the release(s).

Instruction Table: Fill out the table with the information requested in each column as specified below:

Area of Concern and Name	Material, Quantity, and Date Released	Phases of Investigation Completed	Contaminants of Concern	List All Analytes Detected in Soil	Analytes Detected in Soil [Sediment] >RSRs (Max. Conc. and Depth)	Volatilized Analytes Detected in Soil Vapor (Max. Conc.)	List All Analytes Detected in Groundwater	Analytes Detected in Groundwater >RSRs (Max. Conc. and Depth)	Remediation Status and Date
<p>List all AOCs identified on the site plan and in the Phase I ESA by number and name (locations at a site where hazardous waste and/or hazardous substances including petroleum products have been or may have been used, stored, treated, handled, disposed, spilled, and/or released to the environment).</p>	<p>Provide the material (substance), quantity, and date of the release (if unknown, insert UNK). The quantity may be presented in units of volume or weight. Indicate the date, if known.</p> <p>Release volume and date may be estimated if not known (est).</p>	<p>Indicate the phases of investigation conducted for each AOC, and the date each was completed.</p>	<p>For each AOC, list all contaminants of concern (COCs) or contaminant groupings for which analyses were performed.</p>	<p>List all Analytes Detected in Soil for each AOC. Abbreviations (contaminant codes) for many common chemical pollutants are on p. 10. Create abbreviations for COCs not listed, and complete the Additional Contaminant Abbreviation Table at the bottom left of the page.</p>	<p>List the maximum concentrations detected in soil or sediment that are over levels specified in the RSRs (or APS Fast-Track) and the depth at which they were detected in feet below ground surface. If detected in soil, list the analyte and amount detected in regular font (e.g., As 15 ppm); if in sediment, in square brackets (e.g., [As 15 ppm]), and if considered naturally occurring as defined in the RSRs, in chevron brackets (e.g., <As 15 ppm>).</p>	<p>List the maximum concentrations of volatilized analytes detected in soil vapor for each AOC or NT if soil vapor was not tested.</p> <p>Make sure to include the units of measure.</p>	<p>List all analytes detected in groundwater.</p>	<p>List the maximum concentrations detected in groundwater that are over levels specified in the RSRs (or APS Fast-Track) and indicate the depth at which it was found as the screened/open interval in feet below ground surface. Designate whether detected in overburden ("O") or bedrock ("B") groundwater. If considered naturally occurring as defined in the RSRs, place in chevron brackets (e.g., <As 15 ppm>).</p>	<p>Provide a brief description indicating the status and date of remediation.</p>

Example Table:

Area of Concern and Name	Material, Quantity, and Date Released	Phases of Investigation Completed	Contaminants of Concern	List All Analytes Detected in Soil	Analytes Detected in Soil [Sediment] >RSRs (Max. Conc. and Depth)	Volatilized Analytes Detected in Soil Vapor (Max. Conc.)	List All Analytes Detected in Groundwater	Analytes Detected in Groundwater >RSRs (Max. Conc. and Depth)	Remediation Status and Date
AOC-1 Tank Farm	No. 2 Fuel Oil (~500gal) 1997 and dichromate wastewater (200gal) 7/15/85	I - 10/5/98 II - 7/9/00 III - 6/1/01	ETPH, Metals	ETPH Cr	ETPH 1000 ppm (4-6') Cr 56 ppm (5-7') [Cr 0.6 ppm] (0-2')	NT	ETPH	ETPH 271 ppb (O=5-15')	soil removed 9/1/01
AOC-2 Dry Cleaning Machine	PCE UNK - before 11/13/97	I - 10/5/98 II - 7/9/00	CVOCs	PCE TCE	PCE 500 ppm (0-2')	PCE 10 ppmv TCE 8 ppmv	PCE 11DCE TCE	PCE 50 ppb 11DCE 15 ppb (B=20-25')	further investigation planned
AOC-3 Dumpster		I - 10/5/98 II - 7/9/00	ETPH, Metals	As	<12 ppm> (0-2')	NT	none	none	no further action

Additional Contaminant	Abbreviation

Key

NT	not tested
UNK	unknown
< >	background / naturally occurring
[]	sediment
O	overburden
B	bedrock

Part IX: LEP Information

Licensed Environmental Professional - Pursuant to CGS section 22a-134(17), the ECAF must be prepared under the supervision of an LEP for all sites. An LEP's professional services must be rendered in accordance with the Rules of Professional Conduct (Section 22a-133v-6 of the RCSA).

If more than one environmental professional is employed or retained on the ECAF, provide the name of the lead environmental professional to whom DEEP may direct questions about the environmental conditions at the site.

Part X: Certification

Authorized Signature

The certifying party **must be the same individual listed as submitting the ECAF in Part II** of this Form. Pursuant to CGS section 22a-134a(d), the certifying party to a Form I, III or IV shall simultaneously submit a complete ECAF to the Commissioner and certify that the information in the ECAF is correct and accurate to the best of the certifying party's knowledge and belief.

Pursuant to CGS section 22a-133x(a), anyone may enter into the VRP by submitting an ECAF to the Commissioner.

- For a **corporation**, the ECAF must be signed by a responsible corporate officer (i.e., a president, vice president, secretary, or treasurer of the corporation) in charge of a principal business function or any other person who performs similar policy or decision-making functions for the corporation.
- For a **partnership** or **sole proprietorship**, the ECAF must be signed by a general partner or proprietor, respectively.
- For a **LLC**, the ECAF must be signed by a member of the LLC.
- For an **individual**, the ECAF must be signed by the individual, with a statement of the relationship of the signatory to the site.
- For a **municipality** or other **government entity**, the ECAF must be signed by an official who has decision-making authority regarding the site.

NOTE: This certification *must* be notarized by a notary public or witnessed by a commissioner of the superior court, where allowed by law.

Contaminant Abbreviations

Contaminant	Abbreviation
Volatile Organics	
acetone	ACT
benzene	BZ
2-butanone (methyl ethyl ketone)	MEK
carbon tetrachloride	CTC
chlorobenzene	CBZ
chloroform	CFM
dibromochloromethane	DBCM
1,2-dichlorobenzene	2DCB
1,3-dichlorobenzene	3DCB
1,4-dichlorobenzene	4DCB
1,1-dichloroethane	11DCA
1,2-dichloroethane	12DCA
1,1-dichloroethylene	11DCE
cis-1,2-dichloroethylene	c12DCE
trans-1,2-dichloroethylene	t12DCE
1,2-dichloropropane	DCPA
1,3-dichloropropene	DCPE
1,4-dioxane	14-D
ethylbenzene	EBZ
ethylene dibromide	EDB
methyl tert-butyl ether	MTBE
methyl isobutyl ketone	MIBK
methylene chloride	MC
tetrachloroethylene	PCE
toluene	TL
1,1,1-trichloroethane	TCA
trichloroethylene	TCE
vinyl chloride	VC
xylenes	XYL

Contaminant	Abbreviation
Semi-volatile Organics	
acenaphthylene	ACY
acenaphthene	ACE
anthracene	ANTH
benzo(a)anthracene	B(a)A
benzo(b)fluoranthene	B(b)F
benzo(k)fluoranthene	B(k)F
benzo(a)pyrene	B(a)P
bis(2-ethyl hexyl) phthalate	BEHP
fluoranthene	FLAN
fluorene	FLR
naphthalene	NAPH
pyrene	PYR
Miscellaneous	
cyanide	CN
petroleum hydrocarbons	ETPH/EPH/VPH
polychlorinated biphenyls	PCBs
perfluorooctanoic acid	PFOA
perfluorooctane sulfonate	PFOS
perfluorononanoic acid	PFNA
perfluorohexane sulfonate	PFHxS
Inorganics	
Use periodic table of the elements abbreviations for heavy metals and salts.	