



Department of Energy & Environmental Protection
Bureau of Water Protection and Land Reuse
Remediation Division
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INSTRUCTIONS FOR COMPLETION OF A VERIFICATION FORM SUPPORTING THE FILING OF A FORM IV (DEEP-LEP-VER-4S-P and DEEP-LEP-VER-4S-B)

The purpose of the Supporting Form IV Verification Form is to document the written opinion of an environmental professional, licensed pursuant to Section 22a-133v of the CGS, that an investigation of a specific parcel has been completed in accordance with prevailing standards and guidelines - including but not limited to the Site Characterization Guidance Document (SCGD), and that the property or business establishment, as applicable, has been remediated in accordance with the RSRs, *except* for groundwater monitoring and/or the recording of an ELUR.

Such a verification is required to support the filing of a Form IV pursuant to the Property Transfer Law, §Section 22a-134a. The Supporting Form IV Verification is required to be submitted simultaneously with a Form IV filing.

Pursuant to §22a-134a, a verification shall be rendered on a form prescribed by the Commissioner. The Supporting Form IV Verification Form (Property) and the Supporting Form IV Verification Form (Business) are the prescribed forms to support the filing of a Form IV, as applicable.

§22a-134(13) states, in part, that, in order to file a Form IV, the establishment has been remediated in accordance with the RSRs, *except* for natural attenuation monitoring, post remediation groundwater monitoring, and/or the recording of an environmental land use restriction (ELUR). However, the June 27, 2013 Amended RSRs removed the requirement for post-remediation monitoring, because all monitoring to demonstrate compliance must now be collected after remediation is completed, which is technically 'post-remediation monitoring'. Therefore, a Form IV is applicable when "compliance" monitoring is underway, but hasn't been completed.

If the administrative processing of an ELUR is an outstanding issue to achieve compliance with applicable criteria of the RSRs, it is expected that the LEP can demonstrate and document that the intended ELUR will be applicable. If the Department of Energy and Environmental Protection (DEEP) disapproves the applicability of the ELUR, the Form IV filing will be invalid and a revised filing of a Form III (and filing fee) will be pursued.

The Supporting Form IV Verification Form (**VF**) is essentially a checklist of all requirements and available provisions in the RSRs. The **VF** includes prompts to guide the LEP in proper completion of the **VF**. All applicable checkboxes should be marked. The **VF** also includes specific references to RSRs provisions. All provisions used to achieve compliance with each criterion are to be marked.

DEEP advises that each referenced RSR section be reviewed prior to completing the **VF** to ensure the application of each provision marked as being used to achieve compliance has been properly applied. *Relevant findings (as defined in the Verification Report Guidance Document) that support the applicability and use of the RSRs are to be presented in the Verification Report, which is expected to be attached to the VF.*

The **VF** is inclusive of all releases applicable to the verification. Therefore, certain provisions may be applicable to more than one (1) release area. The **VF** includes space to identify the applicable release areas for each application.

Because of fee processing associated with the filing of a Form IV, the Form IV and all supporting documents (including, but not limited to the Supporting Form IV Verification) should be mailed or hand delivered to:

CENTRAL PERMIT PROCESSING UNIT, 1st FLOOR
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

After the Central Permit Processing Unit processes the fee, the Form IV and associated documents will be forwarded to the Remediation Division of the Bureau of Water Protection and Land Reuse.

Upon receipt of a complete Form IV filing, the Certifying Party will be notified by the Department that the Form IV filing is complete. This notification does not attest to the adequacy of the Supporting Form IV Verification. Once the Form IV filing is acknowledged as complete, the **VF** will undergo an administrative completeness review. A complete **VF** will include the Verification Report. Incomplete **VF**'s (including Verification Form and Verification Report) will either be: (1) not processed until complete, or (2) the Verification will be rejected, or (3) the Verification will be flagged for audit. DEEP's response actions will be evaluated on a case-by-case assessment.

General Requirements

Ver# - The Verification Number is a unique identifier to each verification received by the Commissioner. The Ver# is auto-assigned when the verification is entered into DEEP's database. The Ver# will be entered onto the **VF** by DEEP.

Rem# - The Remediation Number is a unique identifier to each project that enters a remedial program with DEEP. The Rem# is auto-assigned when the project (eg: Property Transfer filing) is entered into DEEP's database. Since the Form IV (and supporting verification) is a new project, a Rem# had not been previously assigned, so the Rem# will be entered onto the **VF** by DEEP.

Applicable Release Area ID#s – Throughout the **VF**, Indicate the ID# of all Release Areas (RAs) at which all applicable provisions of the RSRs were used for such RA. Do not include the names of the RAs, just the ID# (e.g., RA-7). The details of names and locations of the RAs should be identified and described in the Verification Report. **Do not state "all" or "site-wide", as this non-specific entry provides no frame of reference. If DEEP must conduct a technical review / research to understand the context of the LEP's application of the RSRs, the Verification will likely be flagged for audit.**

Contact Information – The **VF** provides entry of phone number and e-mail addresses of both the LEP and the signatory for the Certifying Party. Much of DEEP's correspondence to the LEP and the CP is via electronic messaging (final documents are still mailed via USPS). It is very important that DEEP has the ability to electronically contact both LEP and the party required by law to complete the remediation of any release.

Part I: Site Information

Establishment Name and Address - Provide the name of the site by the full, legal company/firm name. Use the name that was indicated on the Property Transfer Form filing. If identifying a corporation or limited partnership 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 full legal name, including title and suffix. Provide the full and exact street address of the location of the site.

Description in Tax Assessor's Office - Provide the lot, block, and map numbers, as listed in the Town's land records. If this does not correlate with the lot, block, map numbers indicated on the property transfer form filing, please explain.

Acreage of Establishment – Include the total acreage of all contiguous properties that are referred to as part of this site.

Part II: Verification

- A. The verification is rendered to support a specific transfer and Form IV filing. In order to identify the specific Form IV, provide the lot, block, and map on the top of each page, as well as the name of the town. Note: The lot, block, and map information is requested on each page of the **VF** because a Rem# is not assigned to the Form IV until the Form IV is filed.
- B. Pursuant to §22a-134a(n), the verification may be applicable to releases that occurred up to the date the Form IV was filed or to the date a Phase II Investigation was completed, **whichever is later**. The verification may also be applicable to releases that occurred up to the date of the verification is signed and sealed. The Verification can only apply to one date.

Enter the date the Form IV was filed with DEEP, the date the Phase II Investigation was completed, and the date the verification is signed. Then **check the date to which the verification applies**. **All releases subsequent to such date will not be closed with this verification.**

- C. A verification rendered to support the filing of a Form IV attest that the Standards for Soil Remediation have been achieved (except for perhaps the recording of an ELUR). Check what action(s) remains to achieve full compliance with the RSRs, whether this is active groundwater compliance monitoring, natural attenuation monitoring of a plume (which includes the inherent subsequent compliance monitoring), and/or the administrative processing of an ELUR.
- D. The LEP is to provide his/her legal signature and license number, printed name, phone number, and e-mail address. The LEP is to imprint or stamp his/her seal in the box provided.

Part III: Regulatory History

A. Previous Remedial Program Information

If the establishment has previously entered a remedial program, indicate which program.

B. Previous Verification History

If a previously rendered verification that has been submitted for the subject establishment or a Commissioner Approval of Investigation or Remediation is being relied on by the LEP, provide the requested information. Then indicate if any of the conditions or environmental controls that may have been used with any such previous verification changed.

C. Significant Environmental Hazard

Complete this box as applicable.

D. Environmental Land Use Restriction

1. Check this box if there are no ELUR's currently recorded for the subject parcel.
2. Check this box if an ELUR was approved by the Commissioner and recorded on the land records pursuant to a previous project in a remedial program and the ELUR is still recorded on the land records. If this box is checked, complete the table that follows.

If an ELUR was recorded as part of a previously approved Engineered Control (EC), the Department is expecting the LEP to determine that the financial surety mechanism had indeed been established for said EC and that the mechanism remains in place and remains valid for the EC.

The final box in this section is a confirmation by the LEP that **public notice of remediation** has been published in accordance with the Property Transfer Law and the RSRs.

Part IV: Standards for Soil Remediation

A. Release Determination and Investigation

This section of the **VF** has three (3) options to check regarding releases to soil at the subject establishment, and presents the final assessment of release determination and investigation completed at the subject establishment for all potential releases applicable to the pertinent date of the verification. Only one option is applicable.

1. **No Releases to Soil (subsequent to a previous valid verification)** - It is presumed that, since groundwater compliance monitoring is underway, or groundwater remediation in the form of natural attenuation is ongoing, and/or the recording of an ELUR is in the administrative process, a release to soils occurred at some time. However, if there were no releases to soil subsequent to the filing of a previous verification (and which is identified in Part III.B above), check this box.

If this box is checked, skip to **Part V: Groundwater Remediation Standards**.

2. **Releases to Soil – No Remediation or other Compliance Measure Required** - Check this box only if **all** detected concentrations of substances in soil – at all release areas - were less than applicable Direct Exposure Criteria (DEC) and Pollutant Mobility Criteria (PMC).

There is a box to indicate a previous verification scenario.

The box related to site characterization is not an option – this is a confirmation that the LEP’s conclusion that remediation or other compliance measure was not required is based on a validated Final Conceptual Site Model.

3. **Releases to Soil – Remediation or other Compliance Measure Required** - If substances in soil at the site have ever exceeded criteria, check the applicable boxes for Criterion Exceeded, indicate the category of COCs, and indicate the measures used to achieve or demonstrate compliance.

There are some Compliance Measures that may be checked, that were completed under purview of a previous remedial program that has not been closed with a verification.

The final box in this section is a confirmation by the LEP that the Verification Report documents and explains how the Soil Remediation Standards were achieved at each release area. This is relevant for any and all releases.

B. Compliance Measures

This section of the **VF** provides the information related to the compliance measures indicated in the Part IV. A.3 box above. Check all applicable boxes for each measure taken. Indicate the Release Areas (RA’s) at which the specific measure was used.

1. **Excavation** – If remedial excavation of polluted soil was conducted, indicate the volume and disposition of said soil.
2. **Engineered Control (via previously filed Form III that has not been closed)** – The use of an Engineered Control requires the Commissioner’s approval, and the recordation of an Environmental Land Use Restriction (ELUR). Indicate whether the EC (and resultant ELUR) were related to DEC or PMC. Follow all prompts on the **VF**.

The RSRs provide for establishing the surety mechanism within one year of construction of the EC. If required, this mechanism must be in place before the verification is rendered. Indicate the type of surety mechanism and the date the surety mechanism was established and documented. A copy of the surety mechanism must be attached to the Verification Report.

If an EC was used to achieve compliance under a previous verification, and said EC required a financial surety mechanism, indicate that this was the case, and also indicate that this mechanism is still valid. The **VF** provides for comments on this subject.

3. **In-Situ Remediation (via previously filed Form III that has not been closed)** – If in-situ remediation of polluted soil was conducted to achieve compliance, indicate if this measure was pursued under a Temporary Authorization or General Permit. The **VF** provides for comments on this remedial measure.
4. **Institutional / Administrative Compliance Measures** – This is a confirmation that the LEP’s use of a compliance measure was used to achieve compliance with the Standards for Soil Remediation.
5. **Other Compliance Measures** – This is provided for the LEP to describe any other remedial/compliance measure that was used to achieve compliance with the Standards for Soil Remediation.

C. Application of Standards for Soil Remediation

This section of the **VF** provides all options / provisions of the RSRs to demonstrate compliance with the Standards for Soil Remediation and the means used to apply the provisions. Indicate in each table what provisions were used and at what Release Areas they were used. The details of how and what data were used to achieve or demonstrate compliance (“Relevant Findings”) should be explained in the Verification Report. *Ensure that the provisions are properly applied by reading the referenced RSR section next to the provision.*

- 1. Background Conditions - 22a-133k-2(a)(2)** – Pursuant to Section 22a-133k-2(a)(2) of the RSRs, notice is required to be submitted to the Commissioner if background conditions are applicable at the project site. Checking the box on this Form acts as said Notice. In checking this box and the use of Background, the LEP is also confirming that the use of this provision (and all pre-requisites) is discussed in the Verification Report – and must indicate the page /section of this discussion in the report.
- 2. Direct Exposure Criteria (DEC) - 22a-133k-2(a)1(A) and k-2(b)** – Check all applicable boxes to indicate the provisions that were used at the subject site to achieve or demonstrate compliance with the DEC. Subset boxes must be appropriately marked to indicate the specific requirements to apply such provision were completed. Some subsets are “either-or” for application of that specific provision, and some subsets are “all-applicable”. The provisions for inapplicability of the DEC are located at the end of Table 2.
- 3. Compliance with DEC – 22a-133k-2(e)** – Indicate how the “compliance data” was applied to demonstrate compliance with the DEC.
- 4. Pollutant Mobility Criteria (PMC) - 22a-133k-2(a)1(B) and k-2(c)** – Check all applicable boxes to indicate the provisions that were used at the subject site to achieve or demonstrate compliance. Subset boxes must be appropriately marked to indicate the specific requirements to apply such provision were completed. Some subsets are “either-or” for application of that specific provision, and some subsets are “all-applicable”. The provisions for inapplicability of the PMC are located at the end of Table 4.
- 5. Compliance with Pollutant Mobility – 22a-133k-2(e)(2)** - Indicate how the “compliance data” was applied to demonstrate compliance with the PMC.
- 6. Other Provisions** – This section provides for the LEP to indicate continued use of 500 mg/K for Lead [per 22a-133k-1(g)] and/or the use of the Widespread Polluted Fill variance.
- 7. Non-Aqueous Phase Liquids (NAPL)** – If NAPL was present at the subject establishment, indicate the extent to which it was remediated. The presence and remediation of NAPL is to be discussed in the Verification Report – and Table 7 must indicate the page /section of this discussion in the report.

Part V: Groundwater Remediation Standards

A. Groundwater Impact Determination and Plume Investigation

This section of the **VF** has three (3) options to check regarding the impact to groundwater at the subject establishment applicable to the pertinent date of the verification. Only one option is applicable.

1. **No Releases to Groundwater** - Check this box if all potential releases to groundwater have been investigated in accordance with prevailing standards and guidelines, including the SCGD or equal alternative approach, and groundwater has not been impacted from any releases.

There is a box to check if there were no groundwater impacts and soil remediation for PMC was not required. If this scenario is correct, skip to **Part VI: Receptors**. If soil remediation was required to address PMC, then groundwater compliance monitoring was required regardless of groundwater impact.

2. **Releases to Groundwater – No Remediation or other Compliance Measure Required** - Check this box if substances, applicable to the pertinent date of this verification, were detected in groundwater, but all detected substances in groundwater were less than all criteria of the Groundwater Remediation Standards before remediation or initiation of other compliance measure. There is a box to confirm that the seasonal and three-dimensional distribution of all applicable plumes have been adequately characterized.
3. **Releases to Groundwater – Remediation or other Compliance Measure Required** - If substances in groundwater at the site have ever exceeded criteria, check the applicable boxes for Criterion Exceeded, indicate the category of COCs, and indicate the measures used to achieve or demonstrate compliance.
4. Complete this table if remedial measures were conducted to address Vapor Intrusion. Check the applicable boxes to indicate which measure was taken.

B. Application of Groundwater Remediation Standards

This section of the **VF** provides all options / provisions of the RSRs to demonstrate compliance with the Groundwater Remediation Standards and the means used to apply the provisions. Indicate in each table what provisions were used and at what Release Areas they were used. The details of how and what data were used to achieve or demonstrate compliance (“Relevant Findings”) should be explained in the Verification Report. *Ensure that the provisions are properly applied by reading the referenced RSR section next to the provision.*

1. **Application of Groundwater Remediation Standards - RCSA 22a-133k-3** – In order to validate the application of the Groundwater Remediation Standards, all subsections of Table #1 and Tables #1a, #1b, and/or #1c are expected to be completed. The correct tables to complete depends on the what the outstanding remedial obligations are. The LEP should be able to mark the first two boxes to confirm that the all plumes have been adequately characterized in accordance with prevailing standards and guidelines (including the SCGD), and the he/she has an understanding of the seasonal and dimensional groundwater conditions.

The next box confirms that groundwater monitoring has been completed in accordance with 22a-133k-3(g), with subsections related to the purpose of the groundwater monitoring program.

- 1a.** If the recording of an ELUR is the **only** reason for filing the Form IV, mark the following box to confirm that groundwater monitoring **has been completed** in accordance with 22a-133k-3(g), with subsections related to the purpose of the groundwater monitoring program. Mark **all** boxes as appropriate. If a specific subsection is not applicable, then mark “Not Applicable”.

The last box is an acknowledgement that the Verification Report presents discussion of adequate representation and data usability for compliance.

- 1b.** If “Compliance” monitoring is a reason for filing the Form IV, mark the following box to confirm that groundwater monitoring **is being conducted** in accordance with 22a-133k-3(g), with subsections related to the purpose of the groundwater monitoring program. Mark **all** boxes as appropriate. If a specific subsection is not applicable, then mark “Not Applicable”.

- 1c.** If groundwater remediation via Monitored Natural Attenuation (MNA) is a reason for filing the Form IV, complete this box. The details of marked boxes should be explained in the Verification Report.

If Table 1a is applicable and has been completed, and/or if there were or are plumes other than the plume(s) with that is being remediated, but the plume(s) are in compliance with the remediation standards, complete the remainder of the VF.

If Tables #1b or 1c are applicable, have been completed, and there were/are no other plumes, skip to Part VI: Receptors

- 2. Compliance with Criteria for Groundwater - 22a-133k-3(g)2(A)** – The LEP is to check each box to indicate that all pre-requisites to demonstrate compliance have been met. Also indicate if the quarterly compliance sampling was completed within 1 year or 2 years. If any substance was detected above criteria during any of the compliance rounds, indicate where in the Verification Report this is discussed, and the significance of the exceedance. The last box is to be checked if an alternative means to demonstrate compliance had been approved by the Commissioner.
- 2a. Groundwater Compliance not applicable – Incidental Sources – 22a-133k-3(f)** – Check this box if the remediation criteria for groundwater do not apply due to “Incidental Sources”. Complete the table to indicate the category of ‘Incidental source’.
- 3. Background Groundwater Quality - 22a-133k-3(a)1(B) and k-3(a)2** – Check the applicable box to indicate whether Background was the remedial goal, or if achieving Background was not required, or if achieving Background was exempt due to Technical Impracticability.

If meeting Background Water Quality was not required, the LEP is directed to complete Table 4a.

- 4. Compliance with Background - 22a-133k-3(g)2(B)** – If Background groundwater quality is used as the goal for remediation of a groundwater plume, indicate how groundwater data was applied to demonstrate compliance.
- 4a. Compliance with Background not Required – 22a-133k-3(d)1 or (d)2** - Check one of the 2 options to indicate why meeting Background Water Quality was not required. All subsets of each option chosen must be filled to indicate valid application.
- 5. Groundwater Protection Criteria – 22a-133k-3(a)2(A) and k-3(d)** - Check the applicable boxes to indicate that the provision used to achieve compliance with the GWPC.

6. **Compliance with GWPC - 22a-133k-3(g)2(B)** – If the groundwater protection criteria was the remedial goal for a plume, indicate how groundwater data was applied to demonstrate compliance.
7. **Surface Water Protection Criteria - 22a-133k-3(a)1(A) and k-3(b)** - Check all applicable boxes to indicate the provisions used to achieve compliance with the SWPC.
8. **Compliance with SWPC - 22a-133k-3(g)2(C)** – The surface water protection criteria is applicable at all sites. Indicate how groundwater data was applied to demonstrate compliance.
9. **Volatilization Criteria - 22a-133k-3(a)1(A) and k-3(c)** – Check all applicable boxes to indicate the provisions used to achieve compliance with the VolC, or whether the VolC was exempt or not applicable. All subset boxes of the chosen option(s) must be checked to confirm the usability of the chosen option(s).
10. **Compliance with VolC - 22a-133k-3(g)2(D)** – If the volatilization criteria is applicable, indicate how groundwater/soil vapor data was applied to demonstrate compliance.
11. **Other Provisions: “Policy on Upgradient Contamination - 8/28/97” and Technical Impracticability – 22a-133k-3(e)2)** - Check applicable boxes to indicate if one of these provisions were used to achieve compliance. The details of how all marked provisions were used to achieve compliance are expected to be explained in the Verification Report.

Part VI: Receptors

Complete all information requested in this Section of the **VF**. Details of the Environmental Setting and results of any sensitive receptor survey should be explained in the Verification Report.

Check the applicable boxes to indicate if an ecological receptor was identified and/or evaluated. Details regarding any evaluation of potential ecological exposure pathways, where contaminants could affect aquatic and terrestrial life, as identified in the Conceptual Site Model (CSM), should be included in the Verification Report.

If water supply wells had been impacted from any on-site release, indicate the number of supply wells impacted and check and complete the applicable boxes to indicate the measures instituted to provide potable water supply. The details of how all marked provisions were used to achieve compliance should be explained in the Verification Report.

Green Remediation

This is intended for information gathering purposes only. Completing this section is optional and does not have any implication on the validity of the verification.

Part VII: Certification

Completion of this Section of the **VF** is to document that the Certifying Party is cognizant that the verification is being rendered on their behalf, and understands the intended applicability of the verification. This certification must be signed by a legally authorized and binding representative of the Certifying Party.

Indicate if an ELUR is intended to achieve compliance with the RSRs, that public notice of intent to record the ELUR has been published in accordance with Section 22a-133q-1(c) of the Regulations of Connecticut State Agencies, and that documentation of the public notice is presented in the Verification Report.