



Connecticut Department of  
**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

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# **General Permit for the Discharge of Groundwater Remediation Wastewater**

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Bureau of Materials Management and Compliance Assurance  
Water Permitting and Enforcement Division (WPED)  
860-424-3025

# General Permit for the Discharge of Groundwater Remediation Wastewater

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# General Permit for the Discharge of Groundwater Remediation Wastewater

## Section 1. Authority

This general permit is issued under the authority of section 22a-430b of the General Statutes.

## Section 2. Definitions

Terms used in this general permit shall be defined as they are in section 22a-423 of the General Statutes and section 22a-430-3(a) of the Regulations of Connecticut State Agencies. For purposes of this general permit, the following definitions shall also apply:

*“7Q10 flow (seven-day, ten year low flow)”* means the lowest seven consecutive day mean stream flow with a recurrence interval of ten years.

*“Approval of registration”* means an approval of registration issued under Section 3 of this general permit.

*“Aquifer protection area”* means aquifer protection area as defined by section 22a-354h of the General Statutes.

*“Authorized discharge”* means a discharge authorized by this general permit.

*“Best management practice”* or *“BMP”* means a practice, procedure, structure, or facility designed to prevent or minimize environmental damage or to maintain or enhance environmental quality. BMPs include without limitation, facilities to reduce pollutants in wastewater and practices or structures to minimize the generation of waste, to control runoff, drainage, spillage, or leaks of contaminated material, to protect sources of drinking water and drinking water wells, and to protect streamflows and aquatic life.

*“Bioaccumulate”* means the uptake and retention of substances by an organism from its surrounding medium and/or food.

*“Bioconcentrate”* means the uptake and retention of substances by an organism from its surrounding medium.

*“CERCLA”* means Comprehensive Environmental Response, Compensation, and Liability Act.

*“Certified Hazardous Materials Manager”* or *“CHMM”* means a person who has gained recognition as a certified hazardous materials manager in accordance with the requirements developed and administered by the Institute of Hazardous Materials Management.

*“CFR”* means the Code of Federal Regulations.

*“Coastal boundary”* means coastal boundary as defined by section 22a-94 of the General Statutes.

“*Commissioner*” means the commissioner as defined by section 22a-2(b) of the General Statutes.

“*Cone of depression*” means an area surrounding a withdrawal of groundwater, the cross sectional border of the point(s) at which groundwater recharge equals the rate of withdrawal.

“*Department*” means the Department of Energy and Environmental Protection.

“*DSN*” means discharge serial number, i.e. an identifying number 101, 102, 103, etc. designating each discreet discharge consisting solely of wastewater authorized by this general permit.

“*Effluent*” means the wastewater authorized to be discharged by this general permit after treatment and prior to mixing with liquid from any other source.

“*Effluent limitation*” means an effluent limitation established in this general permit, including limitations specified in Appendix A or B of this general permit.

“*Emerging contaminants*” means emerging contaminants as defined in the “Technical Fact Sheets about Contaminants of Concern at Federal Facilities”, available at: [www.epa.gov/fedfac/emerging-contaminants-and-federal-facility-contaminants-concern](http://www.epa.gov/fedfac/emerging-contaminants-and-federal-facility-contaminants-concern).

“*Endangered or threatened species*” means endangered or threatened species as defined by section 26-304 of the General Statutes.

“*EPA*” means the United States Environmental Protection Agency.

“*General Statutes*” means the Connecticut General Statutes.

“*Groundwater remediation recirculating system*” means a system designed to recover groundwater, treat it to an appropriate standard and inject it back to groundwater through a designed infiltration system.

“*Groundwater remediation wastewater*” means wastewater generated in connection with investigating pollution or remediating polluted groundwater, sediment or soil. Groundwater remediation wastewater includes without limitation groundwater withdrawn from a groundwater recovery well; groundwater which collects in an excavation or foundation drain or other subsurface facility or structure; groundwater contaminated runoff and stormwater impacted by on-site pollutants from any construction activity; condensate resulting from construction or maintenance of a soil vapor extraction system; washdown or backwash wastewater from treatment facilities; well development wastewater, and wastewater generated by removing an underground storage tank or by developing, testing, sampling, or purging a well, or by maintaining treatment facilities.

“*Impaired water*” means those surface waters of the state designated by the commissioner as impaired pursuant to section 303(d) of the federal Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report.

*“Individual permit”* means a permit issued to a named person or municipality under section 22a-430 of the General Statutes.

*“Influent”* means the groundwater to be discharged prior to any treatment except for the implementation of BMPs at pump intakes for the control of solids.

*“Inland wetlands”* means wetlands as defined by section 22a-38 of the General Statutes.

*“Intermittent discharge”* means a discharge that is generated at scheduled intervals related to activities such as groundwater monitoring, site investigation, groundwater pump tests, or related activities. Discharges that temporarily cease due to treatment system shutdown, lack of available groundwater or other unscheduled reasons are not intermittent as defined by this general permit.

*“Licensed Environmental Professional”* or *“LEP”* means an environmental professional licensed pursuant to the requirements of section 22a-133v of the General Statutes.

*“Maximum contaminant level”* or *“MCL”* means the highest level of a contaminant that is allowed in drinking water under the National Primary Drinking Water Regulations.

*“Mg/l”* means milligrams per liter.

*“Minimum Level”* means the lowest concentration of a pollutant that an analytical methodology can detect and determine the concentration of in accordance with 40 CFR 136 or other accepted protocols. *“Minimum Level”* means the same as *“Reporting Limit”*, *“Quantitation Limit”* and *“Quantification Level”*.

*“Monitoring requirement”* means the requirements specified in Sections 5, 5A, 5B, or 5C of this general permit for the evaluation of wastewaters being discharged.

*“NOAEL”* or *“no observable acute effect level of greater than or equal to 100%”* means that a sample of non-diluted effluent analyzed by a toxicity test conducted pursuant to section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies, as required in Section 5A(a)(2) of this general permit, demonstrates 90% or greater survival for each test organism.

*“Oxygenates”* means fuel additives (alcohols and ethers) that contain oxygen which can boost gasoline’s octane quality, enhance combustion, and reduce exhaust emissions.

*“Permittee”* means a person who or municipality which initiates or maintains an authorized discharge.

*“Professional engineer”* or *“P.E.”* means a professional engineer licensed by the Connecticut Department of Consumer Protection.

*“POTW authority”* means the chairperson or responsible official of the Water Pollution Control Authority which owns or operates a Publicly Owned Treatment Works.

*“Publicly owned treatment works”* or *“POTW”* means a system used for the collection, treatment and/or disposal of sewage from more than one lot as defined in section 22a-430-1

of the Regulations of Connecticut State Agencies and which discharges to the waters of the state and which is owned by a municipality, a regional water authority, or the state.

*“Qualified professional”* means a P.E., LEP, or CHMM who has, for a minimum of eight years, engaged in the design, installation, operation, and maintenance of systems for the collection and treatment of sanitary, industrial, commercial, or remediation wastewaters including, but not limited to, a minimum of four years in responsible charge of design, installation, operation, and maintenance of such systems.

*“Recovery well”* means a well used to pump contaminated groundwater.

*“Registrant”* means a person who or municipality which files a registration.

*“Registration”* means a registration filed pursuant to Section 4 of this general permit.

*“Remote site”* means a site on which groundwater remediation equipment is installed and operates but on which the permittee does not maintain other commercial activity.

*“Screening analysis”* means an analysis performed to satisfy the registration requirements of Section 4 of this permit, and the ongoing screening analysis required pursuant to Section 5(a) of this permit for the evaluation of groundwater prior to treatment for the removal of pollutants.

*“Screening form”* means form no. DEEP-WPED-SCREEN-027 as provided by the commissioner.

*“Site”* means geographically contiguous land or water from which an authorized discharge takes place or from which a discharge for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person or municipality and connected by a right-of-way which such person or municipality controls and from which the public is excluded shall be deemed the same site.

*“Sufficiently sensitive”* means using a sufficiently sensitive analytical method as defined in 40 CFR §122.44(i)(1)(iv).

*“Surface water(s)”* means the waters of Long Island Sound, its harbors, embayments, tidal wetlands and creeks; rivers and streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, federal jurisdictional wetlands, and other natural or artificial, public or private, vernal or intermittent bodies of water, excluding groundwater.

*“Target compound”* means a compound that is identified and quantified in accordance with 40 CFR 136, or other accepted protocols.

*“Tentatively identified compound”* or *“TIC”* means a chemical compound detected in a sample that is not a target compound, internal standard, system monitoring compound or surrogate.

*“Tidal wetland”* means wetland as defined by section 22a-29 of the General Statutes.

“*Total petroleum hydrocarbons analysis*” means analysis conducted in accordance with 40 CFR 136 to determine the concentration of gross oil or hydrocarbon in a substance or material.

“*Toxic*” means having the ability to adversely affect the survival, growth, or reproduction of organisms or humans through either direct contact or consumption.

“*Toxicity reduction evaluation or “TRE”*” means an evaluation intended to determine those actions necessary to achieve compliance with the Whole Effluent Toxicity limits specified in Section 5A(a)(2) of this general permit.

“*µg/l*” means micrograms per liter.

“*Volatile organic compound*” or “*VOC*” means volatile organic compound as defined in 40 CFR 51.100(s).

“*Volume proportioned average*” is a calculated concentration of pollutants in a wastewater generated by multiplying the pollutant concentration in multiple samples by the relative volume, as a percentage of the total wastewater represented by each sample and adding all results.

“*Watercourse*” means a watercourse as that term is defined by section 22a-38 of the General Statutes, including those waters designated as Coastal Waters as defined by section 22a-93 of the General Statutes.

“*Well development*” means the pumping of a well to accomplish the removal of scale or other fine materials from its sides.

“*Well point dewatering*” means the process of dewatering an area, including an excavation, by pumping a well or wells located outside such area.

“*Well purging*” means removing standing water from a well to encourage inflow of surrounding groundwater.

“*Well rehabilitation*” means to physically or chemically treat a groundwater remediation well to remove chemical or biological residues from the well screen(s), annular space, sand pack, and native materials immediately adjacent to the well to return the well to its design function.

### **Section 3. Authorization Under this General Permit**

#### **(a) Eligible Activities**

The following discharges are authorized by this general permit, provided the requirements of Section 3(b) of this general permit are satisfied:

- (1) Any discharge of groundwater remediation wastewater to a surface water, either through a dedicated conveyance, or through any other conveyance system that the permittee is authorized to utilize, or
- (2) Any discharge of groundwater remediation wastewater to a Publicly Owned Treatment Works (POTW), or

- (3) Discharge of well rehabilitation wastewaters and groundwater remediation recirculating system wastewater if conducted in accordance with the requirements of Sections 5C(a), 5C(b) and/or 5C(c) of this general permit.

All other discharges of water, substances or materials into the waters of the state are not authorized under this general permit, and any person who or municipality which initiates, creates, originates, or maintains such a discharge shall first apply for and obtain authorization under section 22a-430 or 22a-430(b) of the General Statutes.

**(b) *Requirements for Authorization***

This general permit authorizes a discharge comprised solely of groundwater remediation wastewater, provided that:

(1) Registration

- (A) Except as provided in Section 3(b)(1)(B) of this general permit, a complete and sufficient registration with respect to such discharge has been filed with the commissioner.
- (B) A complete and sufficient registration with respect to such discharge has been filed with the commissioner and the commissioner has issued an Approval of Registration with respect to such discharge if:
  - (i) the combined maximum daily flow of all groundwater remediation wastewater generated at such site exceeds ten percent of the 7Q10 flow of the watercourse into which such wastewater is discharged, or
  - (ii) the combined maximum daily flow of all groundwater remediation wastewater generated at such site exceeds one-half of one per cent of the water volume of the impoundment, lake, or pond into which such wastewater is discharged, or
  - (iii) the discharge is directed to a surface water with a Water Quality Classification designated as Class AA or any tributary thereof, or
  - (iv) wastewater treatment will include the addition of chemicals, other than for final effluent pH adjustment, used as part of wastewater treatment or for the maintenance of any treatment system component, or
  - (v) groundwater remediation wastewater to be discharged contains any pollutant, excluding temperature, solids, nutrients and oxygenates, for which no limit is specified in Appendix A or Appendix B, or
  - (vi) radioactive material as defined by section 22a-148 of the General Statutes has been deposited on the site from which such discharge takes place or is proposed to take place, or,
  - (vii) groundwater from adjacent properties potentially effected by pollutants originating from the registered property will be collected

at such adjacent properties and pumped or transported to the registered property for treatment and discharge, or

- (viii) the discharge is to be directed to the ground, including discharges of well rehabilitation wastewaters, or
- (ix) the discharge is generated from the dewatering of dredged sediments, or
- (x) the pollutants being remediated have been identified as a source of impairment in the waterbody receiving the discharge, or
- (xi) a stormwater conveyance or other structure that is not part of a designed wastewater treatment system is to be used to reduce pollutants to allowable limits, or
- (xii) the commissioner determines that emerging contaminant(s) are present at levels that require development of site specific monitoring requirements and/or discharge limitations.

(2) Coastal Area Management and Permitting

Such activity is consistent with all-applicable goals and policies in section 22a-92 of the General Statutes, and will not cause adverse impacts to coastal resources as defined in section 22a-93 of the General Statutes or if such activity is located, wholly or in part, waterward of the coastal jurisdiction line in tidal, coastal or navigable waters of the State or in tidal wetlands, the activity is authorized pursuant to sections 22a-359 through 22a-363f, inclusive, or 22a-28 through 22a-35, inclusive.

(3) Endangered and Threatened Species

Such activity does not threaten the continued existence of any species listed pursuant to section 26-306 of the General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species.

(4) Aquifer Protection

Such activity, if it is located within an aquifer protection area as mapped under section 22a-354b of the General Statutes, complies with regulations adopted pursuant to section 22a-354i of the General Statutes.

(5) Conservation and Preservation Restrictions

Such activity, if located within a conservation or preservation restriction area, complies with section 47-42d of the Connecticut General Statutes, by providing the following documentation to the commissioner: proof of written notice to the holder of such restriction of the proposed activity's registration pursuant to this general permit or a letter from the holder of such restriction verifying that the proposed activity is in compliance with the terms of the restriction.

(6) Wild and Scenic Rivers Act

Such activity must be consistent with the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) for those river components and tributaries which have been designated as Wild and Scenic by the United States Congress. Further, such activity must not have a direct and adverse effect on the values for which such river designation was established.

(7) Antidegradation Standards

Such activity is consistent with the Antidegradation Standards of section 22a-426-8 of the Regulations of Connecticut State Agencies.

(8) Water Diversion Policy Act

Such activity is consistent with the Water Diversion Policy Act which requires that any person or municipality maintaining a diversion at a rate exceeding 50,000 gallons in any twenty- four hour period shall:

- (A) have in effect a valid license issued by the commissioner pursuant to sections 22a-368 or 22a-378a of the General Statutes, or
- (B) be exempt pursuant to section 22a-377(b)-1(a) of the Regulations of Connecticut State Agencies.

(9) New Discharges to Impaired Waters or Surface Waters with Total Maximum Daily Loads

A new surface water discharge to an impaired water listed in the most recent Connecticut Integrated Water Quality Report pursuant to Clean Water Act section 303(d) and 305(b) is not authorized unless the permittee provides to the commissioner the following documentation to support a showing that the discharge is not expected to cause or contribute to an exceedance of a water quality standard:

- (A) For discharges of pollutants which cause or contribute to the impairment of a water body segment without an established Total Maximum Daily Load (TMDL), the permittee must provide data and other technical information to the commissioner sufficient to demonstrate that the discharge of the pollutant identified as an indicator of the impairment will meet in-stream water quality criteria at the point of discharge to the waterbody.

For discharges to waterbody segments impaired for Aquatic Life Uses, discharges shall not contain concentrations of any pollutants with a Water Quality Criteria (WQC) identified in section 22a-426-9 Table 3 of the Regulations of Connecticut State Agencies in concentrations greater than the more restrictive of the chronic aquatic life criteria or applicable human health criteria.

- (B) For discharges to waters with an established Total Maximum Daily Load (TMDL), the Department must determine that there are sufficient remaining Waste Load Allocations in the TMDL to allow the discharge and that existing dischargers to the waterbody are subject to compliance

schedules designed to bring the waterbody into attainment with water quality standards.

To be eligible for authorization under this subsection, the registrant must receive a written determination from the commissioner that the discharge will not contribute to the existing impairment. If the registrant does not receive such written determination, the activity is not authorized by this general permit and must obtain an individual permit.

(10) Existing Discharges to Impaired Surface Waters

For previously authorized discharges to impaired waterbody segments or other sensitive areas, the commissioner may require additional control measures or may require authorization under an individual permit pursuant to Sections 3(f)(Transition to and from an Individual Permit) and 4(f) (Action by Commissioner) of this general permit.

- (11) If radioactive material as defined by section 22a-148 of the General Statutes has been deposited on the site from which discharge takes place or is proposed to take place, such discharge is performed and monitored in accordance with the applicable conditions 10 CFR 50.36a “Technical specifications effluents from nuclear power reactors” plus 10 CFR 20 Appendix B “Standards for Protection Against Radiation” and 40 CFR 190, “Environmental Radiation Protection Standards For Nuclear Power Operations”.
- (12) If such site is a solid waste disposal area, as defined in section 22a-207 of the General Statutes, for which the department has required that a groundwater monitoring plan be approved by the commissioner, the commissioner has approved such a plan.
- (13) Any local authorization(s) required for such a discharge or associated activities have been obtained, including written approval from the POTW authority if applicable.
- (14) Such discharge does not physically disturb any tidal wetland or reduce the salinity of any tidal, navigable, or coastal water by more than five percent.
- (15) If such discharge is directed to surface waters with a Water Quality Classification designated as Class AA or any tributary thereof, or to ground waters with a Water Quality Classification designated as GAA, or an Aquifer Protection Area, a copy of the registration has been filed with the appropriate water utility and the Department of Public Health, Drinking Water Section via email at [DPH.SourceProtection@ct.gov](mailto:DPH.SourceProtection@ct.gov), and such discharge has been approved in writing by the Department of Public Health, Drinking Water Section.

(16) Certifications by a Qualified Professional

For discharges of longer than 30 days, as required by Section 4(c)(2)(R) of this general permit, the registrant has submitted to the commissioner a written certification which, at a minimum, complies with the following requirements:

- (A) such certification was signed by a Qualified Professional as defined in this general permit;
- (B) such certification is not the subject of an audit as described under section 22a-430b of the Connecticut General Statutes;
- (C) the Qualified Professional signing the certification has, at a minimum, completely and thoroughly reviewed this general permit and the following regarding the discharges to be authorized under this general permit: (i) all registration information provided in accordance with Section 4(c)(2) of this general permit, (ii) the facility, based on a site inspection, (iii) compliance records, (iv) all wastewater collection and treatment systems and monitoring equipment, including any plans and specifications, operating records and any Department approvals regarding such wastewater collection and treatment systems and monitoring equipment;
- (D) the Qualified Professional signing the certification has made an affirmative determination, based on the review described in Section 3(b)(16)(C) of this general permit, that any treatment or Best Management Practices are adequate to assure that the activity to be authorized under this general permit will comply with the terms and conditions of such general permit and all wastewater collection and treatment systems and monitoring equipment: (i) have been designed and installed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable, (ii) will function properly as designed based on visual inspection, compliance and operating records, and (iii) are adequate to ensure compliance with the terms and conditions of this general permit;
- (E) such Qualified Professional certifies, provided it is true and accurate, to the following statement: "I hereby certify that I am a Qualified Professional as defined in the General Permit for the Discharge of Groundwater Remediation Wastewater and as further specified in Section 3(b)(16) of such permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(16)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the

affirmative determination required in accordance with Section 3(b)(16)(D) of this general permit and that my signing this certification constitutes conclusive evidence of my having made such affirmative determination. I understand that this certification may be subject to an audit by the commissioner in accordance with section 22a-430b of the Connecticut General Statutes, and I agree to cooperate with the commissioner should such an audit be required, including, but not limited to providing information as may be requested in writing by the commissioner in connection with any such audit. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(17) Certification Requirements for Registrants and other Individuals

As part of the registration for this general permit, the registrant and any other individual or individuals responsible for preparing the registration submits to the commissioner a written certification which, at a minimum, complies with the following requirements:

- (A) the registrant and any other individual or individuals responsible for preparing the registration and signing the certification has completely and thoroughly reviewed, at a minimum, this general permit and the following regarding the activities to be covered under such general permit: (i) all registration information provided in accordance with Section 4(c)(2) of such general permit, (ii) the facility, based on a visual site inspection, (iii) compliance records, (iv) all wastewater collection and treatment systems and monitoring equipment, including any plans and specifications, operating records and any Department approvals regarding such wastewater collection and treatment systems and monitoring equipment;
- (B) the registrant has, based on the review described in Section 3(b)(17)(A) of this general permit, made an affirmative determination to: (i) comply with the terms and conditions of this general permit; (ii) maintain compliance with all plans and documents prepared pursuant to this general permit, and (iii) properly operate and maintain all wastewater collection and treatment systems and monitoring equipment in compliance with the terms and conditions of this general permit to protect the waters of the state from pollution;
- (C) such registrant certifies to the following statement: "I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that such activity is eligible for authorization under such permit. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all

information described in Section 3(b)(17)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination required in accordance with Section 3(b)(17)(B) of this general permit and that my signing this certification constitutes conclusive evidence of my having made such affirmative determination.

I certify that our facility does not use products or chemicals that may result in a discharge of mercury.

I understand that the registration filed in connection with such general permit may be denied, revoked or suspended for engaging in professional misconduct, including but not limited to the submission of false or misleading information, or making a false or inaccurate certification. I understand that the certification made pursuant to Section 3(b)(16) of this general permit may be subject to an audit by the commissioner in accordance with section 22a-430b of the Connecticut General Statutes, and that I will be required to provide additional information as may be requested in writing by the commissioner in connection with such audit, and the registration filed in connection with such general permit may be denied, revoked or suspended as a result of such audit. As part of such audit, I understand the commissioner may require that any information prepared in accordance with this general permit be independently certified by a Professional Engineer in accordance with this general permit and that such independent certification shall be at the registrant's expense. I understand that the reasonable cost of any such audit that reveals that a false certification was submitted to the commissioner may be charged to the registrant for this general permit for which such certification was made. I also understand that knowingly making any false statement in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.”

- (D) any other individual or individuals responsible for preparing the registration certifies to the following statement: “I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that such activity is eligible for authorization under such permit. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(17)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such

information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I understand that the registration filed in connection with such general permit may be denied, revoked or suspended for engaging in professional misconduct, including but not limited to the submission of false or misleading information, or making a false or inaccurate certification. I understand that knowingly making any false statement in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.”

- (18) No pollutant with an effluent limit specified as not detected (ND) is detected using sufficiently sensitive analytical methods.

**(c) *Geographic Area***

This general permit applies throughout the State of Connecticut.

**(d) *Effective date and expiration date of this General Permit***

This general permit is effective on February 21, 2018 and expires on February 20, 2023.

**(e) *Effective date of Authorization under this General Permit***

- (1) Except as provided in Section 3(e)(2) of this general permit, a discharge of groundwater remediation wastewater is authorized on the date the commissioner receives a complete and sufficient registration with respect to such discharge.
- (2) A discharge for which an approval of registration is required under Section 3(b)(1)(B) of this general permit is authorized on the date the commissioner issues an approval of registration with respect to such discharge.

**(f) *Transition to and from an Individual Permit***

No person shall operate or conduct an activity authorized by both an individual permit and this general permit. The requirements for transitioning authorization are as follows:

- (1) *Transition from an Individual Permit to Authorization under this General Permit.* If an activity meets the requirements of authorization of this general permit and such operation or activity is presently authorized by an individual permit, the permittee may seek a modification to the permit to exclude such operation or activity from the individual permit or if the operation or activity is the sole operation or activity authorized by such permit, the permittee shall surrender its permit in writing to the commissioner. In either event, such permittee’s individual permit shall continue to apply and remain in effect until authorization of such operation or activity under this general permit takes effect.
- (2) *Transition from Authorization under this General Permit to an Individual Permit.* If an activity or operation is authorized under this general permit and the commissioner subsequently issues an individual permit for the same activity,

then on the date any such individual permit is issued by the commissioner, the authorization issued under this general permit shall automatically expire.

## **Section 4. Registration Requirements**

### ***(a) Who Must Submit a Registration***

Any person or municipality seeking authorization under this general permit to initiate, create or maintain a discharge of groundwater remediation wastewater shall file with the commissioner a registration which meets the requirements of this section, and the applicable fee specified by Section 4(c) of this general permit in accordance with the following:

- (1) For a new discharge of groundwater remediation wastewater, a complete and sufficient registration and applicable fee shall be filed with the commissioner prior to the initiation of such discharge.
- (2) For an existing discharge of groundwater remediation wastewater authorized under the General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water effective on March 30, 2016 and expiring on March 29, 2018, a complete and sufficient registration and applicable fee shall be filed with the commissioner on or before April 15, 2018.
- (3) For an existing discharge of groundwater remediation wastewater authorized under the General Permit for the Discharge of Groundwater Remediation Wastewater to a Sanitary Sewer effective on February 15, 2008 and expiring on February 15, 2018, a complete and sufficient registration and applicable fee shall be filed with the commissioner on or before March 29, 2018.

### ***(b) Scope of Registration***

A registrant shall register on one registration form every discharge originating from a single site for which discharge the registrant seeks authorization under this general permit. Discharges originating from more than a single site may not be registered on the same registration form.

### ***(c) Contents of Registration***

- (1) Fees
  - (A) Except as provided in Sections 4(c)(1)(B) and (C) of this general permit, a registration fee of \$625 for any person and \$312.50 for any municipality shall be submitted with a registration form.
  - (B) A registration fee of \$1,250 for any person or \$625 for any municipality shall be submitted for any discharge of groundwater remediation wastewater for which an approval of registration is required under Section 3(b)(1)(B) of this general permit unless such approval of registration is issued by the commissioner under Section 3(b)(1)(B)(xii) of this general permit.

- (C) Discharges from a building used solely as a single-family residence shall be exempt from the fees required under Section 4(c)(1) of this general permit.
- (D) A registration shall not be deemed complete and sufficient and the subject discharge shall not be authorized by this general permit unless the registration fee has been paid in full.

(2) Registration Form

A registration shall be filed on forms prescribed and provided by the commissioner and shall, with respect to each discharge registered on such form, include the following:

- (A) Legal name, address, and telephone number of the owner of the site from which the subject discharge takes, or is to take, place.
- (B) Legal name, address, and telephone number of the registrant's attorney or other representative, if applicable.
- (C) Legal name, address, and telephone number of any consultant(s), or engineer retained by the registrant to prepare the registration.
- (D) Location address and groundwater classification of the site of the subject discharge.
- (E) The name and water quality classification of the surface water receiving the discharge, the 7Q10 flow of said surface water, and the method of calculating the 7Q10 flow of the surface water, including but not limited to, identification of the sources(s) of all information used in such calculation, if applicable.
- (F) The name of the POTW which will receive the discharge, if applicable.
- (G) The maximum daily flow and number of hours per day of the subject discharge.
- (H) If the subject discharge is an existing discharge, the date it began and the date it is expected to end; if the subject discharge is a new discharge, the date the registrant intends to initiate the discharge and the date it is expected to end.
- (I) A statement whether or not the subject discharge will take place within the coastal boundary, in essential habitat of an endangered or threatened species, or in an aquifer protection area as defined in section 22a-354h of the General Statutes.
- (J) A statement whether the subject discharge will take place within ¼-mile of any public or private drinking water well.

- (K) An indication of whether the site is on the State or Federal Superfund list, National Priority List, listed under CERCLA, has been used for the disposal of hazardous materials, or is subject to the reporting requirements of sections 22a-6u or 22a-134 of the General Statutes.
- (L) A detailed description of any treatment facility for the subject wastewater, including without limitation a description of flow monitoring equipment or techniques and devices used for recording total daily flow, and a statement whether any such system will employ air stripping.
- (M) A detailed description of any erosion and sediment controls, and energy dissipation structures to be used in connection with the subject remedial measures.
- (N) A plan of the site where the subject wastewater will be generated, showing at a minimum: the legal boundaries of such site; the location of existing and planned recovery, soil venting, and drinking water wells thereon; the location from which the subject discharge leaves the site; the location from which the subject discharge enters the surface water; the location of all monitoring wells and other places where chemical, physical, or biological monitoring does or will take place; the existing or planned treatment system for the subject wastewater; and the location, if any, of all tidal wetlands and of all inland wetlands and watercourses.
- (O) A 8 ½" x 11" copy of each applicable section of a United States Geological Survey quadrangle map with a scale of 1:24,000, which shows: the exact location of each discharge; the longitude and latitude of the discharge to within the closest 15 seconds; and the location of any drinking water wells within ¼-mile of the site. Each quadrangle map should be marked with the name of such map.
- (P) The results of a screening analysis conducted pursuant to Sections 4 and 5(a) of this general permit, as documented on a screening form, prescribed and provided by the commissioner.
- (Q) An "Application for Approval of Registration if an Approval of Registration is required per Section 3(b)(1)(B) of this general permit.
- (R) A certification by a Qualified Professional that complies with Section 3(b)(16) of this general permit for discharges exceeding 30 days in duration.
- (S) A written certification, signed by the registrant and any other individual or individuals responsible for preparing the registration, which complies with the requirements of Section 3(b)(17) of this general permit.
- (T) Attachment K, Department of Public Health, Drinking Water Section Approval, if such approval is required by Section 3(b)(15) of this General Permit pertaining to discharges to surface waters with a Water Quality Classification designated as Class AA or any tributary thereof, or to

ground waters with a Water Quality Classification designated as GAA, or an Aquifer Protection Area,

**(d) *Where to Submit a Registration***

- (1) A registration shall be filed at the following address:

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

- (2) One additional copy of the complete and sufficient registration shall be submitted for each of the following conditions:

- (A) For any discharge of groundwater remediation wastewater where drinking water wells exist within one-quarter mile of the proposed site;
- (B) For any discharge of groundwater remediation wastewater where air stripping is used as a wastewater treatment technology.

**(e) *Additional Information***

The commissioner may require a registrant to submit additional information which the commissioner deems reasonably necessary to evaluate whether the subject discharge is consistent with the criteria for authorization under this general permit.

**(f) *Action by Commissioner***

- (1) The commissioner may reject a registration if the registration is not accompanied by the required fee or the commissioner determines that the registration does not include the information required in Section 4(c) of this general permit. Any registration refiled after such a rejection shall be accompanied by the fee specified in Section 4(c)(1) of this general permit.
- (2) The commissioner may deny a registration if it is found that the subject activity is inconsistent with the requirements for authorization under Section 3 of this general permit, or for any other reason provided by law.
- (3) Denial of a registration under this subsection shall constitute notice to the registrant that the subject activity may not lawfully be conducted or maintained without the issuance of an individual permit.
- (4) The commissioner may approve a registration with reasonable conditions. If the commissioner approves a registration with conditions, the permittee shall be bound by such conditions as if they were a part of this general permit.
- (5) Rejection, denial, or approval of a registration shall be in writing.

## Section 5. Conditions of this General Permit – ALL DISCHARGES

The permittee shall at all times continue to meet the requirements for authorization set forth in Section 3 of this general permit. In addition, the permittee shall assure that authorized activities are conducted in accordance with the following conditions:

### (a) *Screening Analysis Requirements*

#### (1) Frequency

##### (A) Initial Screening Analysis

Except as noted in the next paragraph, an initial screening analysis shall be conducted prior to registering for authorization under this general permit and results shall be submitted on forms prescribed and provided by the commissioner with the registration form per Section 4(c)(2)(P) of this general permit.

If the authorized discharge is the result of an emergency response, unexpected release, or underground storage tank release, the initial screening analysis shall be submitted within 30 days of submittal of a registration.

##### (B) Ongoing Screening Analysis

After registering, and for the duration of authorization under this general permit, the registrant shall conduct ongoing screening analysis. Analysis shall be recorded on forms prescribed and provided by the commissioner, submitted in accordance with Section 5 of this general permit, and be maintained on site or be readily available by the permittee. Ongoing screening analysis shall be conducted in accordance with the following schedule based on discharge volume:

<b>Maximum Daily Flow</b>	<b>Ongoing Screening Frequency</b>
< 5,000 gallons per day	annually
≥ 5,000 gallons per day	twice per year

#### (2) Protocols

All screening analysis, initial and ongoing, required by this general permit shall conform to the following:

(A) Samples shall be grab samples of untreated wastewater.

(B) Samples shall be analyzed to determine the concentration or level therein of:

(i) Total volatile organic compounds;

(ii) Total petroleum hydrocarbons;

- (iii) Total copper, total lead, total mercury, total zinc, total iron and total cadmium;
  - (iv) pH;
  - (v) Total Nitrogen and Total Phosphorous
  - (vi) Temperature;
  - (vii) Total settleable solids;
  - (viii) Total suspended solids.
- (C) If wastewater to be discharged is reasonably expected to be impacted by petroleum compounds other than gasoline, samples of untreated wastewater shall be analyzed for Polynuclear Aromatic Hydrocarbons (PAHs).
- (D) If wastewater to be discharged is reasonably expected to be impacted by gasoline, the samples of untreated wastewater shall be analyzed for gasoline oxygenates, including TBA, MTBE, TAME, and related compounds known to be added to the gasoline released. Analysis shall be by EPA Method 624, or other methodology approved pursuant to 40 CFR 136.
- (E) If any pollutant listed in:
- (i) Appendix B, Tables II, III, IV, or V of section 22a-430-4 of the Regulations of Connecticut State Agencies;
  - (ii) Appendix D of section 22a-430-4 of the Regulations of Connecticut State Agencies; or
  - (iii) Title 10 of the CFR,

is reasonably known to have been handled, stored, released, or disposed of at or adjacent to the site where the subject wastewater originates, the subject wastewater shall also be analyzed to determine the concentration of such pollutant.

- (F) If any pollutant identified as an emerging contaminant is reasonably known to have been handled, stored, released or disposed of at the site where the subject wastewater originates, the subject wastewater shall also be analyzed to determine the concentration of such emerging contaminants(s) if an analytical method for such pollutant has been approved pursuant to 40 CFR 136. Such monitoring shall not be subject to the ongoing screening analysis or effluent monitoring requirements unless directed to conduct such analysis in writing by the commissioner.

- (G) If any pollutant,
- (i) other than one specified in subsections (2)(B), 2(C), 2(D), 2(E) or 2(F) of this section which may be toxic, hazardous, or detrimental to any use of the watercourse designated pursuant to Connecticut's Water Quality Standards into which such wastewater is or will be discharged, or
  - (ii) having the potential to bioaccumulate, bioconcentrate, or adversely affect aquatic life,

is reasonably known to have been handled, stored, released, or disposed of at or adjacent to the site where the subject wastewater originates, the subject wastewater shall also be analyzed to determine the concentration of each such pollutant.

(H) Test Methods

All sample analyses shall be done by a laboratory certified by the Connecticut Department of Public Health. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative test methods approved by EPA in accordance with the procedures in 40 CFR §136. All analyses must be conducted using a sufficiently sensitive test method in accordance with 40 CFR §122.44(i)(1)(iv).

**(b) *Pollution Prevention/Best Management Practices***

- (1) Solid waste, including but not limited to contaminated soils or sludges, may be generated as a result of the remediation activity allowed by this general permit. All waste generated must be disposed of in accordance with applicable federal, state and local law. Some or all of these wastes may be hazardous waste identified in accordance with section 3001 of the Federal Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) or other wastes of special concern requiring department approval prior to disposal. It is the responsibility of the permittee to ensure that all wastes generated are properly identified and that all necessary department approvals are secured prior to disposal of the wastes. For further information regarding solid waste management, please contact the Waste Engineering and Enforcement Division at 860-424-3023.
- (2) Air pollution, including but not limited to hazardous air pollutants, may be emitted as a result of the remediation activity allowed by this general permit. It is the responsibility of the permittee to ensure that all air pollution emitted is properly identified and quantified, and that all necessary department approvals are secured prior to emitting such pollutants. All air pollution emitted must be analyzed to ensure compliance with all applicable federal, state and local laws including but not limited to sections 22a-174-1 (Definitions), 22a-174-3 (New Sources), and 22a-174-29 (Hazardous Air Pollutants) of the Regulations of Connecticut State Agencies and the National Emission Standards for Hazardous Air Pollutants (NESHAPs) in the Code of Federal Regulations (40 CFR Part

61). For further information, please contact the Air Permitting Program at 860-424-4152.

- (3) No litter, debris, building materials, or similar materials shall be discharged to the waters of the state from the site.

**(c) *Erosion and Sediment Controls***

If authorized activities create a potential for pollution due to the erosion of soil, erosion and sediment control measures shall be installed and maintained in compliance with the standards set forth in the "2002 Connecticut Guidelines for Soil Erosion and Sediment Control" as revised, established pursuant to section 22a-328 of the Connecticut General Statutes.

- (1) During the construction of any dewatering facility associated with the discharge, erosion and sediment control measures shall be installed and maintained to ensure that erosion of disturbed soils and discharge of eroded sediments to tidal wetlands, inland wetlands and watercourses is minimized or eliminated.
- (2) During discharge operations, erosion and sediment control measures shall be installed and maintained to ensure that discharge energies are sufficiently dissipated to prevent the erosion of soil and the discharge of eroded sediments to tidal wetlands, inland wetlands and watercourses.

**(d) *Regulations of Connecticut State Agencies Incorporated into this General Permit***

The permittee shall comply with all applicable law, including without limitation the following Regulations of Connecticut State Agencies, which are hereby incorporated into this general permit as if fully set forth herein:

Section 22a-430-3:

Subsection (b) General - subparagraph (1)(D) and subdivisions (2), (3), (4) and (5)

Subsection (c) Inspection and Entry

Subsection (d) Effect of a Permit - subdivisions (1) and (4)

Subsection (e) Duty to Comply

Subsection (f) Proper Operation and Maintenance

Subsection (g) Sludge Disposal

Subsection (h) Duty to Mitigate

Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)

Subsection (j) Monitoring, Records and Reporting Requirements - subsections (1), (6), (7), (8), (9) and (11) [except subparagraphs (9)(A)(2), and (9)(C)]

Subsection (k) Bypass

Subsection (m) Effluent Limitation Violations

Subsection (n) Enforcement

Subsection (o) Resource Conservation

Subsection (p) Spill Prevention and Control

Subsection (q) Instrumentation, Alarms, Flow Recorders

Subsection (r) Equalization

Section 22a-430-4:

Subsection (t) - Prohibitions

Subsection (p) - Revocation, Denial, Modification

Appendices

## Section 5A. Permit Terms and Conditions Applicable for Discharges to Surface Waters

### (a) *Monitoring Requirements*

#### (1) Chemical Monitoring Frequency

Monitoring to verify compliance with the effluent limitations in Section 5A and Appendix A of this general permit and any Approval of Registration issued pursuant to Section 3 of this general permit shall be performed according to the following schedule:

- (A) For all discharges, except as specified in subsection (D) of this section, for each initiation of a discharge, the discharge shall be sampled on the first day of discharge and then every other day for the first week, weekly for the next month, and then as follows depending upon the maximum daily flow:

<i>Maximum Daily Flow</i>	<i>Effluent Monitoring Frequency</i>
< 5,000 gallons per day	quarterly
≥ 5,000 gallons per day	monthly

- (B) For each initiation or restart of a discharge after an exceedance of an effluent limitation, the discharge shall be sampled on the first day of discharge and then every other day for the first week, weekly for the next month, and then in accordance with the sampling schedule at the time the discharge was ceased.
- (C) For each restart of a discharge for any reason other than an exceedance of a parameter limit, the discharge shall be sampled on the first day of discharge and then in accordance with the sampling schedule at the time the discharge was ceased.
- (D) For intermittent discharges of groundwater remediation wastewaters generated from scheduled remediation activities, such as purging conducted prior to monitoring, conducted at sites with no other discharges of wastewater subject to this general permit, the following monitoring shall be required:
- (i) A minimum of one representative sample shall be collected and analyzed in accordance with Section 5A(c) of this general permit for each discharge.

- (ii) If multiple points are sampled independently, a volume-proportioned average of analytical results may be substituted for a single sample.
- (iii) Treatment and discharge shall be conducted as described in Section 5A(d) of this general permit.

(2) Aquatic Toxicity Monitoring

All discharges of Groundwater Remediation Wastewater to a surface water, except intermittent discharges, with a duration of greater than 90 days shall be monitored for aquatic toxicity in accordance with the following:

- (A) Monitoring frequency for aquatic toxicity shall be conducted and reported as follows unless otherwise approved by the commissioner:
  - (i) For discharges exceeding 25,000 gallons per day, monitoring for toxicity shall be conducted quarterly during the months of March, June, September, and December.
  - (ii) For discharges with flows of less than 25,000 gallons per day, monitoring for aquatic toxicity shall be conducted twice per year in the months of March and September.
  - (iii) For discharges consisting solely of well purging wastewater generated during routine monitoring events that comply with all chemical monitoring requirements, toxicity monitoring shall be conducted once during the term of this general permit.
  - (iv) For sites discharging under 1,000 gallons per day, if groundwater levels are insufficient to generate a representative discharge during the routine sampling required above, toxicity monitoring may be waived for that sampling period.
- (B) Samples collected for determination of aquatic toxicity shall be tested using the NOAEL protocol specified in section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies.
- (C) Toxicity tests shall be initiated within 24 hours of sample collection.
  - (i) Grab samples shall be chilled immediately following sample collection.
  - (ii) Samples used for Aquatic toxicity shall not be dechlorinated, filtered or modified in any way prior to testing, except for samples which require salinity adjustment. For salinities of between 5 ppt and 15 ppt, the effluent may be salinity adjusted to 15 ppt using artificial sea salts.
- (D) Toxicity tests shall be 48 hours in duration.

- (E) For salinity less than 5 ppt toxicity tests shall employ neonatal (less than 24 hours old) *Daphnia pulex* and juvenile (1-14 days old, with no greater than a 24 hour range in age) *Pimephales promelas* as test organisms. For salinity greater than or equal to 5 ppt toxicity tests shall utilize neonatal (1-5 days old with no more than 24-hours range in age) *Mysidopsis bahia* and juvenile (9-14 days old, with no greater than a 24 hour range in age) *Menidia beryllina* as test organisms.
- (F) All samples collected for determination of aquatic toxicity shall be analyzed for chemical parameters as follows:

<b>Pollutant Parameters</b>	<b>Required Minimum Level</b>
Copper, Total Recoverable	0.005 mg/l
Lead, Total Recoverable	0.005 mg/l
Iron, Total Recoverable	0.1 mg/l
Total Residual Chlorine	0.020 mg/l
Temperature	°F
Zinc, Total Recoverable	0.005 mg/l
Salinity	parts per thousand (ppt)
Appearance	---
Hardness	---
Alkalinity	---
Specific conductance	---
pH	+/- 0.10 Standard Unit

- (G) If any toxicity test indicates that either of the conditions listed below has occurred, another sample of the discharge shall be collected and tested as described above within 30 days of the previous test.
- (i) The survival of the test organisms was less than ninety (90) percent in the average of the test chambers containing undiluted effluent (permit limit exceeded).
  - (ii) The survival of test organisms was less than ninety (90) percent in each replicate control test chamber or test conditions were not achieved as specified in section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies, such as maintenance of appropriate environmental controls (invalid test).
- (H) Following the violation of any aquatic toxicity limit for two consecutive tests or three tests in any 12 month period, the permittee shall conduct a Toxicity Identification/Reduction Evaluation (see Methods for Aquatic Toxicity Identification Evaluations, Publication No. EPA/600/6-91/003) and submit a schedule for return to compliance.

- (I) All toxicity tests and supporting chemistry must be reported to the Department via NetDMR and also by electronic mail on a form provided by the commissioner.

(3) Totals Suspended Solids Requirements

Total Suspended Solids concentrations shall not exceed 30 mg/l. Total Suspended Solids concentrations of greater than 30 mg/l shall be reported and corrected per the conditions of Section 5A(f)(2) of this general permit. Total Suspended Solids concentrations of greater than 30 mg/l are not subject to the requirements of Section 5A(f)(1), (3) or (4) of this general permit.

**(b) Effluent Limitations**

- (1) The effluent limitations specified in Appendix A and/or this section of this general permit and/or specified in the Approval of Registration issued pursuant to Section 3 of this general permit, shall not be exceeded at any time as determined by a grab sample.

Effluent analyses for which quantification was verified during the analysis using sufficiently sensitive methods and which indicate that a parameter was not detected (ND) shall be reported as "less than x" where 'x' is the numerical value equivalent to the minimum level for that analysis.

For any analyses conducted using a sufficiently sensitive test method in accordance with 40 CFR §122.44(i)(1)(iv), if the minimum level for such test method exceeds the effluent limit for the measured pollutant or pollutant parameter, then the effluent limit for the measured pollutant or pollutant parameter shall be non-detect at the minimum level for such test method.

- (2) The maximum daily flow shall not exceed the maximum daily flow specified in the general permit registration.
- (3) The pH of the discharges shall not be less than 6.0 or greater than 8.5 standard units for discharges to surface waters.
- (4) For sites within the influence of naturally saline waters, where such waters are known or presumed to compose all or part of the groundwaters to be pumped, and the discharge is to be directed to such naturally saline water, the limitation for naturally occurring saline water ions shall be 1.5 times the naturally occurring concentration for such ions provided:
  - (A) Groundwater on-site is not known or presumed to be contaminated by such ions as the result of activities that have or are currently occurring at the site,
  - (B) Background concentrations for such ions have been verified by monitoring of the surface water beyond any area influenced by the subject site,
  - (C) The ion does not cause or contribute to a violation of the toxicity requirements of this general permit, and

- (D) Monitoring for such ions is conducted in the surface water at least once per year with analysis being submitted with the reporting required pursuant to Section 5A(e) of this general permit.

**(c) *Additional Monitoring Requirements***

All discharges shall be monitored in accordance with the following:

- (1) The permittee shall monitor the discharge for any pollutant that in the screening analysis conducted pursuant to Section 5(a) of this general permit or any other analysis identifies the presence of such pollutant in the groundwater at levels above either the limitations specified in Appendix A or Section 5A(b) of this general permit or the limitations or conditions specified in an Approval of Registration issued pursuant to Section 3 of this general permit.
- (2) The permittee shall monitor the discharges for the presence of VOCs if the source of contamination includes VOCs, or any screening analysis conducted pursuant to Section 5(a) of this general permit indicates the presence of any VOCs at or above the minimum level, or a combined concentration of oxygenates exceeding 50 ug/l. Tentatively identified compounds (TIC) detected in the screening analysis required pursuant to Section 5(a) of this general permit shall be analyzed as target compounds if such compounds compose greater than 10% of the total pollutant load for VOCs, or if treatment technology is not proven to be as effective for the TICs detected as for target VOCs of concern.
- (3) The permittee shall monitor the discharges for total petroleum hydrocarbons if:
  - (A) the results of any analysis of the discharges indicates that total petroleum hydrocarbons is present in the groundwater to be discharged above the limit identified in Appendix A of this general permit;
  - (B) oil or an oily sheen is visible in the water to be discharged; or
  - (C) the source of the contamination being remediated is petroleum oil.
- (4) All discharges generated during construction dewatering, except well point dewatering, shall be monitored for Total Suspended Solids, and Total Settleable Solids.
- (5) Except as noted in Section 5A(b)(4) of this general permit the permittee shall monitor the discharges for any metal if:
  - (A) any analysis required per Section 5(a)(2) of this general permit indicates that metal is present in the groundwater at concentrations greater than the limit listed in Appendix A;
  - (B) the site has been historically or is presently used to dispose of or store that metal; or

(C) the permittee has reason to believe that concentrations of the metal in groundwater may exceed the limits in Appendix A, as a result of current or historic on-site activities.

- (6) The permittee shall periodically calibrate and perform maintenance on all monitoring and field equipment at intervals that will ensure the accuracy of measurements.
- (7) Monitoring for flow shall be performed according to the schedule in Section 5A(a)(1)(A) of this general permit. All discharges of greater than 5000 gallons per day, shall have flow monitoring equipment installed, or implement techniques and devices capable of recording total daily flow. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. All other discharges shall implement flow-measuring procedures to adequately estimate flows.
- (8) Monitoring and reporting of radioactive liquid releases shall be performed in accordance with an approval of registration issued pursuant to Section 3(b)(1)(B)(vi) of this general permit *and* with the applicable 10 CFR 50.36a “Technical specifications on effluents from nuclear power reactors” plus 10 CFR 20 Appendix B, “Standards for Protection Against Radiation” and 40 CFR 190, “Environmental Radiation Protection Standards For Nuclear Power Operations”. Annual monitoring reports shall be submitted to the Federal Nuclear Regulatory Commission and the Department’s Bureau of Air Management, Radiation Control Division.

(9) Monitoring of Discharges to Impaired Waters

For discharges to impaired waters, the permittee must conduct the following additional monitoring:

- (A) Discharges to Impaired Waters **without** an Established Total Maximum Daily Load (TMDL)
- (i) For discharges to an impaired water without a TMDL, the permittee must monitor annually for any indicator pollutants identified as contributing to the impairment if informed in writing by the Department (and for which a standard analytical method exists). No additional monitoring is required when a waterbody’s biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is identified as an indicator of the impairment, or when a waterbody’s impairment is related to hydrologic modifications, impaired hydrology, or temperature.
- (ii) This monitoring requirement does not apply after the first year of monitoring if the indicator pollutant is not detected above natural

background levels, as determined by the commissioner, in the discharge.

(B) Discharges to Impaired Waters **with** an Established Total Maximum Daily Load (TMDL)

- (i) For discharges to impaired waters for which there is an established TMDL, the permittee is required to monitor for any indicator pollutant identified in the TMDL if informed in writing by the Department (following the Department's examination of the applicable TMDL and/or Waste Load Allocation (WLA)). The Department's notice will include specifications on which indicator pollutant to monitor, limit of detection, and the required monitoring frequency during the first year of permit coverage.
- (ii) Following the first year of monitoring:
  - (a) If the indicator pollutant is not detected in any of the first year samples, the permittee may discontinue further sampling, unless the TMDL has specific instructions to the contrary, in which case the permittee must follow those instructions.
  - (b) If the permittee detects the presence of the indicator pollutant in the discharge for any of the samples collected in the first year, the permittee must continue monitoring annually throughout the term of this permit, unless the TMDL specifies more frequent monitoring, in which case the TMDL requirements must be followed.

(10) Monitoring Location

- (A) Samples shall be taken at the monitoring points identified pursuant to Section 4(c)(2)(N) of this general permit before the effluent joins or is diluted by any other waste stream, or substance.
- (B) For any site with more than one discharge point, individual samples shall be collected from each discharge. Samples shall be designated as DSN 101, DSN 102, etc.

(11) Sample Type

Samples taken for purposes of determining compliance with all effluent limitations and monitoring requirements listed in this general permit shall be grab samples.

(12) Test Methods

- (A) All sample analysis which are required by this general permit shall be conducted by a laboratory certified in accordance with the certification requirements specified in section 19-29a of the General Statutes. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative test methods approved by EPA

in accordance with the procedures in 40 CFR §136 or using methods approved by the commissioner in an Approval of Registration issued pursuant to Section 3 of this general permit.

- (B) All analyses must be conducted using a sufficiently sensitive test method in accordance with 40 CFR §122.44(i)(1)(iv).

**(d) *Treatment and Inspection Requirements***

- (1) The permittee shall treat the discharge for any pollutant that in the screening analysis conducted pursuant to Section 5(a) of this general permit or any other analysis identifies the presence of such pollutant in the groundwater at levels above either the limitations specified in Appendix A or Section 5A(b) of this general permit or the limitations specified in an Approval of Registration issued pursuant to Section 3 of this general permit or as directed in an Approval of Registration issued pursuant to Section 3 of this general permit.
- (2) Treatment systems implemented shall incorporate best management practices and accepted technologies for the reduction of all pollutants to below the levels specified in Appendix A and/or Section 5A(b) of this general permit and/or specified in the Approval of Registration issued pursuant to Section 3 of this general permit.
- (3) If the discharge is directed to a waterbody or tributary to any waterbody that contributes to a source of public drinking water, treatment shall at a minimum incorporate technologies certified by the NSF for the treatment of drinking water for the removal of the pollutants of concern, and be designed for the flows anticipated.
- (4) Treatment systems shall be inspected and maintained at regularly scheduled intervals as determined by manufacturer specifications, site specific conditions and best professional judgment. The permittee shall conduct routine inspections of all equipment associated with the discharges authorized by this general permit. Inspections shall be conducted as necessary to insure proper operation of all equipment. If the routine inspections are to be conducted at intervals of greater than 7 days, an inspection schedule summarizing inspection protocols shall be included as an Attachment to the general permit registration required pursuant to Section 3 of this general permit, unless the site is a remote site as defined in Section 2 of this general permit with a maximum daily flow of under 14,400 gallons per day. Remote sites with maximum daily flows of less than 14,400 gallons per day shall be inspected as necessary to insure proper operation of all equipment, but at intervals of no more than 30 days.

A log shall be maintained on-site documenting the date of inspection, inspector's name, verification of operation of critical equipment, and a summary of any work or change in equipment associated with the discharges authorized by this general permit.

The discharge shall cease if the treatment system is not operating as necessary to maintain compliance with all effluent limitations.

(e) ***Reporting and Record Keeping Requirements***

- (1) Beginning the effective date of the authorization to discharge, the permittee must record all monitoring data collected to comply with this general permit.
- (2) **For discharges lasting 90 days or more**, within 120 days after the effective date of the authorization to discharge, the operator shall begin reporting monitoring data electronically using NetDMR, unless, in accordance with Section 5A(e)(3) of this general permit, the operator is able to demonstrate on a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMR's. DMR Reports are due no later than the last day of the month following the month in which samples are taken.
- (3) **NetDMR opt-out requests** must be submitted in writing to the Department for written approval at least 30 days prior to the date a site would be required under this general permit to begin using NetDMR. This demonstration shall be valid for 12 months from the date of the Department approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically via NetDMR unless the permittee submits a renewed opt-out request and such request is approved by the Department. Except as otherwise specified in writing by the commissioner, each analytical result of a wastewater sample taken and all data generated by any other monitoring conducted under this general permit shall be retained at the subject site for at least five years from the date such result or data was generated or received by the permittee, whichever is later. The commissioner may specify a longer retention period as he reasonably deems necessary upon written notice to the permittee stating the reasons for such longer period. If during the retention period required by this subdivision the commissioner, under chapter 446k of the General Statutes, issues an order or commences a civil action against the permittee, such retention period shall be extended as necessary until such order or action is finally disposed of.
- (4) The permittee shall make any such result or data available to the commissioner upon request.
- (5) Within 14 days of termination of discharge, the permittee shall notify the Department of the date of termination of discharge on a form provided by the commissioner.
- (6) **For discharges lasting less than 90 days**, the results of all monitoring results shall be submitted with the notification of termination of discharge in accordance with Section 5A(e)(5) of this general permit.

(f) ***Duty to Correct, Record, and Report Violations***

- (1) Upon learning of a violation of a condition of this general permit, the permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results and prevent recurrence of such violation.
- (2) The permittee shall:
  - (A) within two hours of becoming aware of the circumstances (and at the start of the next business day if he or she becomes aware of the circumstances

outside normal business hours) of any violation of:

- (i) any maximum daily limitation for a discharge to surface waters of greater than two (2) times the limitation, or
- (ii) if re-sampling for toxicity is required pursuant to Section 5A(a)(2)(G) of this general permit,

notify the Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance at 860-424-3025 during business hours 8:30 a.m. – 4:30 p.m.

- (B) within five days of becoming aware of the circumstances of any violation of any maximum daily limitation for a discharge to surface waters of greater than two (2) times the limitation, or aquatic toxicity which requires resampling pursuant to Section 5A(a)(2)(G) of this general permit, submit a written report that contains the following information:

- (i) the condition(s) or effluent limit(s) violated;
- (ii) the analytical results and information demonstrating such violation(s);
- (iii) the cause of the violation(s);
- (iv) period of noncompliance including exact dates and times;
- (v) if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, upon correction, the date and time of correction;
- (vi) steps taken and planned to reduce, eliminate and prevent a recurrence of the noncompliance, and the dates such steps are executed; and
- (vii) the name and title of the person recording the information and the date and time of such recording.

- (3) In addition to the requirements described in section 22a-430-3(j)(11)(D) of the Regulations of Connecticut State Agencies, any other actual or anticipated noncompliance with effluent limits or other terms and conditions of this general permit shall be recorded within twenty-four hours of becoming aware of such circumstances in a log which contains at least the following information:

- (A) the condition(s) or effluent limit(s) violated;
- (B) the analytical results and information demonstrating such violation(s);
- (C) the cause of the violation(s) or noncompliance;
- (D) period of noncompliance including exact dates and times;
- (E) if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, upon correction, the date and time of correction;
- (F) steps taken and planned to reduce, eliminate and prevent a recurrence of the noncompliance, and the dates such steps are executed; and
- (G) the name and title of the person recording the information and the date and time of such recording.

- (4) The permittee shall submit a report to the commissioner prepared by a Professional Engineer licensed to practice in Connecticut, or a Licensed Environmental Professional, or a Certified Hazardous Materials Manager if analytical results, monitoring data or other information indicates any of the following:
- (A) the exceedance of any effluent limit by more than two hundred percent;
  - (B) three or more violations of any effluent limit from a single sample;
  - (C) three successive sampling events each of which show a violation(s) of any effluent limits;
  - (D) the occurrence of four or more violations of any effluent limit during any calendar year;
  - (E) the violation of the pH limit by more than one standard unit

Such report shall contain at least the information required to be recorded under Section 5A(f)(1)(B) of this general permit and must be submitted within 20 days of becoming aware of the non-compliance which triggered the report. Such certified report shall be sent to the commissioner at the following address:

Water Permitting and Enforcement Division  
Bureau of Materials Management and Compliance Assurance  
Connecticut Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

- (5) Within 60 days after the deadline for submitting the report specified in Section 5A(f)(3) of this general permit, the permittee shall submit to the commissioner at the same address provided in Section 5A(f)(3) of this general permit, the following certification signed by a Professional Engineer licensed to practice in Connecticut, Licensed Environmental Professional, or a Certified Hazardous Materials Manager:

“I certify that in my professional judgment, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining information pursuant to Section 5 of the General Permit for the Discharge of Groundwater Remediation Wastewater that all discharge(s) which are maintained on the site referenced herein, and which are covered under the general permit comply with all conditions of said general permit, including but not limited to all effluent limits in Section 5A(b) of such general permit, and proper operation and maintenance of any systems installed to treat such discharge(s) will insure that all effluent limits and other conditions in such general permit are met, or if there is no treatment system for such discharge(s), that the discharge(s) will meet all effluent limits and conditions of such general permit without treatment. This certification is based in part on my review of analyses of a minimum of three effluent samples collected, preserved, handled and analyzed in accordance with 40 CFR 136, which samples were representative of the discharge during standard operating conditions, were taken in the previous year, at least one week apart, and were of the type(s) specified in Section 5A of said general permit, and were analyzed for the parameters specified in Section 5A of said general permit. I understand that a false statement made in this report, including all

attachments thereto, or in this certification may, pursuant to section 22a-6 of the General Statutes, be punishable as a criminal offense under section 53a-157b of the General Statutes, and may also be punishable under section 22a-438 of the General Statutes and any other applicable law.”

The above certification should not be construed as authorizing a Licensed Environmental Professional or a Certified Hazardous Materials Manager to certify compliance in areas that should only be handled by a licensed Professional Engineer including but not limited to design or modification of engineered wastewater treatment systems.

**Section 5B. Permit Terms and Conditions Applicable for Discharges to a POTW**

**(a) Monitoring Requirements**

**(1) Chemical Monitoring Frequency**

Monitoring to verify compliance with the effluent limitations in Section 5B and Appendix B of this general permit and any Approval of Registration issued pursuant to Section 3 of this general permit shall be performed according to the following schedule:

- (A) For all discharges, except as specified in subsection (D) of this section, for each initiation of a discharge, the discharge shall be sampled on the first day of discharge and then every other day for the first week, weekly for the next month, and then as follows depending upon the maximum daily flow:

<i>Maximum Daily Flow</i>	<i>Effluent Monitoring Frequency</i>
< 5,000 gallons per day	quarterly
≥ 5,000 gallons per day	monthly

- (B) For each initiation or restart of a discharge after an exceedance of an effluent limitation, the discharge shall be sampled on the first day of discharge and then every other day for the first week, weekly for the next month, and then in accordance with the sampling schedule at the time the discharge was ceased.
- (C) For each restart of a discharge for any reason other than an exceedance of a parameter limit, the discharge shall be sampled on the first day of discharge and then in accordance with the sampling schedule at the time the discharge was ceased.
- (D) For intermittent discharges of groundwater remediation wastewaters generated from scheduled remediation activities, such as purging conducted prior to monitoring, conducted at sites with no other discharges of wastewater subject to this general permit, the following monitoring shall be required:

- (i) A minimum of one representative sample shall be collected and analyzed in accordance with Section 5B(d) of this general permit for each discharge.
- (ii) If multiple points are sampled independently, a volume-proportioned average of analytical results may be substituted for a single sample.
- (iii) Treatment and discharge shall be conducted as described in Section 5B(e) of this general permit.

**(b) POTW Specific Requirements**

Any requirement specified in writing by the POTW Authority receiving authorized discharge(s) shall be considered requirement(s) of this general permit.

**(c) Effluent Limitations**

- (1) The effluent limitations specified in Appendix B and/or this section of this general permit and/or specified in the Approval of Registration issued pursuant to Section 3 of this general permit, shall not be exceeded at any time as determined by a grab sample.
- (2) The maximum daily flow shall not exceed the maximum daily flow specified in the general permit registration.
- (3) The pH of the discharges shall not be less than 5.0 or greater than 10.0 standard units at any time.

**(d) Additional Monitoring Requirements**

All discharges shall be monitored in accordance with the following:

- (1) The permittee shall monitor the discharge for any pollutant that in the screening analysis conducted pursuant to Section 5(a) of this general permit or any other analysis identifies the presence of such pollutant in the groundwater at levels above either the limitations specified in Appendix B or Section 5B(c) of this general permit or the limitations or conditions specified in an Approval of Registration issued pursuant to Section 3 of this general permit.
- (2) The permittee shall monitor the discharges for the presence of VOCs if the source of contamination includes VOCs, or any screening analysis conducted pursuant to Section 5(a) of this general permit indicates the presence of any VOCs at or above the minimum level, or a combined concentration of oxygenates exceeding 50 ug/l. Tentatively identified compounds (TIC) detected in the screening analysis required pursuant to Section 5(a) of this general permit shall be analyzed as target compounds if such compounds compose greater than 10% of the total pollutant load for VOCs, or if treatment technology is not proven to be as effective for the TICs detected as for target VOCs of concern.
- (3) The permittee shall monitor the discharges for total petroleum hydrocarbons if:

- (A) the results of any analysis of the discharges indicates that total petroleum hydrocarbons is present in the groundwater to be discharged above the limit identified in Appendix B of this general permit;
  - (B) oil or an oily sheen is visible in the water to be discharged; or
  - (C) the source of the contamination being remediated is petroleum oil.
- (4) All discharges generated during construction dewatering, except well point dewatering, shall be monitored for Total Suspended Solids, and Total Settleable Solids.
- (5) The permittee shall monitor the discharges for any metal if:
- (A) any analysis required per Section 5(a)(2) of this general permit indicates that metal is present in the groundwater at concentrations greater than the limit listed in Appendix B;
  - (B) the site has been historically or is presently used to dispose of or store that metal; or
  - (C) the permittee has reason to believe that concentrations of the metal in groundwater may exceed the limits in Appendix B, as a result of current or historic on-site activities.
- (6) The permittee shall periodically calibrate and perform maintenance on all monitoring and field equipment at intervals that will ensure the accuracy of measurements.
- (7) Monitoring for flow shall be performed according to the schedule in Section 5B(a)(1) of this general permit. All discharges of greater than 5000 gallons per day shall have flow monitoring equipment installed or implement techniques and devices capable of recording total daily flow. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. All other discharges shall implement flow-measuring procedures to adequately estimate flows.
- (8) Monitoring and reporting of radioactive liquid releases shall be performed in accordance with an approval of registration issued pursuant to Section 3(b)(1)(B)(vi) of this general permit *and* with the applicable 10 CFR 50.36a “Technical specifications on effluents from nuclear power reactors” plus 10 CFR 20 Appendix B “Standards for Protection Against Radiation” and 40 CFR 190, “Environmental Radiation Protection Standards For Nuclear Power Operations”. Annual monitoring reports shall be submitted to the Federal Nuclear Regulatory Commission and the Department’s Bureau of Air Management, Radiation Control Division.

(9) Monitoring Location

(A) Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. Samples shall be taken at the monitoring points identified pursuant to Section 4(c)(2)(N) of this general permit before the effluent joins or is diluted by any other waste stream, or substance.

(B) For any site with more than one discharge point, individual samples shall be collected from each discharge. Samples shall be designated as DSN 201, DSN 202, etc.

(10) Sample Type

Samples taken for purposes of determining compliance with all effluent limitations and monitoring requirements listed in this general permit shall be grab samples.

(11) Test Methods

All sample analysis which are required by this general permit shall be conducted by a laboratory certified in accordance with the certification requirements specified in section 19-29a of the General Statutes. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative test methods approved by EPA in accordance with the procedures in 40 CFR §136 or using methods approved by the commissioner in an Approval of Registration issued pursuant to Section 3 of this general permit.

All analyses must be conducted using a sufficiently sensitive test method in accordance with 40 CFR §122.44(i)(1)(iv).

**(e) Treatment and Inspection Requirements**

(1) The permittee shall treat the discharge for any pollutant that in the screening analysis conducted pursuant to Section 5(a) of this general permit or any other analysis identifies the presence of such pollutant in the groundwater at levels above either the limitations specified in Appendix B and/or Section 5B(c) of this general permit or the limitations specified in an Approval of Registration issued pursuant to Section 3 of this general permit or as directed in an Approval of Registration issued pursuant to Section 3 of this general permit.

(2) Treatment systems implemented shall incorporate best management practices and accepted technologies for the reduction of all pollutants to below the levels specified in Appendix B and/or Section 5B(c) of this general permit and/or specified in the Approval of Registration issued pursuant to Section 3 of this general permit.

(3) Treatment systems shall be inspected and maintained at regularly scheduled intervals as determined by manufacturer specifications, site specific conditions and best professional judgment. The permittee shall conduct routine inspections of all equipment associated with the discharges authorized by this general permit. Inspections shall be conducted as necessary to insure proper operation of all equipment. If the routine inspections are to be conducted at intervals of

greater than 7 days, an inspection schedule summarizing inspection protocols shall be included as an Attachment to the general permit registration required pursuant to Section 3 of this general permit, unless the site is a remote site as defined in Section 2 of this general permit with a maximum daily flow of under 14,400 gallons per day. Remote sites with maximum daily flows of less than 14,400 gallons per day shall be inspected as necessary to insure proper operation of all equipment, but at intervals of no more than 30 days.

A log shall be maintained on-site documenting the date of inspection, inspector's name, verification of operation of critical equipment, and a summary of any work or change in equipment associated with the discharges authorized by this general permit.

The discharge shall cease if the treatment system is not operating as necessary to maintain compliance with all effluent limitations.

***(f) Reporting and Record Keeping Requirements***

- (1) Beginning the effective date of the authorization to discharge, the permittee must record all monitoring data collected to comply with this general permit.
- (2) **For discharges lasting 90 days or more**, within 120 days after the effective date of the authorization to discharge, the operator shall begin reporting monitoring data electronically using NetDMR, unless, in accordance with Section 5B(f)(3) of this general permit, the operator is able to demonstrate on a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMR's. DMR Reports are due no later than the last day of the month following the month in which samples are taken.
- (3) **NetDMR opt-out requests** must be submitted in writing to the Department for written approval at least 30 days prior to the date a site would be required under this general permit to begin using NetDMR. This demonstration shall be valid for 12 months from the date of the Department approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically via NetDMR unless the permittee submits a renewed opt-out request and such request is approved by the Department.
- (4) Except as otherwise specified in writing by the commissioner, each analytical result of a wastewater sample taken and all data generated by any other monitoring conducted under this general permit shall be retained at the subject site, or at the registrant's business office for at least five years from the date such result or data was generated or received by the permittee, whichever is later. The commissioner may specify a longer retention period as he reasonably deems necessary upon written notice to the permittee stating the reasons for such longer period. If during the retention period required by this subdivision the commissioner, under chapter 446k of the General Statutes, issues an order or commences a civil action against the permittee, such retention period shall be extended as necessary until such order or action is finally disposed of.
- (5) The permittee shall make any such result or data available to the commissioner upon request.

- (6) Within 14 days of termination of discharge, the permittee shall notify the Department of the date of termination of discharge on a form provided by the commissioner.
- (7) **For discharges lasting less than 90 days**, the results of all monitoring results shall be submitted with the notification of termination of discharge in accordance with Section 5B(f)(6) of this general permit.

**(g) *Duty to Correct, Record, and Report Violations***

- (1) Upon learning of a violation of a condition of this general permit, the permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results and prevent recurrence of such violation.
- (2) The permittee shall immediately notify:
  - (A) the local Water Pollution Control Authority and
  - (B) the Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance at 860-424-3025 during business hours 8:30 a.m. – 4:30 p.m.

of all discharges that could cause problems to the POTW, including but not limited to slug loadings of pollutants which may cause a violation of the POTW's NPDES permit, or which may inhibit or disrupt the POTW, its treatment processes or operations, or its sludge processes, use or disposal.

- (3) The permittee shall:
  - (A) notify the department of violation(s) that are more than twice the limits specified in Section 5B(c) of this permit within two hours of becoming aware of the violation(s) (or at the start of the next business day if this occurs outside normal business hours) and
  - (B) submit a written report that contains the following information within five days of becoming aware of the violation:
    - (i) the condition(s) or effluent limit(s) violated;
    - (ii) the analytical results and information demonstrating such violation(s);
    - (iii) the cause of the violation(s);
    - (iv) period of noncompliance including exact dates and times;
    - (v) if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, upon correction, the date and time of correction;
    - (vi) steps taken and planned to reduce, eliminate and prevent a recurrence of the noncompliance, and the dates such steps are executed; and
    - (vii) the name and title of the person recording the information and the date and time of such recording.
- (4) In addition to the requirements described in section 22a-430-3(j)(11)(D) of the Regulations of Connecticut State Agencies, any other actual or anticipated

noncompliance with effluent limits or other terms and conditions of this general permit shall be recorded within twenty-four hours of becoming aware of such circumstances in a log which contains at least the following information:

- (A) the condition(s) or effluent limit(s) violated;
  - (B) the analytical results and information demonstrating such violation(s);
  - (C) the cause of the violation(s) or noncompliance;
  - (D) period of noncompliance including exact dates and times;
  - (E) if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, upon correction, the date and time of correction;
  - (F) steps taken and planned to reduce, eliminate and prevent a recurrence of the noncompliance, and the dates such steps are executed; and
  - (G) the name and title of the person recording the information and the date and time of such recording.
- (5) The permittee shall submit a report to the commissioner prepared by a Professional Engineer licensed to practice in Connecticut, or a Licensed Environmental Professional, or a Certified Hazardous Materials Manager if analytical results, monitoring data or other information indicates any of the following:
- (A) the exceedance of any effluent limit by more than two hundred percent;
  - (B) three or more violations of any effluent limit from a single sample;
  - (C) three successive sampling events each of which show a violation of any effluent limit;
  - (D) the occurrence of four or more violations of any effluent limit during any calendar year;
  - (E) the violation of the pH limit by more than one standard unit

Such report shall contain at least the information required to be recorded under Section 5B(g)(2) of this general permit and must be submitted within 20 days of becoming aware of the non-compliance which triggered the report. Such certified report shall be sent to the commissioner at the following address:

Water Permitting and Enforcement Division  
Bureau of Materials Management and Compliance Assurance  
Connecticut Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

- (6) Within 60 days after the deadline for submitting the report specified in Section 5B(g)(4) of this general permit, the permittee shall submit to the commissioner at the same address provided in Section 5B(g)(4) of this general permit the following certification signed by a Professional Engineer licensed to practice in Connecticut, Licensed Environmental Professional, or a Certified Hazardous Materials Manager:

“I certify that in my professional judgment, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining information pursuant to Section 5 of the General Permit for the Discharge of Groundwater Remediation Wastewater that all discharge(s) which are maintained on the site referenced herein, and which are covered under the general permit comply with all conditions of said general permit, including but not limited to all effluent limits in Section 5B(c) of such general permit, and proper operation and maintenance of any systems installed to treat such discharge(s) will insure that all effluent limits and other conditions in such general permit are met, or if there is no treatment system for such discharge(s), that the discharge(s) will meet all effluent limits and conditions of such general permit without treatment. This certification is based in part on my review of analyses of a minimum of three effluent samples collected, preserved, handled and analyzed in accordance with 40 CFR 136, which samples were representative of the discharge during standard operating conditions, were taken in the previous year, at least one week apart, and were of the type(s) specified in Section 5B of said general permit, and were analyzed for the parameters specified in Section 5B of said general permit. I understand that a false statement made in this report, including all attachments thereto, or in this certification may, pursuant to section 22a-6 of the General Statutes, be punishable as a criminal offense under section 53a-157b of the General Statutes, and may also be punishable under section 22a-438 of the General Statutes and any other applicable law.”

The above certification should not be construed as authorizing a Licensed Environmental Professional or a Certified Hazardous Materials Manager to certify compliance in areas that should only be handled by a licensed Professional Engineer including but not limited to design or modification of engineered wastewater treatment systems.

- (7) The permittee shall also submit a copy of any report required under this subsection to the applicable Water Pollution Control Authority.

## **Section 5C. Permit Terms and Conditions – Discharges to Ground and Groundwater**

### ***(a) Separating distances to potable supply wells***

The following minimum separating distances between any point of a disposal system that accepts an authorized discharge and any potable water supply well shall be as specified in an approval of registration, or:

- (1) for wells yielding less than 10 gallons per minute, the minimum separating distance shall be 75 feet;
- (2) for wells yielding 10 or more gallons per minute but less than 50 gallons per minute, the minimum separating distance shall be 150 feet;
- (3) for wells yielding more than 50 gallons per minute, the minimum separating distance shall be 200 feet.

### ***(b) Well rehabilitation wastewaters***

The following requirements apply to any well rehabilitation activity that involves the injection or addition of any substance to a well.

- (1) Unless specifically approved in writing by the commissioner, the source of any water injected during well rehabilitation activities shall be from a potable supply.
- (2) Unless specifically approved in writing by the commissioner, well rehabilitation solutions shall be removed from the well within forty-eight (48) hours of being introduced into any well.
- (3) Unless specifically approved in writing by the commissioner, no substance(s) shall be used for well rehabilitation that are not identified in the registration submitted in accordance with Section 4 of this general permit.
- (4) All limitations, monitoring requirements, terms and conditions specified in the Approval of Registration required by Section 3(b)(1)(B) of this general permit shall be complied with or the discharge shall cease.

**(c) *Groundwater Remediation Recirculation Systems***

The following requirements apply to any discharge of treated groundwater remediation wastewater to groundwater.

- (1) Unless specifically approved in writing by the commissioner, the effluent limitations specified in Appendix A shall not be exceeded at any time as determined by a grab sample.
- (2) Unless specifically approved in writing by the commissioner, the discharger shall demonstrate that the groundwater recovery system is designed to capture all discharges injected under authorization of this general permit.
- (3) All limitations, monitoring requirements, terms and conditions specified in the Approval of Registration required by Section 3(b)(1)(B) of this general permit shall be complied with or the discharge shall cease.
- (4) If the discharge is directed to groundwater with a Water Quality Classification designated as Class GAA, or within an aquifer protection area, treatment shall at a minimum incorporate technologies certified by the NSF for the treatment of drinking water for the removal of the pollutants of concern, and be designed for the flows anticipated.

## **Section 6. General Conditions**

**(a) *Reliance on Registration***

In evaluating the permittee's registration, the commissioner has relied on information provided by the permittee. If such information proves to be false or incomplete, the permittee's authorization to discharge under this general permit may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

**(b) *Duty to Provide Information***

If the commissioner requests any information pertinent to the authorized discharge or to compliance with this general permit or with the permittees registration or approval of registration under this general permit, the permittee shall provide such information within 30 days of such request. Such information shall be filed in accordance with the “Certification of Documents” requirements prescribed in Section 6(c) of this general permit.

**(c) *Certification of Documents***

Any document, including but not limited to any notice, information or report, which is submitted to the commissioner under this general permit shall be signed by the permittee or by a duly authorized representative of the permittee in accordance with section 22a-430-3(b)(2)(A) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

“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. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.”

**(d) *Date of Filing***

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word “day” as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

**(e) *False Statements***

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with section 22a-6, under section 53a-157b of the General Statutes.

**(f) *Correction of Inaccuracies***

Within fifteen days after the date a permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be filed in accordance with the certification requirements prescribed in Section 6(c) of this general permit.

**(g) *Transfer of Authorization***

An authorization under this general permit is transferable only in accordance with the provisions of section 22a-60 of the General Statutes. Any person or municipality proposing to transfer an approval of registration shall submit a license transfer form

to the commissioner to transfer the previous permit authorization to a new registrant. The new registrant is not authorized by this general permit until the transfer is approved by the commissioner.

**(h) *Other Applicable Law***

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

**(i) *Other Rights***

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

## **Section 7. Commissioner's Powers**

**(a) *Abatement of Violations***

The commissioner may take any action provided by law to abate a violation of this general permit, including the commencement of proceedings to collect penalties for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

**(b) *General Permit Revocation, Suspension, or Modification***

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify it to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

(c) ***Filing of an Individual Permit Application***

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit to continue lawfully conducting the activity authorized by this general permit, the permittee may continue conducting such activity only if the permittee files an application for an individual permit within sixty (60) days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall comply with the terms and conditions of this general permit and the subject approval of registration. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued Date: February 21, 2018

ROBERT E. KALISZEWSKI  
Deputy Commissioner

This is a true and accurate copy of the general permit executed on February 21, 2018 by the Department of Energy and Environmental Protection.

## Appendix A: DISCHARGES TO SURFACE WATERS

### Toxic, Hazardous and Other Pollutants and Their Maximum Concentrations

The Maximum Concentration For Each Pollutant or Pollutant Parameter, As Specified Below, Shall Not Be Exceeded:

(If the Minimum Level for a pollutant or pollutant parameter is higher than the stated limit for that pollutant or pollutant parameter, the limit shall be “ND <Minimum Level”.)

#### Volatile Organic Compounds

Combined Total of All Individual Compounds Shall Not Exceed 10 µg/l for all Discharges to Receiving Waters with a Water Quality Classification or Goal of A or SA
Combined Total of All Individual Compounds Shall Not Exceed 50 µg/l, <b>and</b> 1,1,2 Trichloroethane shall not exceed 42 µg/l for all Discharges to Receiving Waters with a Water Quality Classification or Goal of B or SB
MTBE Shall Not Exceed 70 µg/l

#### Total Petroleum Hydrocarbons

Total Petroleum Hydrocarbons Shall Not Exceed 5.0 mg/l
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#### Solids

Total Suspended Solids Shall Not Exceed 30 mg/l
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#### Phthalate Esters

Phthalate Ester	Maximum Concentration (µg/l)
Bis(2-ethylhexyl)phthalate	<b>Bis(2-ethylhexyl)phthalate 5.9 µg/l</b>  <b>Combined Total of All Phthalates Shall</b>  <b>Not Exceed 100 µg/l</b>
Benzyl butyl phthalate	
Di-n-butyl phthalate	
Diethyl phthalate	
Dimethyl phthalate	
Di-n-octyl phthalate	

## Base Neutral and Acid Extractables (BNA)

The Combined Total of All BNAs, Including Tentatively Identified Compounds, but Excluding Phenols\* and PAHs\* Shall Not Exceed 10.0 µg/l.

\* Excluded Compounds Referenced Below

In addition, the Maximum Concentration For Each Compound Specified Below Shall Not Be Exceeded:

BNA's (Excludes Phenol and PAHs)	Maximum Concentration (µg/l)
Benzidine	ND
3,3 dichlorobenzidine	ND
Hexachlorobenzene	ND

## Phenols

Phenol	Maximum Concentration (µg/l)
2-sec-Butyl-4, 6-dinitrophenol (DNBP)	<b>Combined Total of All Phenols Shall Not Exceed 5.0 µg/l</b>
4-Chloro-3-methylphenol	
2-Chlorophenol	
Cresols (methyl phenols)	
2-Cyclohexyl-4, 6-dinitrophenol	
2,4-Dichlorophenol	
2,6-Dichlorophenol	
2,4-Dimethylphenol	
2,4-Dinitrophenol	
2-Methyl-4, 6-dinitrophenol	
2-Nitrophenol	
4-Nitrophenol	
Pentachlorophenol	
Phenol	
Tetrachlorophenols	
Trichlorophenols	
2,4,6-Trichlorophenol	

## Polynuclear Aromatic Hydrocarbons (PAHs)

The Combined Total of All PAHs Shall Not Exceed 5.0 µg/l and the Maximum Concentration For Each Compound Specified Below Shall Not Be Exceeded:

PAH	Maximum Concentration (µg/l)
Acenaphthene	
Acenaphthylene	
Anthracene	
Benzo(a)anthracene	0.49 µg/l
Benzo(a)pyrene	0.49 µg/l
Benzo(b)fluoranthene	
Benzo(j)fluoranthene	
Benzo(k)fluoranthene	0.49 µg/l
Benzo(ghi)perylene	
Chrysene	
Dibenzo(a,h)acridine	
Dibenzo(a,j)acridine	
Dibenzo(a,h)anthracene	0.01 µg/l
H-Dibenzo(c,g)carbazole	
Dibenzo(a,e)pyrene	
Dibenzo(a,h)pyrene	
Dibenzo(a,i)pyrene	
Fluoranthene	
Fluorene	
Indeno(1,2,3-cd)pyrene	0.49 µg/l
3-Methylcholanthrene	
Naphthalene	
Phenanthrene	
Pyrene	

## Organochlorine Pesticides

(For any maximum concentration that is below the minimum level of the approved methodology, the maximum concentration shall be "ND < minimum level")

Pesticide	Maximum Concentration (µg/l)
Aldrin	ND
Alpha-BHC	ND
Beta-BHC	ND
Delta-BHC	ND
Gamma-BHC (Lindane)	ND
Chlordane (technical)	ND
4,4'-DDD	ND
4,4'-DDE	ND
4,4'-DDT	ND
Dieldrin	ND
Endosulfan I	ND
Endosulfan II	ND
Endosulfan sulfate	ND
Endrin	ND
Endrin aldehyde	ND
Heptachlor	ND
Heptachlor epoxide	ND

### Chlorinated Herbicides

Herbicide	Maximum Concentration (µg/l)
2,4,-D	<b>Combined Total of 2,4-D plus 2,4-DB Shall Not Exceed 50 µg/l</b>
2,4-DB	
2,4,5-T	ND
2,4,5-TP (Silvex)	ND
Dicamba	ND

### PCBs

PCB	Maximum Concentration (µg/l)
PCB-1016	<b>Combined Total of All PCBs Shall Not Exceed 0.1 µg/l and no individual compound shall exceed 0.00017 µg/l</b>
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	
OTHER PCB's	

*If other PCBs have been used or stored on-site or there is reason to believe they may be present, analyze each compound (congener) in addition to the seven listed PCB mixtures.*

## Metals

Metals	Maximum Concentration (µg/l)	
	10 to 1 Dilution	100 to 1 Dilution
Arsenic	0.021 µg/l	0.021 µg/l
Beryllium	2.6 µg/l	24.8 µg/l
Cadmium	10.0 µg/l	95.9 µg/l
Chromium	342 µg/l	1000 µg/l
Copper	48 µg/l	480 µg/l
Lead	9.8 µg/l	93.6 µg/l
Hexavalent Chromium	79.4 µg/l	79.4 µg/l

Metals	Maximum Concentration (µg/l)	
	10 to 1 Dilution	100 to 1 Dilution
Mercury	ND	ND
Nickel	235 µg/l	1000 µg/l
Selenium	40 µg/l	390 µg/l
Silver	5.0 µg/l	48 µg/l
Zinc	322 µg/l	1000 µg/l

Dilution is calculated as the ratio 7Q10 flow of the receiving water and maximum daily flow of the discharge (7Q10 / maximum flow). Dilution in tidal waters shall be determined by the Department on a case by case basis.

## OTHER SUBSTANCES:

Pollutant	Maximum Concentration	
	10 to 1 Dilution	100 to 1 Dilution
Ammonia	1.5 mg/l	1.5 mg/l
Chlorine	0.09 mg/l	0.8 mg/l
Cyanide	43 µg/l	406 µg/l
Amenable Cyanide	43 µg/l	100 µg/l

## Radioactivity:

Except as authorized in an Approval of Registration issued pursuant to Section 3(b)(1)(B)(vi) of this general permit, the concentration of radon in the discharge shall not exceed naturally occurring background concentration.

Discharge of wastewater impacted by any other radiological sources, or from sites specified in Section 3(b)(1)(B)(vi) of this general permit shall be conducted as authorized by an Approval of Registration issued pursuant to Section 3(b)(1)(B)(vi) of this general permit *and* with the applicable 10 CFR 50.36a "Technical specifications on effluents from nuclear power reactors" plus 10 CFR 20 Appendix B "Standards for Protection Against Radiation" and 40 CFR 190, "Environmental Radiation Protection Standards For Nuclear Power Operations".

## Appendix B: DISCHARGES TO A POTW

### Toxic, Hazardous and Other Pollutants and Their Maximum Concentrations

The Maximum Concentration For Each Pollutant or Pollutant Parameter, As Specified Below, Shall Not Be Exceeded:

(If the Minimum Level for a pollutant or pollutant parameter is higher than the stated limit for that pollutant or pollutant parameter, the limit shall be "ND <Minimum Level".)

#### Volatile Organic Compounds

<b>Combined Total of Chlorinated Volatile Organic Compounds Shall Not Exceed 1.0 mg/l</b>
<b>Combined Total of All Volatile Organic Compounds Shall Not Exceed 5.0 mg/l</b>
<b>MTBE Shall Not Exceed 1.0 mg/l</b>

#### Total Petroleum Hydrocarbons

<b>Total Petroleum Hydrocarbons Shall Not Exceed 100 mg/l</b>
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EPA Method 200.7 or other methods approved in accordance with 40 CFR 136 which are capable of achieving minimum levels below the levels established below

Metals	Maximum Concentration (mg/l)
Arsenic	0.1 mg/l
Barium	5.0 mg/l
Beryllium	2.0 mg/l
Boron	5.0 mg/l
Cadmium	0.1 mg/l
Chromium	1.0 mg/l
Hexavalent Chromium	0.1 mg/l
Cobalt	2.0 mg/l
Copper	1.0 mg/l
Lead	0.1 mg/l

Metals	Maximum Concentration (mg/l)
Magnesium	50 mg/l
Mercury	ND
Nickel	1.0 mg/l
Selenium	1.0 mg/l
Silver	0.1 mg/l
Thallium	1.0 mg/l
Tin	2.0 mg/l
Vanadium	1.0 mg/l
Zinc	1.0 mg/l

**Base Neutral and Acid Extractables (BNA)**

**Combined Total of All BNAs Excluding Phenols and PAHs Shall Not Exceed 2.0 mg/l**

**Phenols**

Phenol	Maximum Concentration (mg/l)
2-sec-Butyl-4,6-dinitrophenol (DNBP)	<b>Combined Total of All Phenols Shall Not Exceed 1.0 mg/l</b>
4-Chloro-3-methylphenol	
2-Chlorophenol	
Cresols(methyl phenols)	
2-Cyclohexyl-4,6-dinitrophenol	
2,4-Dichlorophenol	
2,6-Dichlorophenol	
2,4-Dimethylphenol	
2,4-Dinitrophenol	
2-Methyl-4,6-dinitrophenol	
2-Nitrophenol	
4-Nitrophenol	
Pentachlorophenol	
Phenol	
Tetrachlorophenols	
Trichlorophenols	
2,4,6-Trichlorophenol	

## Polynuclear Aromatic Hydrocarbons (PAHs)

**Combined Total of All Polynuclear Aromatic Hydrocarbons Shall Not Exceed 2.0 mg/l**

## Organochlorine Pesticides

Pesticide	Maximum Concentration (µg/l)
Aldrin	1.5 µg/l
Alpha-BHC	1.0 µg/l
Beta-BHC	1.0 µg/l
Delta-BHC	1.0 µg/l
Gamma-BHC (Lindane)	2.0 µg/l
Chlordane (technical)	20 µg/l
4,4'-DDD	0.2 µg/l
4,4'-DDE	0.2 µg/l
4,4'-DDT	0.2 µg/l
Dieldrin	10 µg/l
Endosulfan I	2.0 µg/l
Endosulfan II	2.0 µg/l
Endosulfan sulfate	2.0 µg/l
Endrin	1.0 µg/l
Endrin aldehyde	1.0 µg/l
Heptachlor	0.6 µg/l
Heptachlor epoxide	0.4 µg/l
Methoxychlor	360 µg/l
Toxaphene	10 µg/l

**Phthalate Esters**

Phthalate Ester	Maximum Concentration (mg/l)
Benzyl butyl phthalate	<b>Combined Total of All Phthalates Shall Not Exceed 2.0 mg/l</b>
Bis(2-ethylhexyl)phthalate	
Di-n-butyl phthalate	
Diethyl phthalate	
Dimethyl phthalate	
Di-n-octyl phthalate	

**PCBs**

PCB	Maximum Concentration (µg/l)
PCB-1016	<b>Combined Total of All PCBs Shall Not Exceed 1.0 µg/l</b>
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	
OTHER PCB's	

*If other PCBs have been used or stored on-site or there is reason to believe they may be present, each compound must be analyzed for in addition to the seven listed PCBs.*

### Chlorinated Herbicides

Herbicide	Maximum Concentration (µg/l)
2,4,-D	<b>Combined Total of 2,4-D plus 2,4-DB Shall Not Exceed 700 µg/l</b>
2,4-DB	
2,4,5-T	10.0 µg/l
2,4,5-TP (Silvex)	10.0 µg/l
Dicamba	10.0 µg/l

### Cyanide: EPA Method 335.1; 335.2

Cyanide	Maximum Concentration (mg/l)
Total Cyanide	0.6 mg/l
Amenable Cyanide	0.1 mg/l