



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

Application for Emergency or Temporary Authorization to Discharge to Groundwater to Remediate Pollution

Please complete this form in accordance with the instructions (DEEP-REM-GWP-INS-600) to ensure the proper handling of your application. Print or type unless otherwise noted. You must submit the application fee along with this form.

CPPU USE ONLY
App #: _____
Doc #: _____
Check #: _____
Program: Remediation Groundwater Discharge

Part I: Application Information

<p>A. This application is for (check one):</p> <p><input type="checkbox"/> A Temporary Authorization (TA) [#1746]</p> <p><input type="checkbox"/> An Emergency Authorization (EA) [#1747]</p> <p>B. This application is for</p> <p><input type="checkbox"/> A new authorization</p> <p><input type="checkbox"/> A <i>modification</i>*</p> <p>* C. Existing permit/authorization/registration ID</p>	<p>DEEP REMEDIATION USE ONLY</p> <p>RemGIS RemID <input type="checkbox"/> scanned</p>
D. City or Town where site is located:	
E. Brief Description of Project:	

Part II: Fee Information: The application will not be processed without the fee. The fee shall be non-refundable and shall be paid by check or money order to the Department of Energy and Environmental Protection.

<p>The Base Fee is \$1,500; There is no charge for modifications.</p> <p>FEE ENCLOSED \$ _____</p>	<p>A 50% discount applies if the applicant is a municipality:</p> <p><input type="checkbox"/> Municipality Reduction Taken (CGS 22a-6(b))</p> <p><i>Single family residence homeowners may request a waiver of the fee, even if they are not an applicant:</i></p> <p><input type="checkbox"/> Single Family Residence Waiver* (Complete signature box below)</p>
<p>* <input type="checkbox"/> I am the owner of a single family residence which is the location where the pollution that is to be remediated originates, and I request a fee waiver.</p>	
<p>_____ Homeowner's Signature</p>	

Part III-A: Applicant Information

- **If an applicant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, applicant's name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, The registered name will be the name used by DEEP. This information can be accessed at the Secretary of State's database (CONCORD). <http://www.concord-sots.ct.gov/CONCORD/index.jsp>.*
- *If an applicant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).*

<p>1. Applicant: _____</p> <p>Mailing Address: _____</p> <p>City/Town: _____ State: ____ Zip Code: _____</p> <p>Business Phone: _____ ext.: _____</p> <p>Contact Person: _____ Phone: _____ ext. _____</p> <p>*E-Mail: _____</p> <p><i>*By providing this e-mail address you are agreeing to receive official correspondence from the Department, at this electronic address, concerning the subject application. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify the Department if your e-mail address changes.</i></p> <p>a) Applicant Type (check one):</p> <p><input type="checkbox"/> individual <input type="checkbox"/> federal agency <input type="checkbox"/> state agency <input type="checkbox"/> municipality <input type="checkbox"/> tribal</p> <p><input type="checkbox"/> *business entity (*If a business entity complete i through iii)</p> <p>i) check type: <input type="checkbox"/> corporation <input type="checkbox"/> limited liability company <input type="checkbox"/> limited partnership</p> <p style="padding-left: 40px;"><input type="checkbox"/> limited liability partnership <input type="checkbox"/> statutory trust <input type="checkbox"/> Other: _____</p> <p>ii) provide Secretary of the State business ID #: _____ (Information accessible through the CONCORD database at http://www.concord-sots.ct.gov/CONCORD/index.jsp)</p> <p>iii) <input type="checkbox"/> Check here if you are not registered with the Secretary of State's office.</p> <p>b) Applicant's interest in property at which the proposed activity is to be located:</p> <p><input type="checkbox"/> site owner <input type="checkbox"/> option holder <input type="checkbox"/> lessee <input type="checkbox"/> easement holder <input type="checkbox"/> operator</p> <p><input type="checkbox"/> other (specify): _____</p>
<p><input type="checkbox"/> Check if there are any co-applicants. <i>If so</i>, provide, for each such additional party, the information requested above. Space is provided on page 3 for the property owner and on page 4 for non-property-owners who are co-applicants.</p>
<p>2. Billing contact, if different than the applicant.</p> <p>Name: _____</p> <p>Mailing Address: _____</p> <p>City/Town: _____ State: ____ Zip Code: _____</p> <p>Business Phone: _____ ext. _____</p> <p>Contact Person: _____ Phone: _____ ext. _____</p> <p>Title: _____</p> <p>Email: _____</p>

If there are any changes or corrections to your company/facility or individual name, mailing or billing address, or contact information, please complete and submit the *Request to Change Company/Individual Information* to the address indicated on the form. For any other changes you must contact the specific program from which you hold a current DEEP license. If there is a change in ownership, contact the Permit Assistance Office for questions concerning license transfers at 860-424-3003.

Part III-B: Additional Party Information

1. **Owner of primary parcel** where activity will occur, *if different than applicant*: N/A: Same as applicant
 Check if primary parcel owner is a co-applicant, and ensure an applicant certification is included.

Name: _____

Mailing Address: _____

City/Town: _____ State: ____ Zip Code: _____

Contact Person: _____ Title: _____

Contact Phone: _____ ext.: _____

*Email: _____

*If a co-applicant, by providing this e-mail address you are agreeing to receive official correspondence from the Department, at this electronic address, concerning the subject application. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify the Department if your e-mail address changes.

- If primary parcel owner is neither an applicant nor co-applicant**, describe how owner has granted permission and access.

Access Summary: _____

2. List the **primary technical contact** (professional employed or retained to assist in preparing the application and/or to design or supervise the activity): Same as applicant

Name: _____ LEP P.E

Firm: _____ License number: _____

Mailing Address: _____

City/Town: _____ State: ____ Zip Code: _____

Contact Person: _____ Title: _____

Contact Phone: _____ ext.: _____

*Email: _____

*By providing this e-mail address you are agreeing that this contact you have identified may receive official correspondence from the Department, at this electronic address, concerning the subject application. Please ask this contact to check their security settings to be sure they can receive e-mails from "ct.gov" addresses. Also, please ask them to notify the Department if their e-mail address changes.

Service Provided: _____

3. In the space on the following page, identify other parties who DEEP should be aware of regarding this project, *other than owners of parcels in addition to the primary parcel*, which instead must be included in Table 1 (page 9).

Identification of Additional Parties

[Expandable text entry area for users of electronic form]

Part IV: Site Location and Additional Parcels

1. Identify, for the **primary parcel** associated with the area of proposed activity:

Name of site: _____

Is this name of the site the same as the name of the applicant? Yes No

Is this the site of origin for the pollution being remediated? Yes No

Street Address or Description of Location: _____

City/Town: _____ State: **CT** Zip Code: _____

Tax Assessor's Reference: Map: _____ Block: _____ Lot: _____

Latitude and longitude of the center of the proposed activity (in degrees, minutes, and seconds or in decimal degrees): Latitude: _____ Longitude: _____

Method of determination (check one):

GPS USGS Map CTECO Other (specify): _____

2. Character of primary parcel (Check all that apply):

Retail/commercial Industrial/manufacturing Other nonresidential (specify below)

Single family residence Up to four residential units Other residential

Explanation: _____

3. Will the area of the proposed activity area or expected zone of influence extend beyond the boundary of the primary parcel identified above? Yes No

If yes, Identify in Table 1 (on page 9) any other affected parcels and the owners of such other parcels, and indicate that you have obtained appropriate access permission.

Part V-A: Site Information- Site Setting

1. Check all that apply to any parcel, in whole or in part, that includes an area of proposed activity or any part of the expected zone of influence (consult the instructions for additional information):

- A. Is within the coastal area as defined in CGS section 22a-94 (a),
 Is within the coastal boundary as delineated on DEEP approved coastal boundary maps.

If within the coastal boundary, and this application is for a new authorization or for a modification of an existing permit, you must submit a *Coastal Consistency Review Form* (DEP-APP-004) with your application as Attachment G.

- B. Is located on federally recognized Indian lands.
C. Is subject to conservation or preservation restriction.

If applicable, proof of written notice of this application to the holder of such restriction or a letter from the holder of such restriction verifying that this application is in compliance with the terms of the restriction, must be submitted as Attachment H.

- D. Is located within an area identified as a habitat for endangered, threatened or special concern species as identified on the "State and Federal Listed Species and Natural Communities Map". Date of Map: _____

If applicable, complete and submit a *Connecticut Natural Diversity Data Base* (CT NDDDB) *Review Request Form* (DEP-APP-007) to the address specified on the form. **Please note NDDDB review generally takes 4 to 6 weeks and may require additional documentation from the applicant. DEEP strongly recommends that applicants complete this process before submitting the subject application.**

When submitting this application, please include copies of any correspondence to and from the NDDDB, including copies of the completed CT NDDDB Review Request Form, as Attachment I.

- None of the above applies to any parcel that is the subject of this application.**

2. Check all that apply to any part of the area of proposed activity, including access and support activity, or any part of the expected zone of influence:

- Is within 100 feet of any watercourse, coastal water, inland wetland, or tidal wetland.
 Is located within any identified floodplain; or within stream channel encroachment lines.

- Neither of the above applies to any area that is the subject of this application.**

3. Provide, for the nearest downgradient stream or surface water body:

A. Name of stream or water body: _____

B. Distance (feet) from zone of influence: _____

C. Surface water quality goal, as identified in the Connecticut Water Quality Standards adopted pursuant to CGS section 22a-426: AA A B C D + Coastal (S prefix)

4. Is any part of the area of proposed activity, including the predicted zone of influence, located within 1 mile of any public water supply well? Yes No

Part V-B: Site Information- Regulatory Framework

1. *Identify any remedial program creating an obligation to conduct remediation:*

A. Check all that apply to the primary parcel: List Associated DEEP ID numbers:

CGS 22a-133x or CGS 22a-133y _____

CGS 22a-134a (Prop. Transfer) _____

RCSA 22a-449(c)-105(h) (RCRA Corr. Act.) _____

RCSA 22a-449(d)-(106) (UST Corr. Act.) _____

Under a Pollution Abatement Order (CGS 22a-432) _____

Brownfield program (specify) _____

None of the above applies to the primary parcel.

B. For any other parcels where the zone of influence is present: N/A-No other parcels

Some of the above apply to a parcel other than the primary parcel. **If so, list on Table 1.**

None of the above applies to any other parcel in the area of activity or zone of influence.

2. For sites in a *remedial program, or under any active oversight by DEEP LUST program*, identify:

A. LEP lead DEEP lead Not determined Not in a remedial program

B. Name of supervising LEP: _____ License Number: _____

C. Name of DEEP project lead (if not LEP lead): _____

3. *Identify programs that may apply or impose regulatory requirements:*

A. Check all that apply to the primary parcel: List Associated ID numbers:

Regulated under RCRA Subtitle C / CGS 22a-449(c) (HW) _____

Regulated under RCRA Subtitle D / CGS 22a-208a (SW) _____

Regulated under RCRA Subtitle I / CGS 22a-449(d) (USTs) _____

Issued a Water Discharge Permit under CGS 22a-430 (excluding stormwater discharge permits) _____

None of the above applies to the primary parcel.

B. For any other parcels where the zone of influence is present: N/A-No other parcels

Some of the above apply to a parcel other than the primary parcel. **If so, list on Table 1.**

None of the above applies to any other parcel in the area of activity or zone of influence.

4. *Other programs:* Identify any additional DEEP programs (not already noted above) or other governmental agencies that should be contacted when DEEP staff review this application:

Part V-C: Site Information- Relation to Water Supplies

1. *Proximity to Public Water Supplies (PWS):* Check all that apply for any part of the area of proposed activity or anticipated zone of influence:

Within an aquifer protection area: Level A Level B

Within a public water supply source water area:

Surface Water Watershed Groundwater Well Source Water Area

Upon water company owned land: Land Class: 1 2 3

If any apply, provide PWS ID number(s): _____

If any apply, a duplicate or certified copy of the application *and the supporting documents* must be filed with the Drinking Water Section of the Department of Public Health.

Check here to certify that a copy was sent.

None of the above applies to any part of the area of proposed activity or anticipated zone of influence.

2. Identify the groundwater quality goal(s), adopted in the Connecticut Water Quality Standards pursuant to CGS section 22a-426, for any part of the area of proposed activity or anticipated zone of influence: GAA GAAs GA GB Other (specify): _____

3. *Proximity to water supply wells:* Check all that apply for any part of the area of proposed activity or anticipated zone of influence:

Located within 1000 feet of a public water supply well.

Within 200 feet of any water supply well pumping over 10 gallons per minute.

Within 75 feet of any water supply well not owned by applicant or primary parcel owner.

A water supply well owned by applicant or primary parcel owner is within 75 feet.

If any apply, a duplicate or certified copy of the application form must be filed with the local director of health.

Check here to certify that a copy was sent.

None of the above applies to area of proposed activity or anticipated zone of influence.

4. A. List in Table 2 on page 9 of this application all public water supply wells within 1000 feet and all water supply wells within 500 feet of the proposed activity or anticipated zone of influence. Indicate if no wells were identified for listing: No wells are identified.

B. Identify how the list was developed, or basis for determining no wells were present:

Well inventory conducted: Year: _____ Other (explain below)

Explanation: _____

Part V-D: Site Information- Environmental Effect Mitigation (see instructions)

Identify potential adverse environmental effects of the proposed activity on the site setting and receptors identified above in parts V-A and V-C and how these effects will be prevented. Also describe how these effects, should they occur, will be identified and mitigated, with particular attention to, but not limited to, a discussion of protection of water supply wells.

Check here if continuation sheet is needed, and label and attach it to this sheet.

Table 1

Listing of Additional Parcels that include any part of the proposed activity or zone of influence

(Consult instructions, and see questions IV.3, V-B.1.B and V-B.3.B)

[Expandable text entry area for users of electronic form]

Map/Block/Lot	Address	Owner	Phone	Character	Permission

Table 2

Identified Water Supply Wells

(Consult instructions, and see question V-C.4)

[Expandable text entry area for users of electronic form]

Address	Contact Name	Phone	Well/System type	Distance from ZOI	Remarks

Part VI-A: Detailed Information- Site and Pollution

1. *Sensitive Site Receptors*: Check all that apply **within 25 feet** of any part of the activity area or zone of influence; and explain in part VI-D how impact on identified receptors will be limited:

- Leaching system present.
- Coastal water, tidal wetland, inland wetland or watercourse present.
- Underground public utility present.
- Subsurface stormwater collection or management system present.
- Private utility or subsurface structure present.
- Occupied basement present.
- Occupied structure present and volatile organic chemicals are present as a CoC.

None of the above is present in or within 25 feet of any part of the area of activity or zone of influence.

2. *Pollution Presence*: Check all that apply: (provide discussion as needed in part VI-D)

A. Evidence of a release that discharge is proposed to treat:

- Quantitative Qualitative No evidence of release

Identify nature of evidence: _____

Identify mechanism for release: _____

B. Nature of pollution that activity is proposed to treat:

- Petroleum Fuel Organic Solvent (specify) _____
 Metals (specify) _____ Other (specify) _____

C. Nature and origin of Petroleum Fuel Pollution: Not applicable; no petroleum fuel pollution

- Heating Oil Other Petroleum Fuel (specify) _____

Yes No Pollution being remediated is associated with release from a tank with a capacity equal to or less than 2,100 gallons in size.

Yes No Release is associated with a heating oil tank.

D. Evaluation of Non-Aqueous Phase Liquids (NAPL):

Yes No Don't Know or Not Applicable (provide discussion of either in part VI-D)

Presence of non-aqueous phase liquid (NAPL) has been evaluated.

NAPL likely is or was present at the location of the proposed activity.

Basis for answer: cTRSR Cnap over 1% solubility product encountered
 Other (specify) _____

Removal actions have been implemented for any NAPL present. (Summarize actions and results achieved in part VI-D discussion)

E. Contamination (non-natural) other than the target pollutant is present: Yes No

If yes, Identify nature: Additional AOCs Polluted Fill/Urban Soil Other

Describe: _____

3. *Hydrogeology*: Check all that apply:

- | <u>Yes</u> | <u>No</u> | <u>Don't Know or Not Applicable</u> (provide discussion of either in part VI-D) |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Water table is less than 15 feet above the bedrock surface. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Flow velocity is determined: State horizontal flow velocity: _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Activity is within the area of influence of a high-yield (10 gpm) well. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Temporal flow variation exists: <input type="checkbox"/> seasonal <input type="checkbox"/> pumpage related |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Significant vertical flow exists: State gradient ratio V:H:: _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Preferential flow pathways have been identified. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Aquifer heterogeneity was evaluated and considered in remediation design. |

Explanations:

4. *Hydrogeochemistry*: Check all that apply:

- | <u>Yes</u> | <u>No</u> | <u>Don't Know or Not Applicable</u> (provide discussion of either in part VI-D) |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Groundwater contains more than 10,000 mg/l petroleum or over 100 ppm VOCs. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Vertical contaminant distribution is known and considered in remedial design. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Groundwater/aquifer chemistry has been considered in design dosage. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Potential interactions with/mobilization of aquifer matrix may occur. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Potential interactions with other pollutants present may occur. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Intermediate or by-products may be generated. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> End, intermediate, or by-products may have environmental effects. |

Explanations:

5. *Zone of Influence*: Describe how the zone of influence depicted on the site map was determined:

6. *Imminent Threat*: If applying for an Emergency Authorization, explain why the presence of the pollution described above presents an imminent threat to human health or the environment:

Part VI-B: Detailed Information- Activity Proposed

<p>1. <i>Objective and Scope</i>: Check all that apply:</p> <p>A. Identify the general discharge objective:</p> <p><input type="checkbox"/> Pilot Test <input type="checkbox"/> Source Control <input type="checkbox"/> Remediation <input type="checkbox"/> Other</p> <p>Explain: _____</p> <p>B. Identify the general nature of the technology proposed:</p> <p><input type="checkbox"/> <i>In situ</i> chemical <input type="checkbox"/> <i>In situ</i> biological <input type="checkbox"/> <i>In situ</i> physical <input type="checkbox"/> Other</p> <p>Explain: _____</p> <p>C. Identify the target environmental media: <input type="checkbox"/> soil <input type="checkbox"/> groundwater <input type="checkbox"/> product</p> <p>D. Identify the performance objective: _____</p>
<p>2. <i>Primary Substance Discharged</i>: (list chemical amounts in question 4, provide chemical details in Appendix F)</p> <p>A. Identify the primary substance(s): _____</p> <p>B. Categorize the nature of the principal substance to be discharged for the proposed activity.</p> <p><input type="checkbox"/> Electron Acceptor (typically for bioremediation of petroleum product)</p> <p><input type="checkbox"/> Chemical Oxidant: <input type="checkbox"/> Peroxide <input type="checkbox"/> Permanganate <input type="checkbox"/> Persulfate <input type="checkbox"/> Ozone</p> <p><input type="checkbox"/> Organic Electron Donor/Substrate (typically for biodegradation of chlorinated solvents)</p> <p><input type="checkbox"/> Reinjection of treated water (typically for an <i>In situ</i> physical process)</p> <p><input type="checkbox"/> Other/Composite: Explain: _____</p>
<p>3. <i>Additional Discharge Information</i>: (provide discussion as needed in part VI-D)</p> <p>A. Identify nature of additional chemicals that will be discharged (list chemicals in question 4)</p> <p><input type="checkbox"/> Supplemental buffering chemicals.</p> <p><input type="checkbox"/> Supplemental bio-nutrient substances.</p> <p><input type="checkbox"/> Cultured nonpathogenic naturally occurring biologic organisms.</p> <p><input type="checkbox"/> Surfactants</p> <p><input type="checkbox"/> Activators</p> <p><input type="checkbox"/> Other- Identify role: _____</p> <p>B. Design/dosage based on <input type="checkbox"/> Bench Testing <input type="checkbox"/> Pilot Testing <input type="checkbox"/> Other</p> <p>Explain: _____</p> <p>C. Identify any residual that will remain in the subsurface after the discharge period:</p> <p>_____</p>
<p>4. <i>Substances and Dosage</i></p> <p>List all substances to be discharged, identify the reason/role for their use, provide the proposed total discharge amounts, and identify the proposed concentrations if solutions are to be used. Include units of measurement. Provide, in Attachment F, MSDSs and detailed information about of each substance, including identification of proprietary chemical constituents and identification of appropriate monitoring parameters for the substance's proposed use.</p>

Substance	Role	Total Amount	Concentration

5. *Delivery mechanism:* Identify how the substances will be introduced into the subsurface

A. Check all that apply:

- Emplacement in an open excavation resulting from removal of a tank or polluted soil.
- Emplacement of removable devices. Identify: _____
- Injection or emplacement on or below the ground surface:
 - Single use injection points
 - Constructed multi-use points
 - Existing wells repurposed
 - Other

Describe: _____

- Alternative delivery mechanism/source. Identify: _____

B. Injection specifics (per discharge period or Discharge Event):

Total discharge Volume (gal.): _____

Number of injection locations: _____

Rate per point (range) (gpm): _____

Expected pressure range (psi): _____

C. Depth range of discharge: Below Surface: _____

Below Water Table: _____

6. Other Considerations (provide discussion in part VI-D):

- A. Yes No Activity will result in introduction of chemicals into or on bedrock, or within 2 feet of the bedrock surface.
- B. Yes No Injection pressures are likely to alter aquifer hydrogeologic properties.
- C. Yes No Hydraulic controls are used to establish the Zone of Influence.
- D. Yes No A groundwater or soil vapor remedial system is in operation at the site or is proposed as an element of the remedial system.
- E. Yes No More than 50,000 gal/day of water/solution will be managed.
- F. Yes No Recurring scheduled discharge periods or multiple Discharge Events are proposed.

Summarize any multiphase schedule: _____

Part VI-C: Detailed Information- Monitoring Proposed

1. *Permit Compliance Monitoring:*

A. Identify receptors to be monitored:

Water Supply Wells (public/private) Surface Water Receptors Storm and Sewer Systems Indoor Air Pathway

Other Explain: _____

B. How many wells/points will be used to monitor the limits of the zone of influence? _____

C. How many wells/points will monitor chemical conditions within the zone of influence? _____

D. Yes No Field observations and field parameter monitoring are proposed.

E. Yes No Verification of injected chemical analysis/concentrations is proposed.

2. In the tables below, **summarize** the nature of the compliance monitoring program:

Monitoring Well Location(s)	Objective(s)	Parameter Group(s)*	Frequency*

Other Monitoring Sites(s)	Objective(s)	Parameter Group(s)*	Frequency*

*Parameter Group	Constituents Analyzed	Objective(s)
Example A field parameters	DO, DCO2, pH, ORP, Cond., Turbidity, Temp., Wtr Lvl	Real time results, map chemical effects

*Frequency	During Active Discharge	Post-Discharge

3. *Rebound:* Identify how the occurrence of rebound will be evaluated:

4. *Other Monitoring Information:*

A. Summarize how monitoring frequency and duration take into account site groundwater flow conditions, discharge chemodynamics, receptor locations, and the activity timeline:

B. Identify any changes in monitoring frequency (or parameters) associated with the shift from active injection to post injection monitoring, and the rationale for such modifications:

C. Identify any indicator or surrogate parameters used and the rationale for their selection:

D. Summarize any monitoring that incorporates approaches other than field or laboratory measurement of water samples from wells:

5. *Other Monitoring Considerations:*

A. Describe how the pre-discharge baseline condition for monitoring comparisons has been or will be established prior to initiation of the discharge:

B. Summarize any operational or process monitoring of the discharge that will be conducted:

C. Identify any other periodic monitoring being conducted at the site that relates to the pollution being remediated or that may be affected by the discharge:

D. Identify if any wells used for the discharge will later be used for compliance or verification monitoring, and how sample representativeness for the data objective will be evaluated:

Part VI-D: Detailed Information- On-site Adverse Outcome Mitigation

**Describe how adverse outcomes associated with site conditions identified in Part VI-A and the specific proposed activities identified in Part VI-B will be prevented or minimized by the proposed activity design and implementation, how monitoring identified in Part VI-C will allow adverse outcomes to be identified, and the contingencies for mitigation of adverse outcomes should any occur.
Also discuss any identified data gaps and how they are either not significant or will be addressed during implementation.**

Check here if continuation sheet is needed, and label and attach it to this sheet.

Part VII-A: Supporting Documents

Identify, by checking the box, each specific lettered attachment being submitted with this application form, and provide information regarding their content. When submitting any supporting documents, please label the documents as indicated in this part (e.g., Attachment A, etc.) and be sure to include the applicant's name as indicated on this application form.

<input type="checkbox"/>	Attachment A: An 8 1/2" X 11" copy of the relevant portion or a full-sized original of a USGS Quadrangle Map indicating the exact location of the facility or site and required nearby features. Indicate the quadrangle name on the map.	
<input type="checkbox"/>	Attachment B: Site Conditions Report, including:	<u>found on page(s):</u>
	Characterization of release being treated	_____
	Description of previous remedial actions	_____
	Identification of relevant site conditions and history	_____
	Characterization of hydrogeology and water chemistry	_____
	Identification of receptor or transport pathways	_____
<input type="checkbox"/>	Attachment C: Site Plan(s), including:	
<input type="checkbox"/>	Basic site boundaries	<input type="checkbox"/> cross section(s)
<input type="checkbox"/>	Groundwater flow on maps & sections	<input type="checkbox"/> Location of significant site features
<input type="checkbox"/>	Location of wells and other data points	<input type="checkbox"/> Depiction of release, plume, & other AOCs
<input type="checkbox"/>	Specific proposed discharge location(s)	<input type="checkbox"/> Location(s) of proposed activity
<input type="checkbox"/>	Location(s) of receptors/pathways	<input type="checkbox"/> Composite zone of influence
<input type="checkbox"/>		<input type="checkbox"/> Monitoring locations
<input type="checkbox"/>	Attachment D: Work Plan, including, but not limited to:	<u>found on page(s):</u>
	Rational for technology selection / remedial goal	_____
	Identification of all substances to be discharged	_____
	Reason needed/evaluation of substances identified in VI-B	_____
	Evaluation of byproducts produced / interaction with aquifer	_____
	Bench/pilot study results, or reason unnecessary	_____
	Calculation of chemical dosage and distribution	_____
	Description of discharge mechanisms	_____
	Chemical handling measures	_____
	Site safety measures	_____
	Contingency measures	_____
	Discussion of multiphase implementation approach	_____
<input type="checkbox"/>	Attachment E: Monitoring Plan, including:	<u>found on page(s):</u>
	Monitoring program objectives	_____
	Monitoring locations and frequencies, and rationale/objective	_____
	Monitoring constituents/parameters and rationale	_____
	Monitoring sampling and analytical methods	_____
	Data evaluation and reporting procedures	_____
<input type="checkbox"/>	Attachment F: Specifications for substances to be discharged, as applicable.	
<input type="checkbox"/>	Attachment G: <i>Coastal Consistency Review Form</i> (DEP-APP-004), if applicable.	
<input type="checkbox"/>	Attachment H: Conservation/Preservation restriction information, if applicable.	
<input type="checkbox"/>	Attachment I: CT NDDB Information, if applicable, including <i>CT NDDB Request Form</i> (DEP-APP-007).	

Part VIII: Applicant Certification

The applicant *and* the individual(s) responsible for actually preparing the application must sign this part. An application will be considered incomplete unless all required signatures are provided. If the applicant is the preparer, please mark N/A in the spaces provided for the preparer.

<p>“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.</p> <p>I certify that this application is on complete and accurate forms as prescribed by the commissioner without alteration of their text.</p> <p>I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.”</p>	
Signature of Applicant	Date
Name of Applicant (print or type)	Title (if applicable)
Signature of Preparer (if different than above)	Date
Name of Preparer (print or type)	Title (if applicable)
<p><input type="checkbox"/> Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies after this sheet. You must include signatures of any person preparing any report or parts thereof required in this application (i.e., professional engineers, surveyors, soil scientists, consultants, etc.).</p>	

Note: Please submit a completed Application Form, Fee, and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Space in electronic version of form to insert additional pages of certifications for Part VIII