Connecticut Department of Energy & Environmental Protection

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National Pollutant Discharge Elimination System

Comprehensive General Permit for Discharges to Surface and Ground Water

Permit No: CTCGP0000

The Comprehensive General Permit for Discharges to Surface and Ground Water is issued in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes. ("Conn. Gen. Stat."), and Regulations of Connecticut State Agencies ("Regs. Conn. State Agencies") adopted thereunder, as amended, and Section 402(b) of the Clean Water Act ("CWA"), as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer a NPDES permit program. This general permit authorizes discharges to surface and ground waters of the State of Connecticut. Persons shall comply with the applicable federal regulations, 40 CFR Parts 122, 123, 127, 136, which are hereby incorporated into this general permit, as is fully set forth herein. Persons shall comply with all conditions of this permit including the following sections of the Regs. Conn. State Agencies which have been adopted pursuant to Section 22a-430 of the Conn. Gen. Stat. and are hereby incorporated into this permit.

This permit becomes effective [EFFECTIVE]. This permit and the authorization to discharge shall expire five (5) years from the effective date. This permit expires on [EXPIRATION].

Issued: DRAFT

DRAFT

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Deputy Commissioner

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Comprehensive General Permit for Discharges to Surface and Ground Water

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Section 1 Authority

This general permit is issued under the authority of section 22a-430b of the Connecticut General Statutes ("Conn. Gen. Stat.").

Section 2 Authorization Under This General Permit

2.1 Eligible Activities & Discharges

This General Permit authorizes the discharge of wastewaters, as defined in this permit, from the categories of activities listed below to the surface waters and ground waters of the State of Connecticut, subject to the conditions and limitations of this permit.

Authorization for each category of discharge listed below is limited to the classification of the receiving waterbody and maximum discharge flows identified in Table 2.1 – Authorized Discharges by Category, Waterbody Type, and Maximum Flow. Authorization is subject to the terms of this permit.

- Non-contact cooling water
- Geothermal heat pump water
- Hydrostatic pressure testing of natural gas, petroleum tanks, and pipeline
- Fire suppression system testing
- Hydrant flushing
- Boiler blowdown
- Pressure washing
- Water treatment wastewater

All other discharges of water, substance or material into the waters of the state other than those specified in this permit are not authorized by this general permit.

Any person or municipality which initiates, creates, originates, or maintains such a discharge shall apply for and obtain authorization under Section 22a-430 of the Conn. Gen. Stat. prior to the occurrence of such discharge.

Table 2.1 — Authorized Discharges by Category, Waterbody Type, and Maximum Flow

Category of Discharge	Ground Water Classification	Maximum Daily Flow to Ground Water (GPD)	Authorized Surface Water Classification	Maximum Daily Flow to Surface Water (GPD)
Non-Contact Cooling Water	All	500,000	All	500,000
Geothermal Heat Pump Water	GB, GC	500,000	B, SB, C	500,000
Hydrostatic Pressure Testing (Natural Gas, Petroleum Tanks, Pipelines)	GB, GC	500,000	B, SB, C	500,000
Fire Suppression System Testing	GB, GC	500,000	B, SB, C	500,000
Hydrant Flushing	GB, GC	500,000	B, SB, C	500,000
Boiler Blowdown	GB, GC	50,000	Not Authorized	Not Authorized
Pressure Washing	GB, GC	500,000	B, SB, C	500,000
Water Treatment System Wastewater	All	50,000 (subsurface system) And 500,000 (infiltration basin)	All	2,000,000

2.2 Requirements for Authorization

This general permit authorizes the discharges associated with activities listed in Section 2.1 of this general permit provided the following conditions are met:

2.2.1 Application

For discharges requiring an application consistent with Section 3.1.2 of this general permit, a complete application form has been filed with the Commissioner and the Commissioner has issued a Notice of Coverage, unless the discharge(s) meet the requirements of Section 3.1.1 of this

general permit. All required applications must meet the requirements of Section 3 of this general permit.

2.2.2 Permit Compliance

The discharge from such activity is in compliance with all terms and conditions of this general permit including, but not limited to, the prohibitions described in this general permit.

2.2.3 Prohibitions

The following activities or discharges are expressly prohibited under this general permit:

2.2.3.1 No discharge shall contain, or cause in the receiving surface waters, a visible oil sheen or floating solids; or cause visible discoloration or foaming.

2.2.3.2 No discharge shall cause acute or chronic toxicity in the receiving surface water.

2.2.3.3 The discharge shall not increase the temperature of the receiving surface water above 85ºF, or, in any case, raise the normal temperature of the receiving stream more than 4ºF beyond any zone of influence allocated to that discharge in this general permit.

2.2.3.4 There shall be no discharge of polychlorinated biphenyl ("PCB") compounds.

2.2.3.5 There shall be no discharge of mercury beyond permit limits.

2.2.3.6 Dilution is expressly prohibited as a form of treatment.

2.2.3.7 Sludge and/or bottom deposits from any storage tank or basin.

2.2.3.8 Fuels, oils, or petroleum-based pollutants.

2.2.3.9 Soaps, solvents, or detergents.

2.2.3.10 Toxic or hazardous substances from a spill or other release.

2.2.4 Coastal Area Management and Permitting

Such discharge is consistent with all applicable goals and policies in section 22a-92 of the Conn. Gen. Stat. and will not cause adverse impacts to coastal resources as defined in section 22a-93 of the Conn. Gen. Stat.

2.2.5 Endangered and Threatened Species

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

2.2.6 Aquifer Protection

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

2.2.7 Conservation and Preservation Restrictions

Such discharge, if located within a conservation or preservation restriction area, complies with section 47-42d of the Conn. Gen. Stat. Proof of written notice to the holder of such restriction or a letter from the holder of such restriction verifying that the proposed activity is in compliance with the terms of the restriction shall be retained on site.

2.2.8 Wild and Scenic Rivers Act

Such discharge 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.

2.2.9 Antidegradation Standards

Such discharge is consistent with the Antidegradation Standards of section 22a-426-8 of the Regs. Conn. State Agencies.

2.2.10 New or Increased Discharges to High Quality Waters

On or before thirty (30) days prior to the commencement of a new or increased discharge to High Quality Waters from its activity, the permittee must document compliance with the Connecticut Antidegradation Implementation Policy in the Water Quality Standards, as amended.

2.2.11 New or Increased Discharges to Impaired Waters

A discharge is not authorized to an impaired waterbody that is listed in the most recent Connecticut Integrated Water Quality Report pursuant to Clean Water Act section 303(d) and 305(b) unless the Permittee provides to the Commissioner the following documentation demonstrating that the discharge is not expected to cause or contribute to an exceedance of the water quality standard(s) that caused the impairment:

2.2.11.1 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 standards and criteria at the point of discharge to the waterbody.

2.2.11.2 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 Table 3 of section 22a-426-9 of the Regs. Conn. State Agencies in concentrations greater

than the more restrictive of the chronic aquatic life criteria or applicable human health criteria.

2.2.11.3 For discharges to waters with an established TMDL, the Commissioner must determine if there are sufficient allocations in the TMDL to allow the discharge. The Commissioner may authorize the discharge with additional permit conditions or compliance.

2.3 Geographic Area

This general permit applies throughout the State of Connecticut.

2.4 Effective Date and Expiration Date of this General Permit

This general permit is effective on [insert effective date] and expires (5) five years after the issuance date. The general permit may be administratively continued in effect until DEEP has reissued the permit in accordance with the Conn. Gen. Stat. and the Regs. Conn. State Agencies. If the permit is administratively continued, Permittees are required to comply with all permit terms and conditions, including the monitoring requirements and submittal of reports at their original frequency during the continuance of the permit.

2.5 Effective Date of Authorization

2.5.1 Authorization to Discharge for Permittees Granted Automatic Permit Coverage

For those persons granted automatic permit coverage the effective date of authorization under this general permit is the same as the effective date of the general permit or the date the subject discharge is initiated, whichever is later.

2.5.2 Authorization to Discharge for Existing Permittees

Upon the effective date of this general permit, Permittees that had existing authorization to discharge under the *Comprehensive General Permit for Discharges to Surface Water and Ground Water,* issued April 1, 2023, ("Existing Permittees") shall have continued authorization to discharge under the terms and conditions of this general permit, provided the Permittee is in compliance with the terms and conditions of this general permit and a complete application for this general permit is submitted to the Commissioner in accordance with Section 3 of this general permit on or before ninety (90) days after the effective date of this general permit, until the Commissioner makes a final determination regarding such application.

2.5.3 Authorization to Discharge for New Applicants

An activity that is not authorized to discharge under the *Comprehensive General Permit for Discharges to Surface Water and Ground Water,* issued April 1, 2023, ("New Applicants") will be authorized to discharge under the terms and conditions of this general permit on the issuance date of the Notice of Coverage from the Commissioner.

2.6 Transition to and from an Individual Permit

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

2.6.1 Transition from an Individual Permit to Authorization under this General Permit.

If an activity meets the requirements for 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 individual permit to exclude such operation or activity from that 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 by indicating on the application provided. 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.

2.6.2 Transition from Authorization under this General Permit to an Individual Permit.

If an activity is authorized under this general permit and the Commissioner subsequently issues an individual permit for the same activity, then, on the effective date of any such individual permit issued by the Commissioner, the authorization issued under this general permit shall automatically terminate.

Section 3 Application Requirements

3.1 Who Must File an Application

A complete application shall be filed on forms prescribed and provided by the Commissioner in accordance with the permit terms and conditions of this general permit. Discharges or activities taking place at more than one (1) site may not be consolidated on one (1) application form except for Public Water Systems. The water storage tanks and pipelines that are part of the distribution network may be consolidated on one (1) form.

If the source or activity generating the discharge for which an application is required to be submitted under this general permit is owned by one person or municipality (the owner) but is leased or in some other way the legal responsibility of another person or municipality (the operator), it is the operator's responsibility to submit the application form required by this general permit and maintain compliance with the terms and conditions of this general permit.

3.1.1 Automatic Coverage—No Application Required

Any person or municipality that initiates, creates, originates, or maintains the following wastewater discharges, as defined in this general permit, is not required to submit an application. Permit authorization is automatic provided the Permittee is in compliance with all permit terms and conditions:

3.1.1.1 Non-contact Cooling Water

Discharges to ground water with a maximum daily flow less than 5,000 gpd.

3.1.1.2 Geothermal Heat Pump Water

a. Discharges to ground water with a maximum daily flow less than 5,000 gpd.

3.1.1.3 Fire Suppression System Test

a. Discharges to surface water or ground water.

3.1.1.4 Hydrant Flushing

a. Discharges to surface water or ground water.

3.1.1.5 Boiler Blowdown

a. Discharges to ground water with a maximum daily flow less than 5,000 gpd.

3.1.1.6 Pressure Washing

3.1.1.7 Discharges to surface water or ground water.

3.1.1.8 Water Treatment Discharges:

a. Discharges to ground water with a maximum daily flow less than 500 gpd.

b. Discharges of raw water to surface water or ground water.

c. Discharges from pump leakage, sampling taps, water treatment laboratory water, or on-line analytical instrumentation with a maximum daily flow of 500 gpd which are land applied to the ground and meet the permit terms and conditions.

d. Discharges of water supply system tank and pipeline draining wastewater (including hydrostatic tests) which meet permit terms and conditions.

e. Discharges from well rehabilitation that comply with the Best Management Practices in this general permit.

f. Potable Water System Maintenance tank or pipeline discharges to surface water or ground water with a maximum daily flow of 500,000 gpd.

3.1.2 Application Required

Any person or municipality that initiates, creates, originates, or maintains an eligible activity and discharge under this general permit, excluding the discharges referenced in Section 3.1.1 of this general permit, must file a timely and complete application with the Commissioner which, at a minimum, meets the requirements of Section 0 of this general permit and includes the applicable fee(s).

3.1.2.1 Non-contact Cooling Water

a. Discharges to surface water.

b. Discharges to ground water with a maximum daily flow greater than or equal to 5,000 gpd.

3.1.2.2 Geothermal Heat Pump

a. Discharges to surface water.

b. Discharges to ground water with a maximum daily flow greater than or equal to 5,000 gpd.

3.1.2.3 Hydrostatic Pressure Testing

a. Discharges to surface water.

b. Discharges to ground water.

3.1.2.4 Boiler Blowdown

a. Discharges to ground water with a maximum daily flow greater than or equal to 5,000 gpd.

3.1.2.5 Water Treatment Discharges

a. Discharges to surface water.

b. Discharges to ground water with a maximum daily flow greater than or equal to 500 gpd.

3.1.3 Authorization to Discharge for Existing Permittees

Existing Permittees that had existing authorization to discharge under the *Comprehensive General Permit for Discharges to Surface Water and Ground Water,* issued April 1, 2023 shall submit a complete application for coverage under this general permit to the Commissioner in accordance with the requirements of this general permit on or before ninety (90) days after the effective date of this general permit.

3.1.4 Applicants without Existing Authorization to Discharge

New Applicants without existing authorization to discharge shall submit a complete application for this general permit to the Commissioner in accordance with the requirements of this general permit one hundred eighty (180) days prior to the date of discharge. Such discharge is authorized under this general permit on the date the Notice of Coverage is issued by the Commissioner.

3.2 Application Fees

3.2.1 The application fee is $1250 and prescribed in Table 3.1.

3.2.2 Municipalities will receive a 50% discount on fees.

3.2.3 The application fee shall be paid to the Department of Energy and Environmental Protection.

3.2.4 An application shall not be deemed complete, and no discharge shall be authorized by this general permit unless the application fee has been paid in full.

3.2.5 The application fee is non-refundable.

3.3 Application Fees for Notice of Change

A fee of $1,000.00 shall be submitted with a complete Notice of Change form for permit modifications.

Table 3.1 Application Fees

Discharge Category	Discharge Location	Maximum Daily Flow (gpd)	Application Fee
Non-Contact Cooling Water	Surface Water	500,000	$1250
	Ground Water	Greater than 5,000	$1250
Geothermal Heat Pump Water	Surface Water	500,000	$1250
	Ground Water	Greater than 5,000	$1250
Boiler Blowdown	Ground Water	Greater than 5,000	$1250
Hydrostatic Pressure Testing Water	Surface & Ground Water	500,000	$1250
Water Treatment Wastewater	Surface Water	2,000,000	$1250
	Ground Water	Greater than 500	$1250

3.4 Contents of the Application

An application shall be filed on forms prescribed and provided by the Commissioner and shall include, but not be limited to, the requirements in this section of this general permit, as applicable.

3.4.1 Applicant Information

3.4.1.1 Legal name, mailing address, telephone number, and e-mail address of the Applicant. If the Applicant is an entity transacting business in Connecticut and is required to register with the

Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State.

3.4.1.2 Legal name, mailing address, telephone number, and e-mail address of the owner of the property on which the subject activity and discharge(s) are to take place.

3.4.1.3 Legal name, mailing address, telephone number, and e-mail address of the Applicant's attorney or other representative, if applicable.

3.4.1.4 Legal name, mailing address, telephone number, and e-mail address of any consultant(s) or engineer(s) retained by the Applicant to prepare the application or to design or construct the subject activity.

3.4.1.5 Legal name, telephone number, and e-mail address of the site contact person.

3.4.2 Site Information

3.4.2.1 Name, site address, and mailing address of the site with respect to which the application is submitted.

3.4.2.2 A detailed description of the process or activity generating each discharge and the type(s) of wastewater to be discharged.

3.4.2.3 Four-digit Standard Industrial Classification ("SIC") codes for the primary activity(ies) occurring at the registered site.

3.4.2.4 Six-digit North American Industry Classification System ("NAICS") codes for the primary activity(ies) occurring at the registered site.

3.4.2.5 Site Plan & Map: A plan of the site ("site plan") showing north meridian, property boundaries, all buildings, adjacent water bodies and roads, the location of the subject activity, monitoring location(s),and discharge location(s).

3.4.2.6 A statement whether the subject discharge will take place within ¼-mile of any public or private drinking water well.

3.4.2.7 A statement whether the activity will be located on federally recognized Indian lands.

3.4.2.8 A statement whether the site is located within the coastal boundary or coastal area as delineated on DEEP approved coastal boundary maps. If the site is within a coastal

boundary, a Coastal Consistency Review Form must be submitted with the Application as Attachment A.

3.4.2.9 A statement whether the site is located within a mapped Level A or B Aquifer Protection Area as defined in Sections 22a-354a though 22a-354bb of the Conn. Gen. Stat.

3.4.3 Discharge Location

3.4.3.1 For each discharge outfall:

a. Unique discharge location identifier (ie. discharge serial number), as defined by this general permit.

b. The latitude and longitude for each discharge point.

c. Name of the receiving water body.

d. The waterbody classification of the receiving surface water body, whether it is listed as impaired in the most recent Connecticut Integrated Water Quality Report pursuant to Clean Water Act section 303(d) and 305(b), the cause of impairment, and name of TMDL, if applicable.

e. Describe how water will be conveyed to the discharge point (e.g., hose, pump, controlled release).

f. Identify the proposed discharge location (e.g., storm drain, land surface, vegetated area, surface water, or ground water).

3.4.4 Discharge Information

3.4.4.1 Maximum daily total flow in gallons per day and the maximum instantaneous flow rate in gallons per minute for each discharge.

3.4.4.2 The method of flow measurement of each discharge (i.e. estimation, flow meter, etc.).

3.4.4.3 A description of the duration of each discharge (batch or continuous, hours per day).

3.4.4.4 Monitoring location where representative samples will be collected.

3.4.4.5 An estimated date of when each discharge began or will begin.

3.4.4.6 A list of the substances used or added to the wastewater, including but not limited to those substances for which effluent limits are specified in Section 4 of this general permit and

those substances listed in Appendix B Tables II, III and V or Appendix D of section 22a-430-4 of the Regs. Conn. State Agencies.

3.4.5 Plans and Specifications of Wastewater Treatment System (Attachment X of the Application)

3.4.5.1 Provide a description of all collection, treatment, and disposal systems proposed or installed to collect, treat, and dispose of the wastewaters which are the subject of this application; and plans and specifications of such systems. If applicable, the plans and specifications of such system shall be prepared by and certified by a professional engineer licensed in the state of Connecticut, unless such system is a pre-engineered system.

3.4.5.2 An accurate and detailed description of any wastewater treatment processes, such as neutralization, filtration, or precipitation of solids or metals, etc. which the Applicant utilizes or will utilize to achieve compliance with any of the effluent limits specified in this general permit.

3.4.6 Monitoring Plan

For all discharges requiring monitoring, a Monitoring Plan must be submitted which specifies for each discharge the:

- monitoring location(s).
- sample type.
- parameters to be monitored.
- frequency of monitoring.
- method of flow measurement.
- record keeping and reporting requirements.

3.4.7 Wastewater Screening

3.4.7.1 For New Applicants: facilities who have not produced a discharge, submit projected pollutant concentrations of the discharge using either supporting calculations or information from similar discharges.

The compliance schedule requirements in Section 4.1 of this general permit shall be completed within thirty (30) days of commencing discharge.

3.4.7.2 For Existing Permittees: analytical data from at least one sample, per effluent outfall, taken within the last six (6) months prior to submittal of the application. Analysis shall be

summarized on prescribed forms for all pollutants that are known or suspected to be present in the discharge.

3.4.7.3 For Water Treatment and Non-contact Cooling Water discharges, one (1) screening analysis will be conducted for pollutants believed present in the discharge prior to wastewater treatment.

3.4.7.4 For All Applicants:

a. Samples shall consist of representative grab samples and comply with approved sampling and analytical methods in accordance with 40 CFR 136.

b. Name, address, and telephone number of the laboratory(ies) used for the associated analyses.

c. A copy of the lab report associated with the analytical results provided.

d. If any of the following criteria are met, the applicant shall perform screening and submit the results with the application.

- If any pollutant identified as an emerging contaminant, as defined in this permit is reasonably known to be present, to have been handled, stored, released, or disposed of at the site where the subject wastewater originates.

- If any pollutant is 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 having the potential to bioaccumulate, bioconcentrate, or adversely affect aquatic life.

- If additives containing nitrogen or phosphorus are, will be or are believed present in the discharge, the sample shall be tested for total Kjeldahl nitrogen, nitrates, and total phosphorus.

3.4.7.5 The Commissioner may require the sampling and analysis for parameters of concern.

Note: Failure to submit analytical data on the forms prescribed by the Commissioner will result in the rejection of the application.

3.4.8 Line & Process Flow Diagram (Attachment X of the Application)

A line drawing of the water flow through the facility which clearly shows the following:

3.4.8.1 the intake source (e.g. well, city water, river);

3.4.8.2 all points of chemical addition into any treatment units;

3.4.8.3 sampling and flow meter locations;

3.4.8.4 all separate production operations with intake and discharge points of each operation;

3.4.8.5 treatment units with intake and discharge points of each unit;

3.4.8.6 a water balance that indicates approximate average and maximum daily flows at intake and discharge points of all separate production operations, treatment units and between processes;

3.4.8.7 each process tank, its workflow position, size, contents, ultimate disposal location; and

3.4.8.8 countercurrent rinsing and the direction of rinsing.

Note: Failure to submit a complete line and process flow diagram will result in the rejection of the application.

3.4.9 Erosion and Sediment Controls (Attachment X of the Application)

For discharges to ground water, a detailed description of all erosion and sediment controls and energy dissipation structures to be used in connection with the subject remedial measures.

3.4.10 Ground Water Monitoring Program

For ground water discharges covered under an approved Ground Water Monitoring Program, provide the approved monitoring plan, all amendments, and the corresponding ground water monitoring results.

3.4.11 Category Specific Application Requirements

3.4.11.1 Non-Contact Cooling Water

a. Provide a description and names of the source water.

b. Identify all known source(s) of contamination in the source water.

c. For Existing Permittees, a table summarizing the last two (2) years of all monitoring data on forms prescribed by the Commissioner.

3.4.11.2 Water Treatment

a. Provide a description and names of the source water.

b. Identify all known source(s) of contamination in the source water.

c. A list including the address of all water storage tanks associated with that facility.

d. For each discharge, indicate whether the discharge contains residual chlorine.

e. For Existing Permittees, a table summarizing last two (2) years of monitoring data on forms prescribed by the Commissioner.

f. Plans and specifications of the wastewater treatment system provided the discharge is greater than 500 gallons per day.

g. Discharge information for all designed emergency overflows must be included in the application.

h. For facilities with existing ground water monitoring wells, the latitude and longitude of each monitoring well, the depth to mean high ground water level, and the results of the last two (2) years of monitoring data on forms prescribed by the Commissioner.

3.4.11.3 Hydrostatic Pressure Testing

a. Describe the type of material or product contained in the tank or pipeline prior to testing.

b. Was the tank or pipeline cleaned prior to hydrostatic testing? If yes, describe cleaning method and date.

c. List any substances, residues, chemicals, or contaminants that may remain in the system prior to filling with test water.

d. Provide the material of construction of the tank or pipeline (e.g., steel, PVC, lined, coated).

e. State the size, length, and total volume of the tank or pipeline to be tested.

f. Identify the water source used for hydrostatic testing (e.g., municipal water, well water, surface water).

g. Will any additives (e.g., corrosion inhibitors, dyes, disinfectants) be introduced to the test water?

h. If additives are used, list product names, Safety Data Sheets (SDS), and concentrations.

3.4.12 Subscriber Agreement

A completed Connecticut DEEP NetDMR Subscriber Agreement.

3.4.13 Applicant Certification

The Applicant submits to the Commissioner a written certification which, at a minimum, complies with the following requirements:

3.4.13.1 The signatory requirement for the Applicant must comply with Section 22a-430-3(b)(2)(A) of the Regs. Conn. State Agencies and Section 13.20 of this general permit.

3.4.13.2 The Applicant has completely and thoroughly reviewed, at a minimum, this general permit and the following regarding the activities to be covered under such general permit:

a. all application information provided in accordance with Section 0 of such general permit,

b. the facility, based on a visual site inspection,

c. compliance records, and

d. all wastewater collection and treatment systems and monitoring equipment, including any plans and specifications, operating records and any DEEP approvals regarding such wastewater collection and treatment systems and monitoring equipment.

3.4.13.3 The Applicant has, based on the review described in Section 3.4.13.2 of this general permit, made an affirmative determination to:

a. comply with the terms and conditions of this general permit;

b. maintain compliance with all plans and documents prepared pursuant to this general permit, and

c. 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.

3.4.13.4 Such Applicant certifies to the following statement:

"I hereby certify that I am making this certification in connection with an application under the Comprehensive General Permit for Discharges to Surface Water and Ground Water, submitted to the Commissioner by [INSERT NAME OF APPLICANT] 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 application 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 3.4.13 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 3.4.13.3 of this general permit and that my signing this certification constitutes conclusive evidence of my having made such affirmative determination.

I understand that the application 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 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 Conn. Gen. Stat. and any other applicable law."

3.4.14 Qualified Professional Certification:

3.4.14.1 The application must include 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 Conn. Gen. Stat..

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 application information provided in accordance with Section 3 of this general permit.
ii. the facility, based on a site inspection.
iii. compliance records.
iv. all wastewater collection, treatment systems, and monitoring equipment, including any plans and specifications, operating records and any DEEP approvals required for such systems.

d. The Qualified Professional signing the certification has made an affirmative determination, based on the review described in Section 3.4.14.1.c of this general permit, that any proposed 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 Comprehensive General Permit for Discharges to Surface Water and Ground Water. I am making this certification in connection with an application under such general permit, submitted to the Commissioner by [INSERT NAME OF APPLICANT] 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 3.4.14 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 3.4.14.1.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 Conn. Gen. Stat., 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 Conn. Gen. Stat. and any other applicable law."

3.4.15 Preparer Certification

Any other individual or individuals responsible for preparing the application certifies to the following statement:

"I hereby certify that I am making this certification in connection with an application under the Comprehensive General Permit for Discharges to Surface Water and Ground Water, submitted to the Commissioner by [INSERT NAME OF APPLICANT] 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 application 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 3.4.15 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 application 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 Conn. Gen. Stat. and any other applicable law."

3.5 Request an Amendment or Modification of Existing Permit Coverage

A Notice of Change form shall be submitted by the Permittee to DEEP on the Notice of Change form prescribed by the Commissioner if any of the following conditions are met:

- To correct inaccurate or misleading information previously submitted to DEEP.
- To submit discharge screening analysis required by Section 3.4.7 upon initiation of a discharge
- Updating contact information
- Modifying the wastewater description.

Discharges or activities associated with such modifications may not be discharged without prior written approval from the Commissioner.

The Notice of Change must, at a minimum, contain a narrative of the proposed modification(s), how it is expected to affect the authorized discharge(s), supporting documentation and analytical data, if applicable, process flow diagrams, a timeline for implementation, and the expected completion of the proposed change(s). Additional information may be requested to complete the review of the request.

3.5.1 Treatment System Modification

This general permit authorizes the Permittee to expand or alter the existing wastewater collection or treatment system to meet the permit terms and conditions. The approval does not relieve the Permittee of the obligation to meet any other permit conditions or effluent limit contained within the general permit. The Permittee shall notify the Commissioner at least fifteen (15) days prior to expanding or significantly altering its wastewater collection or treatment system, or its method of operation. Treatment system modifications do not require further DEEP approval, unless determined by the Commissioner.

3.6 Where to Submit an Application or Notice of Change

3.6.1 For Applications and Notices of Change:

3.6.1.1 Submit a Transmittal Form to the Commissioner at DEEP.centralpermits@ct.gov or mailing address:

Central Permit Processing Unit
Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

3.6.1.2 Upon receipt and confirmation thereof, the Applicant shall submit required fees as prescribed.

3.6.1.3 The completed application or Notice of Change, together with all required documentation and supporting materials, shall be submitted to the Commissioner electronically.

3.6.1.4 If such discharge is directed to surface waters with a Water Quality Classification designated as Class AA or any tributary thereof, or an Aquifer Protection Area, a copy of the application must be filed with the appropriate water utility and the Department of Public Health, Drinking Water Section via email at DPH.SourceProtection@ct.gov.

Note: Applicants are advised to consult the Industrial Water Permitting Program's website for detailed instructions and guidance regarding application submission.

3.7 Confidential Business Information

If the Applicant claims that certain elements of their application constitute a trade secret or are otherwise exempt from the disclosure requirements of the state Freedom of Information Act (Section 1-210 et seq of the Conn. Gen. Stat., also called "FOIA") as specified in that Act, they shall follow the procedures provided in the application instructions for this general permit regarding information

subject to FOIA requirements. The process of complying with the FOIA requirements does not exempt the Applicant from the application deadlines specified within this general permit.

3.8 Additional Information

The Commissioner may require an Applicant to submit additional information that the Commissioner deems necessary to evaluate the consistency of the subject activity with the requirements for authorization under this general permit. A response to the Commissioner's request for additional information shall be submitted to DEEP within fifteen (15) days of the Commissioner's request, unless a different submittal date is provided.

3.9 Actions by Commissioner

3.9.1 Approval with Permit Conditions

The Commissioner may approve an Application or Notice of Change with or without additional permit conditions. If the Commissioner approves an application with conditions, the Permittee shall be bound by such conditions as if they are part of this general permit.

3.9.2 Rejection or Denial

The Commissioner may reject or deny an application if it is determined that it is incomplete, it does not satisfy the application requirements in this general permit, or if more than fifteen (15) days have elapsed since the Commissioner requested the Applicant submit additional information to determine eligibility for permit coverage or for authorization to discharge under this general permit. Any application refiled after such a rejection shall be accompanied by the applicable fee.

The Commissioner may reject or deny an application if he or she finds that the subject activity is inconsistent with the "Requirements for Authorization" of this general permit, or for any other reason provided by law.

3.9.3 Require Individual Permit

The Commissioner may require that an applicant obtain an individual permit for any discharge authorized by this permit in accordance with Section 22a-430b(c) of the Conn. Gen. Stat.

3.9.4 Notice to Applicant

Denial, rejection, or revocation of an application or permit coverage under this subsection shall constitute notice to the applicant that the subject activity may not lawfully be conducted or maintained without the issuance of an individual permit in accordance with Section 22a-430 of Regs. Conn. State Agencies.

3.9.5 Notice in Writing

Approval, rejection, denial, revocation of an application or permit coverage shall be provided to the Applicant in writing and state the reasons for such rejection or disapproval.

3.10 Termination of Discharge

For discharges that required the submittal of an application and proceeded to cease discharge, a Notice of Termination form shall be submitted to the Commissioner on a prescribed form within fourteen (14) days of the cessation of the discharge. Failure to submit the Notice of Termination may result in enforcement.

Notices of Termination shall be electronically mailed to: DEEP.IndustrialNPDESCompliance@ct.gov .

The authorization to discharge under this permit terminates at midnight of the day that the permittee is notified that their complete NOT has been processed. Until the permittee terminates permit coverage, all permit terms and conditions remain in effect.

Section 4 Conditions of This General Permit Applicable to All Discharges

4.1 Compliance Schedule for New Applicant Wastewater Screening

For New Applicants requesting permit coverage, within thirty (30) days of commencing discharge, submit the analytical results using the Notice of Change form required in Section 3.5 of this general permit.

4.2 Cessation of Discharge

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

4.3 Pollutant Monitoring and Analytical Methods for All Discharges

4.3.1 All samples shall be collected, handled, and analyzed in accordance with the methods approved under 40 CFR 136, unless a method is required under 40 CFR Subchapter N or unless an alternative method has been approved. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified by the Commissioner.

4.3.2 All analyses shall be performed by a laboratory certified by the Connecticut Department of Public Health, with the exception of analyses of pH, temperature, and total residual chlorine.

4.3.3 It is a violation of this permit for a Permittee or his/her designated agent to manipulate test samples in any manner or to delay sample shipment.

4.4 Environmental Laboratory

Analyses required under this permit shall be performed in accordance with the Conn. Gen. Stat. Section 19a-29a. An "environmental laboratory", as that term is defined in the referenced section, that is performing analyses required by this permit, shall be registered and have certification acceptable to the Commissioner, as such registration and certification is necessary.

4.5 Metals

All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.

4.6 PFAS

Analysis for PFAS shall be performed using the method(s) approved by the EPA pursuant to 40 CFR 136 and by a laboratory certified to conduct such test methods. If no such test method is approved by EPA pursuant to 40 CFR 136, PFAS analyses shall be performed in accordance with EPA Method 1633 or 1633A (see https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas).

4.7 Minimum Levels

4.7.1 The minimum levels ("ML") at which quantification must be achieved and verified during the chemical analyses required for this general permit shall be at or below the level of the applicable effluent limit, or if above the applicable effluent limit, the amount of the pollutant must be high enough that the method detects and quantifies the level of the pollutant.

4.7.2 The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this section of the permit.

4.7.3 Analyses for which quantification was verified to be at or below a ML shall be reported as "less than the [ML]" where '[ML]'is the numerical value equivalent to the ML for that analysis.

4.7.4 Analytical results indicating that a parameter was not present at a concentration greater than or equal to the ML specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions that require calculations (e.g. grab sample averages, average monthly limits).

4.7.5 Permittees must submit documentation showing the ML used for each analysis as an attachment to their Discharge Monitoring Report (DMR).

4.8 Sample Type

All samples obtained shall be representative of daily operations during discharge events at the prescribed monitoring location in the Notice of Coverage. Sample type shall be a grab sample unless otherwise specified in the Notice of Coverage.

4.9 Flow Monitoring

4.9.1 For flows less than 5,000 gallons per day, the Permittee may use reasonable methods to monitor or estimate flow such as pump capacity and/or run times, the use of dedicated incoming water meter, or other generally acceptable engineering practices.

4.9.2 For discharges greater than 5,000 gallons per day, the Permittee shall use either:

4.9.2.1 A flow meter which measures, visually indicates and records instantaneous and total daily flow; or

4.9.2.2 A method which a Qualified Professional has determined will measure and record total daily flow during all periods of discharge. Employees at the Permittee's facility associated with

wastewater discharge compliance must be trained in this method and records kept of the date(s) of training, the trainer, and the employees trained.

4.9.3 Total daily flow shall be monitored and recorded for each discharge and for each day of discharge. The Permittee must record flow for each day of discharge, but only the highest flow of the month gets reported on the Discharge Monitoring Report.

4.10 Record Keeping and Reporting Requirements

4.10.1 Electronic Reporting

4.10.1.1 For discharge activities that require a Notice of Coverage, the Permittee shall report results of chemical analyses electronically using NetDMR, a web-based tool that allows Permittees to electronically submit Discharge Monitoring Reports ("DMRs") and other required reports through a secure internet portal. The following are required to be submitted as an attachment to DMRs in NetDMR: any additional monitoring conducted in accordance with 40 CFR 136 and any calculations used to determine compliance. Additionally, New Applicants waiting for access to NetDMR shall attach all monitoring data required during this waiting period to the first discharge monitoring report available in NetDMR. NetDMR is accessed at: https://npdes-ereporting.epa.gov/net-netdmr

4.10.1.2 DMRs shall be submitted by the thirtieth (30th) day of the month following the month in which samples are taken. Should a discharge not occur during a sampling period, a DMR shall still be submitted using the appropriate NODI code to indicate "No Discharge."

4.10.1.3 If the Permittee monitors any discharge more frequently than required by this general permit using test procedures approved under 40 CFR 136 or specified in this general permit, the results shall be included in the calculation and reporting of the data on the DMR.

4.10.1.4 All aquatic toxicity analytical reports must be included as an attachment to the DMR. See Appendix B for additional information on toxicity.

4.10.1.5 The permittee shall also electronically submit any written report of noncompliance as an attachment to the DMR.

4.10.2 Record Retention

4.10.2.1 The Permittee shall retain copies of all records of data used to comply with this general permit for a period of at least five (5) years from the date of the record. The Permittee shall, at a minimum, maintain at the facility records of the following:

a. The flow records required by Section 4.9.3 of this general permit and the maximum daily flow for each month of the year.

b. The final discharge pH records required by each monitoring section of this general permit.

c. The calibration records of all pH and flow instrumentation equipment associated with wastewater treatment and discharge monitoring.

d. The frequency and duration of non-continuous discharges.

e. The individual(s) who performed the sampling or measurements.

f. The exact location of sampling or measurements.

g. The dates and times of sample collection or in situ measurement.

h. The dates analyses were performed.

i. The individual who performed the analyses.

j. The analytical techniques or methods used.

k. The results of such analyses.

l. Any routine maintenance work, preventative maintenance, etc. performed on the wastewater collection and treatment system.

4.10.2.2 If the Permittee monitors any discharge more frequently than required by the permit using test procedures approved under 40 CFR 136 or specified in the permit, the results shall be maintained on site and shall be submitted upon request of the Commissioner.

4.10.2.3 Records required by this general permit shall be retained for five (5) years on-site, or at the Permittee's principal place of business in Connecticut, as required by Section 22a-430-3(j) of the Regs. Conn. State Agencies. Records shall be made available to the Commissioner for inspection immediately (within five (5) business days) upon request.

4.10.2.4 The Commissioner may extend this record retention period as he or she deems necessary upon written notice to the Permittee, and this period is automatically extended for as long as a Permittee is under an active license, permit, or order from the Commissioner under Chapter 446K of the Conn. Gen. Stat. or if the Permittee is in litigation for any violation of any permit or order issued by the Commissioner under Chapter 446K of the Conn. Gen. Stat.

4.10.2.5 Permittees must provide copies of all monitoring data upon the Commissioner's request within two (2) business days of the request.

4.11 Treatment System Operation and Maintenance

4.11.1 The Permittee must maintain any treatment, collection, or conveyance systems necessary to meet the general permit effluent limits and conditions contained in the general permit and Notice of Coverage at all times.

4.11.2 The Permittee shall treat the discharge for any pollutant identified as present in the untreated wastewater at a concentration exceeding the limits of this general permit or the limitations specified in a Notice of Coverage.

4.11.3 The treatment system must be maintained at all times as described in the application.

4.11.3.1 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, but no less than monthly, to ensure proper operation of all equipment.

4.11.3.2 A written log shall be maintained on-site or at the Permittee's principal place of business in Connecticut, as required by section 22a-430-3(j) 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.

4.11.3.3 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.

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

4.12 Erosion and Sediment Controls

4.12.1.1 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 "Connecticut Guidelines for Soil Erosion and Sediment Control" (2023, as revised), established pursuant to section 22a-328 of the General Statutes to ensure that erosion of disturbed soils and discharge of eroded sediments to tidal wetlands, inland wetlands and watercourses are minimized or eliminated.

4.12.1.2 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 are minimized or eliminated.

4.12.1.3 Erosion and sediment control measures shall be installed and maintained to ensure that discharge energies are sufficiently dissipated to prevent the erosion of soil or the discharge of eroded sediments to tidal wetlands, inland wetlands and watercourses.

4.13 Duty to Correct, Record, and Report Violations

4.13.1 Corrective Actions

Immediately upon learning of a violation of a condition of this general permit, the Permittee shall immediately take all reasonable actions to determine the cause of the violation, correct the violation, mitigate the impact of the violation, and prevent its recurrence.

4.13.2 Noncompliance Notifications

4.13.2.1 In accordance with Section 22a-430-3(j)(8), 22a-430-3(j)(11)(D), 22a-430-3(k)(4), and 22a-430-3(i)(3) of the Regs. Conn. State Agencies, the Permittee shall notify the Commissioner of the following actual or anticipated noncompliance with the terms or conditions of this permit within two (2) hours of becoming aware of the circumstances.

a. A noncompliance that is greater than two times an effluent limitation;

b. Any condition that may endanger human health or the environment, including but not limited to noncompliance with WET limitations;

c. A failure or malfunction of monitoring equipment used to comply with the monitoring requirements of this permit;

d. Any actual or potential bypass of the Permittee's collection system or treatment facilities; or

e. Expansions or significant alterations of any wastewater collection, treatment facility, or its method of operation for the purpose of correcting or avoiding a permit violation.

All other actual or anticipated violations of the permit shall be reported to the Commissioner within twenty-four (24) hours of becoming aware of the circumstances.

Notification of an actual or anticipated noncompliance or facility modification does not stay any term or condition of this permit.

4.13.2.2 Where to Submit Noncompliance Notifications

Noncompliance Notifications shall be submitted via the Commissioner's online Noncompliance Notification Form:

https://portal.ct.gov/deep/water-regulating-and-discharges/industrial-wastewater/compliance-assistance/notification-requirements.

4.13.2.3 Resampling in the Event of an Effluent Limit Violation

If any sample analysis violates an effluent limit, a second sample of the effluent, using the same sample type, shall be collected and analyzed for the parameter(s) in question and the results reported to DEEP within thirty (30) days of the exceedance using the Noncompliance Follow-up Report Form referenced in Section 4.10.3 of this general permit and NetDMR.

4.13.3 Noncompliance Follow-Up Report

4.13.3.1 Within five days of any Notification of Noncompliance, the Permittee shall submit a follow-up report using the Commissioner's online Noncompliance Follow-up Report Form:

https://portal.ct.gov/deep/water-regulating-and-discharges/industrial-wastewater/compliance-assistance/notification-requirements.

The follow-up report shall contain, at a minimum, the following information:

a. A description of the noncompliance and its cause.

b. The period of noncompliance, including exact dates and times.

c. If the noncompliance has not been corrected, the anticipated time it is expected to continue.

d. Steps taken or planned to correct the noncompliance and reduce, eliminate and prevent recurrence of the noncompliance.

4.13.4 Additional Notification Requirements

In accordance with Section 22a-430-3(j)(11)(E) of the Regs. Conn. State Agencies, the Permittee shall notify the Commissioner within seventy-two (72) hours and in writing within thirty (30) days when he or she knows or has reason to believe that the concentration in the discharge of any substance listed in the application, or any toxic substance as listed in Appendix B or D of the Regs. Conn. State Agencies Section 22a-430-4, has exceeded or will exceed the highest of the following levels:

4.13.4.1 One hundred micrograms per liter;

4.13.4.2 Two hundred micrograms per liter for acrolein and acrylonitrile,

4.13.4.3 Five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;

4.13.4.4 One milligram per liter for antimony;

4.13.4.5 An alternative level specified by the Commissioner, provided such level shall not exceed the level which can be achieved by the Permittee's treatment system; or

4.13.4.6 A level two times the level specified in the Permittee's application.

a. The seventy-two (72) hour initial Noncompliance Notifications shall be submitted via the Commissioner's online Noncompliance Notification Form. The thirty (30) day follow-up report shall be submitted via the Commissioner's online Noncompliance Follow-up Report Form. The Forms are available at the Commissioner's website:

https://portal.ct.gov/deep/water-regulating-and-discharges/industrial-wastewater/compliance-assistance/notification-requirements .

b. A record of such violations or conditions shall be maintained on site and include the information described in this subsection of this general permit.

4.14 Resampling in the Event of an Effluent Limit Violation

If any sample analysis violates an effluent limit, a second sample of the effluent, using the same sample type, shall be collected and analyzed for the parameter(s) in question and the results reported to DEEP within thirty (30) days of the exceedance using the Noncompliance Follow-up Report Form and NetDMR.

Section 5 Conditions of this General Permit Applicable to Non-Contact Cooling and Geothermal Heat Pump Water Discharges to Surface and Ground Water

The Permittee must at all times continue to meet the requirements for authorization set forth in Section 2 of this general permit and assure that the discharge authorized by this general permit is conducted in accordance with the following permit terms and conditions:

5.1 Non-Contact Cooling and Geothermal Heat Pump Water Discharges to Surface Water

5.1.1 Permit Conditions

5.1.1.1 No discharge shall contain or cause in the receiving stream a visible oil sheen, floating solids, visible discoloration, or foaming.

5.1.1.2 No discharge shall cause acute or chronic toxicity in the receiving water.

5.1.1.3 The temperature of the discharge shall not increase the temperature of the receiving water above 85°F for freshwaters and 83°F for marine waters, nor shall the discharge raise the temperature of the receiving stream more than 4°F at any time, except for marine waters during the months of July, August, and September, during which time the discharge shall not raise the temperature of the receiving waters by more than 1.5°F.

5.1.1.4 A discharge of non-contact cooling water or geothermal heat pump water to ground water shall be derived solely from once-through heat exchange systems or condensate which does not receive chemical additions of any kind and which uses on-site uncontaminated ground water, public water supply, or surface water as source water.

5.1.1.5 The wastewater shall not be discharged to any open floor drain, floor trench, sump or drainage system which is designed or constructed to receive, or which may receive chemical spillage or wastewaters not authorized by this general permit.

5.1.1.6 Discharges authorized by this general permit may not contain any substances found in Appendix B, Tables II, III, and V and Appendix D of Section 22a-430-4 of the Regs. Conn. State Agencies unless the concentration of those substances do not exceed: (a) all effluent limits specified in this general permit; or (b) if no such limit is specified, the most restrictive

aquatic life or human health criteria listed in Table 3 of the Regs. Conn. State Agencies Section 22a-426-9 (Water Quality Standards).

5.1.1.7 The maximum daily flow shall not exceed the maximum daily flow specified in the permit application.

5.1.1.8 Water treatment chemicals containing chromium, copper, lead, zinc, tributyl tin or magnesium shall not be added to non-contact cooling water or geothermal heat pump water.

5.1.2 Numeric Effluent Limits

5.1.2.1 A discharge of non-contact cooling water or geothermal heat pump water to surface water shall comply with the following permit conditions and limits in Tables 5.1.2.1 and 5.1.2.2 below.

Table 5.1.2.1 Instantaneous Maximum Effluent Limit or Range for Discharges of Non-contact Cooling Water and Geothermal Heat Pump Water to Surface Water

Parameter	Effluent Limit	Unit	Minimum Level	NetDMR Parameter Code
Flow	500,000	gpd	not applicable	
pH[1]	6.0 – 9.0	s.u.	not applicable	
Acute Aquatic Toxicity, *Daphnia pulex* (freshwater)[2, 3]	≥90 [2,3]	Percent	not applicable	
Acute Aquatic toxicity, *Pimephales promelas* (freshwater)[2,3]	≥90 [2,3]	Percent	not applicable	
Acute Aquatic toxicity, *Mysidopsis bahia* (marine & estuarine)[2,3]	≥90 [2,3]	Percent	not applicable	
Acute Aquatic toxicity, *Menidia beryllina* (marine & estuarine)[2,3]	≥90 [2,3]	percent	not applicable	
Iron, total	3.0	mg/L	0.040 mg/L	
Oil & Grease, Non-polar Material	5.0	mg/L	not applicable	
Total Phosphorus	Monitor	mg/L	0.1 mg/L	
Total Suspended Solids	20	mg/L	not applicable	
Temperature (marine & estuarine)[4]	83	°F	not applicable	
Temperature (freshwater)[4]	85	°F	not applicable	
Footnotes: [1] The pH of the discharge shall not be less than 6.0 or more than 9.0 S.U.				

Parameter	Effluent Limit	Unit	Minimum Level	NetDMR Parameter Code
[2] The results of the aquatic toxicity tests shall be reported as percent survival in an undiluted sample of the effluent. See Appendix B for Whole Effluent Toxicity (WET) guidance and table. [3] For aquatic toxicity, discharges to marine and estuarine waters shall perform the aquatic toxicity test using *Mysidopsis bahia* and *Menidia beryllina* and discharges to freshwater water shall use *Daphnia pulex* and *Pimephales promelas* species. [4] Discharges to marine and estuarine waters shall not exceed 83°F and discharges to freshwater shall not exceed 85°F.				

Table 5.1.2.2 Instantaneous Maximum Effluent Limits for Discharges of Non-contact Cooling Water and Geothermal Heat Pump Water to Surface Water by Instream Waste Concentration

Parameter	Instream Waste Concentration [1]										
	Reservoir & Lake	Less than 1%	1 to 5%	Greater than 5% to 20%	Greater than 20% to 40%	Greater than 40% to 70%	Greater than 70% to 100%	Intermittent Discharge	Units	Minimum Level	NetDMR Parameter Code
Aluminum, total	1.5	1.50	1.41	0.36	0.18	0.10	0.071	1.5	mg/L	0.010 mg/L	
Manganese, total	3.0	3.00	1.53	0.38	0.19	0.11	0.077	3.0	mg/L	not applicable	
Copper, total[2] (Freshwater)	0.105	0.48	0.095	0.037	0.019	0.011	0.0075	0.12	mg/L	0.003 mg/L	
Copper, total[3] (Estuarine, Marine)	---	0.39	0.079	0.02	0.0098	0.0056	0.0039	0.039	mg/L	0.003 mg/L	
Lead, total	0.048	0.098	0.020	0.0049	0.0025	0.0014	0.00098	0.15	mg/L	0.001 mg/L	
Zinc, total	0.29	2.00	0.64	0.16	0.081	0.046	0.032	0.32	mg/L	0.010 mg/L	
Total Residual Chlorine[2] (Freshwater)	0.085	0.90	0.180	0.045	0.023	0.013	0.009	0.05	mg/L	0.020 mg/L	
Total Residual Chlorine[3] (Estuarine, Marine)	---	0.61	0.12	0.031	0.015	0.0088	0.0061	0.065	mg/L	0.020 mg/L	

Footnotes:

[1] The Instream Waste Concentration shall be calculated by dividing the maximum gallon/hr flow of the discharge by the sum of the maximum gallon/hr flow of the discharge and the seven-day ten-year low flow (7Q10) of the receiving stream and multiplying the result by 100.

[2] If discharge is to freshwater, these limits apply.

[3] If discharge is to estuarine or marine water, these limits apply.

5.1.3 Monitoring

The Permittee shall monitor the discharge for the parameters in Tables 5.1.2.1 and 5.1.2.2. The required frequency of parameter and aquatic toxicity monitoring shall be based on the discharge flow rates specified in Table 5.1.3.

Table 5.1.3. Non-contact Cooling Water or Geothermal Heat Pump Discharge to Surface Water Monitoring Frequency and Reporting Requirements

Permitted Maximum Daily Flow (gallons per day)	Parameter Monitoring Frequency	Aquatic Toxicity Monitoring Frequency	Reporting of Information[1]
0 to 500	No Monitoring	No Monitoring	Not Applicable
501 to 5,000	Annually	Annually	Submit DMR
5,001 to 50,000	Quarterly	Semi-annually	Submit DMR
50,001 to 500,000	Monthly	Quarterly	Submit DMR

Footnotes:
[1] The results of all analyses shall be retained in accordance with the recordkeeping requirements of this general permit. A Discharge Monitoring Report (DMR) is not required to be submitted to the Commissioner unless otherwise specified in this permit.

5.1.3.1 Monitoring Location

All samples shall be representative of the discharge, collected after all treatment, prior to mixing with any other waters, and before discharge to waters of the state.

5.1.3.2 Sample Type

Samples collected for the purpose of determining compliance with the effluent limitations and monitoring requirements listed in this general permit shall be grab samples.

5.2 Non-Contact Cooling Water and Geothermal Heat Pump Discharges to Ground Water

5.2.1 Permit Conditions

5.2.1.1 A discharge of non-contact cooling water or geothermal heat pump water to ground water shall be derived solely from once-through heat exchange systems or condensate which does not receive chemical additions of any kind and which uses on-site uncontaminated ground water, public water supply, or surface water as source water.

5.2.1.2 Ground water contaminated as a result of industrial or commercial activity including but not limited to those substances listed in Appendix B, Tables II, III, and V, and Appendix D of section 22a-430-4 of the Regs. Conn. State Agencies shall not be used as a source water.

5.2.1.3 Water treatment chemicals containing chromium, copper, lead, zinc, tributyl tin or magnesium shall not be added to non-contact cooling water or geothermal heat pump water.

5.2.1.4 The following minimum separating distances shall be maintained between any point of a disposal system and the item listed:

Table 5.2.1 – Minimum Horizontal Separating Distances

Potential Receptor		Separating Distance (feet)
Public or Private Water Supply Well (not downgradient of an existing permitted wastewater disposal system) withdrawal rate:	Less than 10 gallons per minute	75
	10 to 50 gallons per minute	150
	Greater than 50 gallons per minute	200
Watercourse		50
Public Water Supply Reservoir		100
Property Line		15
Subsurface Sewage Disposal System		10

5.2.1.5 For discharges to a subsurface disposal system, a minimum separation distance of 1,000 feet is required between any part of the disposal system and any downgradient potable water supply well. If a Ground Water Monitoring Program has been approved in writing by the Commissioner, the minimum separation distance may be reduced to

200 feet. “Downgradient” refers to the ground water gradient, or if that is unknown, the topographic gradient.

5.2.2 Numeric Effluent Limits

5.2.2.1 A discharge of non-contact cooling water or geothermal heat pump water land applied to the ground, to a subsurface disposal system, or an infiltration basin shall comply with the following limits in Table 5.2.2.1 below:

Table 5.2.2.1 Maximum Effluent Limits for Discharges of Non-contact Cooling Water or Geothermal Heat Pump Water to Ground Water

Parameter	Maximum Limit	Unit	Minimum Level	NetDMR Parameter Code
Flow	500,000	gpd	not applicable	
pH	6.0 – 9.0	S.U.	not applicable	
Lead, total	0.01	mg/L	0.001 mg/L	
Aluminum, total	1.5	mg/L	not applicable	
Iron, total	3.0	mg/L	0.040 mg/L	
Manganese, total	3.0	mg/L	not applicable	
Copper, total	1.3	mg/L	0.003 mg/L	
Temperature	Monitor	°F	not applicable	
Zinc, total	Monitor	mg/L	0.010 mg/L	

5.2.3 Monitoring

The Permittee shall monitor the discharge for the parameters in Table 5.2.2.1. The frequency of parameter monitoring shall be determined by flow as follows in Table 5.2.3:

Table 5.2.3 Non-contact Cooling Water or Geothermal Heat Pump Discharge Monitoring Frequency and Reporting

Maximum Daily Flow (gallons per day)	Parameter Monitoring Frequency	Reporting of Information[1]
0 to 500	No Monitoring	Not Applicable
501 to 5,000	Annually	Retain onsite
5,001 to 50,000	Quarterly	Submit DMR
50,001 to 500,000	Monthly	Submit DMR

Footnotes:

[1] The results of all analyses shall be retained in accordance with the recordkeeping requirements of this general permit. A Discharge Monitoring Report (DMR) is not required to be submitted to the Commissioner unless otherwise specified in this permit.

5.2.3.1 Monitoring Location

All samples shall be representative of the waste stream and from a location prior to comingling with any other waste stream and prior to entering the applicable ground water.

5.2.3.2 Sample Type

Samples collected for the purpose of determining compliance with the effluent limitations and monitoring requirements listed in this general permit shall be grab samples.

Section 6 Conditions of this General Permit Applicable to Hydrostatic Pressure Testing Discharges of Petroleum and Natural Gas Tanks and Pipelines

6.1 Hydrostatic Pressure Testing Discharges of Petroleum and Natural Gas to Surface Water

6.1.1 Conditions

6.1.1.1 No discharge shall contain (or cause in the receiving stream) a visible oil sheen, floating solids, visible discoloration, or foaming.

6.1.1.2 No discharge shall cause acute or chronic toxicity in the receiving water body.

6.1.1.3 The temperature of the discharge shall not increase the temperature of the receiving water above 85°F for freshwaters and 83°F for marine waters, nor shall the discharge raise the temperature of the receiving stream more than 4°F at any time, except for marine waters during the months of July, August, and September, during which time the discharge shall not raise the temperature of the receiving waters by more than 1.5°F.

6.1.1.4 The wastewater shall not be discharged to any open floor drain, floor trench, sump or drainage system which is designed or constructed to receive or which may receive chemical spillage or wastewaters not authorized by this general permit.

6.1.1.5 Discharges authorized by this general permit may not contain any substances found in Appendix B, Tables II, III, and V and Appendix D of Section 22a-430-4 of the Regs. Conn. State Agencies unless the concentration of those substances do not exceed: (a) all effluent limits specified in this general permit; or (b) if no such limit is specified, the most restrictive aquatic life or human health criteria listed in Table 3 of the Regs. Conn. State Agencies Section 22a-426-9 (Water Quality Standards).

6.1.1.6 The maximum daily flow shall not exceed the maximum daily flow specified in the permit application.

6.1.1.7 Prior to any hydrostatic pressure testing, each Permittee shall remove to the maximum extent all solid and liquid substances including scale, soil and any residues from materials previously contained in the tank or pipeline using, at a minimum the following practices:

a. for all pipelines: cleaning with either compressed air, high pressure water spray, or both;

b. for natural gas pipelines: cleaning with compressed air and with cleaning pigs designed for such pipelines; and/or

c. for all used tanks: cleaning with compressed air, high pressure water spray, or both.

6.1.1.8 Wastewaters generated from the cleaning procedures described above are not considered an eligible discharge authorized by this general permit. The wastewater

generated shall be collected for off-site transport and disposal by a licensed waste transporter.

6.1.1.9 No chemicals are to be added to any water used for hydrostatic pressure testing after it enters the site, or to the tanks or pipelines which are being tested.

6.1.1.10 All hydrostatic pressure testing wastewater discharging directly to a surface water body shall be provided with controls such as check dams or temporary basins to prevent erosion or any visible discoloration and foaming of the receiving water body and to dissipate energy prior to discharge to mitigate scouring of the streambed and adverse impacts.

6.1.1.11 If the source of hydrostatic pressure testing water is a surface water body the intake point of the pipe used to draw the test water from the surface water shall be located at a depth which minimizes the entrainment of sediments.

6.1.2 Numeric Effluent Limits

6.1.2.1 A discharge of petroleum and natural gas hydrostatic pressure testing wastewater to surface water shall comply with the following limits in Tables 6.1.2.1 and 6.1.2.2 below.

Table 6.1.2.1 Instantaneous Maximum Effluent Limit or Range for Discharges of Petroleum and Natural Gas Hydrostatic Pressure Testing Water to Surface Water

Parameter	Limit	Unit	Minimum Level	NetDMR Parameter Code
Flow	500,000	Gpd	not applicable	
pH[1]	6.0 – 9.0	S.U.	not applicable	
Oil & Grease, Non-polar Material	5.0	mg/L	not applicable	
Iron, total	3.0	mg/L	0.040 mg/L	
Total Suspended Solids	45	mg/L	not applicable	

Footnotes:
[1] The pH of the discharge shall not be less than 6.0 or more than 9.0 S.U.

Table 6.1.2.2 Instantaneous Maximum Effluent Limits for Discharges of Petroleum and Natural Gas Hydrostatic Pressure Testing Water to Surface Water by Instream Waste Concentration

Parameter		Instream Waste Concentration [1]									
	Reservoir & Lake	<1%	1 to 5%	>5% to 20%	>20% to 40%	>40% to 70%	>70% to 100%	Inter-mittent Discharge	Units	Minimum Level (unit)	NetDMR Parameter Code
Aluminum, total	1.5	1.50	1.41	0.36	0.18	0.10	0.071	1.5	mg/L	0.010 mg/L	
Manganese, total	3.0	3.00	1.53	0.38	0.19	0.11	0.077	3.0	mg/L	not applicable	
Copper, total[2] (Freshwater)	0.105	0.48	0.095	0.037	0.019	0.011	0.0075	0.12	mg/L	0.003 mg/L	
Copper, total[3] (Estuarine, Marine)	---	0.39	0.079	0.02	0.0098	0.0056	0.0039	0.039	mg/L	0.003 mg/L	
Lead, total	0.048	0.098	0.020	0.0049	0.0025	0.0014	0.00098	0.15	mg/L	0.001 mg/L	
Zinc, total	0.29	2.00	0.64	0.16	0.081	0.046	0.032	0.32	mg/L	0.010 mg/L	
Total Residual Chlorine[2] (Freshwater)	0.085	0.90	0.180	0.045	0.023	0.013	0.009	0.05	mg/L	0.020 mg/L	
Total Residual Chlorine[3] (Estuarine, Marine)	---	0.61	0.12	0.031	0.015	0.0088	0.0061	0.065	mg/L	0.020 mg/L	

Footnotes:
[1] The Instream Waste Concentration shall be calculated by dividing the maximum gallon/hr flow of the discharge by the sum of the maximum gallon/hr flow of the discharge and the seven-day ten-year low flow (7Q10) of the receiving stream and multiplying the result by 100.
[2]If discharge is to freshwater, these limits apply.
[3]If discharge is to estuarine or marine water, these limits apply.

6.1.3 Monitoring

The Permittee shall monitor the discharge for the parameters in Tables 6.1.2.1 and 6.1.2.2. The frequency of parameter monitoring shall be determined by the discharge flow as follows in Table 6.1.3:

Table 6.1.3 Petroleum and Natural Gas Hydrostatic Pressure Testing Surface Water Discharge Parameter Monitoring Frequency and Reporting

Permitted Maximum Daily Flow (gallons per day)	Parameter Monitoring Frequency	Reporting of Information[1]
0 to 500	No Monitoring	None
501 to 500,000	1st 10% & last 10% per event	Retain onsite

Footnotes:

[1] The results of all analyses shall be retained in accordance with the recordkeeping requirements of this general permit. A Discharge Monitoring Report (DMR) is not required to be submitted to the Commissioner unless otherwise specified in this permit.

6.1.3.1 Monitoring Location

All samples shall be representative of the discharge, collected after all treatment, prior to mixing with any other waters, and before discharge to waters of the state.

6.1.3.2 Sample Type

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

6.2 Hydrostatic Pressure Testing Discharges of Petroleum and Natural Gas to Ground Water

6.2.1 Permit Conditions

6.2.1.1 Prior to any hydrostatic pressure testing, each Permittee shall remove to the maximum extent all solid and liquid substances including scale, soil and any residues from materials previously contained in the tank or pipeline using, at a minimum the following practices:

a. for all pipelines: cleaning with either compressed air, high pressure water spray, or both;

b. for natural gas pipelines: cleaning with compressed air and with cleaning pigs designed for such pipelines; and/or

c. for all used tanks: cleaning with compressed air, high pressure water spray, or both.

6.2.1.2 Wastewaters generated from the cleaning procedures described above are not considered an eligible discharge authorized by this general permit. The wastewater generated shall be collected for off-site transport and disposal by a licensed waste transporter.

6.2.1.3 No chemicals are to be added to any water used for hydrostatic pressure testing after it enters the site, or to the tanks or pipelines which are being tested.

6.2.1.4 Erosion and sediment controls shall be utilized when necessary, and structural practices must be implemented to divert flows away from exposed soils, retain the discharges where they will infiltrate the ground, and otherwise limit the discharge off pollutants from the site. All steps must be taken to avoid discharging when the ground surface is frozen.

6.2.1.5 The following minimum separating distances shall be maintained between any point of a disposal system and the item listed:

Table 6.2.1 – Minimum Horizontal Separating Distances

Potential Receptor		Separating Distance (feet)
Public or Private Water Supply Well (not downgradient of an existing permitted wastewater disposal system) withdrawal rate:	Less than 10 gallons per minute	75
	10 to 50 gallons per minute	150
	Greater than 50 gallons per minute	200
Watercourse		50
Public Water Supply Reservoir		100
Property Line		15

6.2.1.6 For discharges to a subsurface disposal system, a minimum separation distance of 1,000 feet is required between any part of the disposal system and any downgradient potable water supply well. If a Ground Water Monitoring Program has been approved in writing by the Commissioner, the minimum separation distance may be reduced to 200 feet. "Downgradient" refers to the ground water gradient, or if that is unknown, the topographic gradient.

6.2.2 Numeric Effluent Limits

6.2.2.1 A discharge of petroleum and natural gas hydrostatic pressure testing wastewater land applied to the ground, to a subsurface disposal system, or an infiltration basin shall comply with the following limits in Table 6.2.2.1 below:

Table 6.2.2.1 — Maximum Effluent Limits for Discharges of Petroleum and Natural Gas Hydrostatic Pressure Testing to Ground Water

Parameter	Maximum Limit	Unit	Minimum Level (unit)
Flow	500,000	gpd	not applicable
Temperature	Monitor	°F	not applicable
pH	6.0 – 9.0	S.U.	not applicable
Oil & Grease, Non-polar Material	5.0	mg/L	not applicable
Aluminum, total	1.5	mg/L	not applicable
Copper, total	1.3	mg/L	0.003 mg/L
Iron, total	3.0	mg/L	0.040 mg/L
Lead, total	0.01	mg/L	0.001 mg/L
Manganese, total	3.0	mg/L	not applicable
Zinc, total	Monitor	mg/L	0.010 mg/L

6.2.3 Monitoring

The Permittee shall monitor the discharge for the parameters in Table 6.2.2.1. The frequency of parameter monitoring shall be determined by the discharge flow as follows in Table 6.2.3:

Table 6.2.3 Petroleum and Natural Gas Hydrostatic Pressure Testing Ground Water Discharge Parameter Monitoring Frequency and Reporting

Permitted Maximum Daily Flow (gallons per day)	**Parameter Monitoring Frequency**	**Reporting of Information[1]**
0 to 500	No Monitoring	None
501 to 500,000	1st 10% & last 10% per event	Retain onsite
Footnotes: [1] The results of all analyses shall be retained in accordance with the recordkeeping requirements of this general permit. A Discharge Monitoring Report (DMR) is not required to be submitted to the Commissioner unless otherwise specified in this permit.		

6.2.3.1 Monitoring Location

All samples shall be representative of the discharge, collected after all treatment, prior to mixing with any other waters, and before discharged to waters of the state.

6.2.3.2 Sample Type

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

Section 7 Conditions of this General Permit Applicable to Fire Suppression System Testing Water Discharges

7.1 Fire Suppression System Testing Water Discharges to Surface Water

7.1.1 Permit Conditions

7.1.1.1 No discharge shall contain or cause in the receiving stream a visible oil sheen, floating solids, visible discoloration, or foaming.

7.1.1.2 No discharge shall cause acute or chronic toxicity in the receiving water body.

7.1.1.3 The temperature of the discharge shall not increase the temperature of the receiving water above 85°F for freshwaters and 83°F for marine waters, nor shall the discharge raise the temperature of the receiving stream more than 4°F at any time, except for marine waters during the months of July, August, and September, during which time the discharge shall not raise the temperature of the receiving waters by more than 1.5°F.

7.1.1.4 The wastewater shall not be discharged to any open floor drain, floor trench, sump or drainage system which is designed or constructed to receive or which may receive chemical spillage or wastewaters not authorized by this general permit.

7.1.1.5 Discharges authorized by this general permit may not contain any substances found in Appendix B, Tables II, III, and V and Appendix D of Section 22a-430-4 of the Regs. Conn. State Agencies unless the concentration of those substances do not exceed: (a) all effluent limits specified in this general permit or (b) if no such limit is specified, the most restrictive aquatic life or human health criteria listed in Table 3 of the Regs. Conn. State Agencies Section 22a-426-9 (Water Quality Standards).

7.1.1.6 Fire suppression system testing wastewater shall be discharged to a surface water only if a discharge to a municipal sanitary sewer or to a subsurface disposal system or land application to the ground surface are not available as an option.

7.1.1.7 All fire suppression system testing wastewater discharging directly to a surface water body shall be provided with controls as necessary to remove accumulated solids and to prevent erosion, sedimentation, visible discoloration and foaming of the receiving water body and to dissipate energy prior to discharge to mitigate scouring of the stream bed and adverse impacts.

7.1.1.8 A record shall be kept of the discharge date, start time, stop time, location, and estimated flow. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

7.2 Fire Suppression System Testing Discharges to Ground Water

7.2.1 Permit Conditions

7.2.1.1 Erosion and sediment controls shall be utilized when necessary, and structural practices must be implemented to divert flows away from exposed soils, retain the discharges where they will be land applied to the ground on the discharger's property, and otherwise limit the discharge of pollutants from the site into surface waters. All steps must to be taken to avoid land applying to the ground when the ground surface is frozen.

7.2.1.2 The following minimum separating distances shall be maintained between any point of a disposal system and the item listed:

Table 7.2.1.2 – Minimum Horizontal Separating Distances

Potential Receptor		**Separating Distance (feet)**
Public or Private Water Supply Well (not downgradient of an existing permitted wastewater disposal system) withdrawal rate:	Less than 10 gallons per minute	75
	10 to 50 gallons per minute	150
	Greater than 50 gallons per minute	200
Watercourse		50
Public Water Supply Reservoir		100
Property Line		15
Subsurface Sewage Disposal System		10

7.2.1.3 For discharges to a subsurface disposal system, a minimum separation distance of 1,000 feet is required between any part of the disposal system and any downgradient potable water supply well. If a Ground Water Monitoring Program has been approved in writing by the Commissioner, the minimum separation distance may be reduced to 200 feet. "Downgradient" refers to the ground water gradient, or if that is unknown, the topographic gradient.

7.2.1.4 A record shall be kept of the discharge date, start time, stop time, location, and estimated flow. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

Section 8 Conditions of this General Permit Applicable to Hydrant Flushing Water Discharges

8.1 Hydrant Flushing Water Discharges to Surface Water

8.1.1 Permit Conditions

8.1.1.1 No discharge shall contain or cause in the receiving stream a visible oil sheen, floating solids, visible discoloration, or foaming.

8.1.1.2 No discharge shall cause acute or chronic toxicity in the receiving water body.

8.1.1.3 The temperature of the discharge shall not increase the temperature of the receiving water above 85°F for freshwaters and 83°F for marine waters, nor shall the discharge raise the temperature of the receiving stream more than 4°F at any time, except for marine waters during the months of July, August, and September, during which time the discharge shall not raise the temperature of the receiving waters by more than 1.5°F.

8.1.1.4 The wastewater shall not be discharged to any open floor drain, floor trench, sump or drainage system which is designed or constructed to receive or which may receive chemical spillage or wastewaters not authorized by this general permit.

8.1.1.5 Discharges authorized by this general permit may not contain any substances found in Appendix B, Tables II, III, and V and Appendix D of Section 22a-430-4 of the Regs. Conn. State Agencies unless the concentration of those substances do not exceed: (a) all effluent limits specified in this general permit or (b) if no such limit is specified, the most restrictive of the aquatic life or human health criteria listed in Table 3 of the Regs. Conn. State Agencies Section 22a-426-9 (Water Quality Standards).

8.1.1.6 Hydrant flushing wastewaters shall be discharged to a surface water only if a discharge to a municipal sanitary sewer or to a subsurface disposal system or land application to the ground surface are not available as an option.

8.1.1.7 All hydrant flushing wastewater discharging directly to a surface water body shall be provided with controls as necessary to remove accumulated solids and to prevent erosion, sedimentation, visible discoloration and foaming of the receiving water body and to dissipate energy prior to discharge to mitigate scouring of the stream bed and adverse impacts.

8.1.1.8 Travel time of the hydrant flushing wastewater over the ground or along paved surfaces must be maximized to dissipate chlorine.

8.1.1.9 Standard operating procedures must be developed by the water treatment facility or municipality undertaking the hydrant flushing to ensure employees are familiar with

the requirements of this general permit and the procedures to minimize erosion, dissipate energy, and reduce chlorine in the hydrant flushing wastewater discharge.

8.1.1.10 A record shall be kept of the discharge date, start time, stop time, location, and estimated flow. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

8.2 Hydrant Flushing Discharges to Ground Water

8.2.1 Permit Conditions

8.2.1.1 Erosion and sediment controls shall be utilized when necessary, and structural practices must be implemented to divert flows away from exposed soils, retain the discharges where they will be land applied to the ground on the discharger's property, and otherwise limit the discharge of pollutants from the site into surface waters. All steps must to be taken to avoid land applying to the ground when the ground surface is frozen.

8.2.1.2 The following minimum separating distances shall be maintained between any point of a disposal system and the item listed:

Table 8.2.1 – Minimum Horizontal Separating Distances

Potential Receptor		**Separating Distance (feet)**
Public or Private Water Supply Well (not downgradient of an existing permitted wastewater disposal system) withdrawal rate:	Less than 10 gallons per minute	75
	10 to 50 gallons per minute	150
	Greater than 50 gallons per minute	200
Watercourse		50
Public Water Supply Reservoir		100
Property Line		15
Subsurface Sewage Disposal System		10

8.2.1.3 For discharges to a subsurface disposal system, a minimum separation distance of 1,000 feet is required between any part of the disposal system and any downgradient potable water supply well. If a Ground Water Monitoring Program has been approved in writing by the Commissioner, the minimum separation distance may be reduced to 200 feet. "Downgradient" refers to the ground water gradient, or if that is unknown, the topographic gradient.

8.2.1.4 Travel time of the hydrant flushing wastewater over the ground or along paved surfaces must be maximized to dissipate chlorine.

8.2.1.5 Standard operating procedures must be developed by the water treatment facility or municipality undertaking the hydrant flushing to ensure employees are familiar with

the requirements of this general permit and the procedures to minimize erosion, dissipate energy, and reduce chlorine in the hydrant flushing wastewater discharge.

8.2.1.6 A record shall be kept of the discharge date, start time, stop time, location, and estimated flow. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

Section 9 Conditions of this General Permit Applicable to Boiler Blowdown Discharges to Ground Water

9.1.1 Permit Conditions

9.1.1.1 All boiler blowdown discharges shall be to an engineered subsurface disposal system and not land applied to the ground surface or surface waters.

9.1.1.2 All discharges of boiler blowdown wastewaters shall be discharged to ground water which, on the effective date of this general permit or the date the discharge is initiated, whichever is later, has an existing or future Water Quality Classification of GB or GC in the Connecticut Water Quality Standards adopted pursuant to section 22a-426 of the Conn. Gen. Stat.

9.1.1.3 Boil-out and boiler acid wastewaters are not eligible waste streams authorized to be discharged by this permit. The discharge of these wastewaters must be permitted separately under section 22a-430 or 22a-430b of the Conn. Gen. Stat., or these wastewaters must be collected by a waste transporter holding a valid license issued by the Commissioner for that purpose.

9.1.1.4 The following minimum separating distances shall be maintained between any point of a disposal system and the item listed:

Table 9.1.1.4 – Minimum Horizontal Separating Distances

Potential Receptor		**Separating Distance (feet)**
Public or Private Water Supply Well (not downgradient of an existing permitted wastewater disposal system) withdrawal rate:	Less than 10 gallons per minute	75
	10 to 50 gallons per minute	150
	Greater than 50 gallons per minute	200
Watercourse		50
Public Water Supply Reservoir		100
Property Line		15
Subsurface Sewage Disposal System		10

9.1.1.5 For discharges to a subsurface disposal system, a minimum separation distance of 1,000 feet is required between any part of the disposal system and any downgradient potable water supply well. If a Ground Water Monitoring Program has been approved in writing by the Commissioner, the minimum separation distance may be reduced to

200 feet. “Downgradient” refers to the ground water gradient, or if that is unknown, the topographic gradient.

9.1.2 Numeric Effluent Limits

9.1.2.1 A discharge of boiler blowdown to a subsurface disposal system shall comply with the following limits in Table 9.1.2.1 below

Table 9.1.2.1 Instantaneous Maximum Limits for Boiler Blowdown Discharges to Ground Water

Parameter	Maximum Limit	Unit	Minimum Level (unit)
Flow	50,000	gpd	not applicable
Temperature	Monitor	°F	not applicable
pH	6.0 – 9.0	S.U.	not applicable
Copper, total	1.3	mg/L	0.003 mg/L
Iron, total	3.0	mg/L	0.040 mg/L
Lead, total	0.01	mg/L	0.001 mg/L
Zinc, total	Monitor	mg/L	.010 mg/L

9.1.3 Monitoring

The Permittee shall monitor the discharge for the parameters in Table 9.1.2.1. The frequency of parameter monitoring shall be determined by the discharge flow as follows in Table 9.1.3

Table 9.1.3. Boiler Blowdown Discharge Parameter Monitoring Frequency and Reporting

Permitted Maximum Daily Flow (gallons per day)	Parameter Monitoring Frequency	Reporting of Information[1]
0 to 500	No Monitoring	None
501 to 500,000	1st 10% & last 10% per event	Retain onsite

Footnotes:
[1] The results of all analyses shall be retained in accordance with the recordkeeping requirements of this general permit. A Discharge Monitoring Report (DMR) is not required to be submitted to the Commissioner unless otherwise specified in this permit.

9.1.3.1 Monitoring Location

All samples be representative of the discharge, collected after all treatment, prior to mixing with any other waters, and before discharged to waters of the state.

9.1.3.2 Sample Type

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

Section 10 Conditions of this General Permit Applicable to Pressure Washing Wastewater Discharges

10.1 Pressure Washing Wastewater Discharges to Surface Water

10.1.1 Permit Conditions

All discharges of pressure washing wastewater to surface water must conform to the following permit requirements and best management practices:

10.1.1.1 No discharge shall contain or cause in the receiving stream a visible oil sheen, floating solids, visible discoloration, or foaming.

10.1.1.2 No discharge shall cause acute or chronic toxicity in the receiving water body.

10.1.1.3 The temperature of the discharge shall not increase the temperature of the receiving water above 85°F for freshwaters and 83°F for marine waters, nor shall the discharge raise the temperature of the receiving stream more than 4°F at any time, except for marine waters during the months of July, August, and September, during which time the discharge shall not raise the temperature of the receiving waters by more than 1.5°F.

10.1.1.4 The wastewater shall not be discharged to any open floor drain, floor trench, sump or drainage system, which is designed or constructed to receive, or which may receive chemical spillage or waste waters not authorized by this general permit.

10.1.1.5 Discharges authorized by this general permit may not contain any substances found in Appendix B, Tables II, III, and V and Appendix D of Section 22a-430-4 of the Regs. Conn. State Agencies unless the concentration of those substances do not exceed: (a) all effluent limits specified in this general permit or (b) if no such limit is specified, the most restrictive aquatic life or human health criteria listed in Table 3 of the Regs. Conn. State Agencies Section 22a-426-9 (Water Quality Standards).

10.1.1.6 Wastewaters shall be discharged to a surface water only if a discharge to a municipal sanitary sewer, to a subsurface disposal system, or land application to the ground surface are not technically feasible or practicable.

10.1.1.7 Wastewater discharging directly to a surface water body shall be provided with controls as necessary to remove accumulated solids and to prevent erosion, sedimentation, visible discoloration and foaming of the receiving water body and to dissipate energy prior to discharge to mitigate scouring of the stream bed and adverse impacts.

10.1.1.8 Pressure washing discharges must not contain cleaners, detergents, chemical or biological additives, and the wastewater resulting from power washing activities may

not reasonably be expected to contain any such substances due to the type of surface and/or materials to be washed.

10.1.1.9 The discharge of pressure washing wastewater used for the chemical and/or mechanical stripping of paint, other than graffiti removal is prohibited.

10.1.1.10 The pressure washing of boats, bottom hulls, or other surfaces that are painted with an anti-fouling paint is prohibited under this general permit.

10.1.1.11 A record shall be kept of the discharge date, start time, stop time, location, and estimated flow. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

10.2 Pressure Washing Discharges to Ground Water

10.2.1 Permit Conditions

All discharges of pressure washing water land applied to the ground must conform to the following minimum requirements:

10.2.1.1 Collection of the wastewater and discharge to a POTW was not technically feasible or practicable.

10.2.1.2 Pressure washing discharges must not contain cleaners, detergents, chemical or biological additives, and the wastewater resulting from pressure washing activities may not reasonably be expected to contain any such substances due to the type of surface and/or materials to be washed.

10.2.1.3 The discharge of pressure washing wastewater used for the chemical and/or mechanical stripping of paint, other than graffiti removal, is prohibited.

10.2.1.4 The pressure washing of boats, bottom hulls, or other surfaces that are painted with an anti-fouling paint is prohibited.

10.2.1.5 All discharges of pressure washing wastewater must be land applied to a pervious ground surface without runoff to storm drains or surface water bodies. All storm drains in the vicinity of the pressure washing operation must be obstructed in a manner which ensures that no pressure washing wastewater reaches any storm drain or surface water body.

10.2.1.6 Permittees shall insure that all discharges do not impact any drinking water wells.

10.2.1.7 The following minimum separating distances shall be maintained between any point of a disposal system and the item listed:

Table 10.2.1 – Minimum Horizontal Separating Distances

Potential Receptor		**Separating Distance (feet)**
Public or Private Water Supply Well (not downgradient of an existing permitted wastewater disposal system) withdrawal rate:	Less than 10 gallons per minute	75
	10 to 50 gallons per minute	150
	Greater than 50 gallons per minute	200
Watercourse		50
Public Water Supply Reservoir		100
Property Line		15
Subsurface Sewage Disposal System		10

10.2.1.8 For discharges to a subsurface disposal system, a minimum separation distance of 1,000 feet is required between any part of the disposal system and any downgradient potable water supply well. If a Ground Water Monitoring Program has been approved in writing by the Commissioner, the minimum separation distance may be reduced to 200 feet. “Downgradient” refers to the ground water gradient, or if that is unknown, the topographic gradient.

10.2.1.9 A record shall be kept of the discharge date, start time, stop time, location, and estimated flow. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

Section 11 Conditions of this General Permit Applicable to Water Treatment Wastewater Discharges

11.1 Water Treatment Wastewater Discharges to Surface Water

11.1.1 The following discharges from water treatment plants are prohibited to surface water:

11.1.1.1 Facility discharges containing detergents or surfactants.

11.1.1.2 Water treatment laboratory wastewaters.

11.1.1.3 Regeneration and backwash wastewaters from sodium chloride ion exchange units.

11.1.1.4 Activated carbon backwash and regeneration wastewaters for filters which treat for volatile organic compounds, except that initial start-up backwash conducted for the removal of loose carbon fines may be discharged to any surface water or ground water provided such initial start-up backwash has been pretreated to remove solids.

11.1.2 Permit Conditions

11.1.2.1 No discharge shall contain or cause in the receiving stream a visible oil sheen, floating solids, visible discoloration, or foaming.

11.1.2.2 No discharge shall cause acute or chronic toxicity in the receiving water body.

11.1.2.3 The temperature of the discharge shall not increase the temperature of the receiving water above 85°F for freshwaters and 83°F for marine waters, nor shall the discharge raise the temperature of the receiving stream more than 4°F at any time, except for marine waters during the months of July, August, and September, during which time the discharge shall not raise the temperature of the receiving waters by more than 1.5°F.

11.1.2.4 The wastewater shall not be discharged to any open floor drain, floor trench, sump or drainage system which is designed or constructed to receive or which may receive chemical spillage or wastewaters not authorized by this general permit.

11.1.2.5 Discharges authorized by this general permit may not contain any substances found in Appendix B, Tables II, III, and V and Appendix D of Section 22a-430-4 of the Regs. Conn. State Agencies unless the concentration of those substances do not exceed: (a) all effluent limits specified in this general permit; or (b) if no such limit is specified,

the most restrictive aquatic life or human health criteria listed in Table 3 of the Regs. Conn. State Agencies Section 22a-426-9 (Water Quality Standards).

11.1.2.6 The maximum daily flow shall not exceed the maximum daily flow specified in the permit application.

11.1.2.7 The following types of water treatment plant wastewater may be discharged to the surface water only after treatment for solids removal designed to meet the 20.0 mg/L effluent limit specified in Section 11.1.3 for total suspended solids:

a. Clarifier tank sludge blowdown;

b. Greensand filter ion exchange regeneration wastewaters; or

c. Filter media backwash and regeneration wastewaters.

11.1.2.8 Discharges from potable water tank or pipeline draining to surface water associated with hydrostatic testing, repair or maintenance, inspection, or new pipeline installation shall comply with the following:

a. Potable water storage tanks should be drained or pumped to the water supply system to the extent possible before draining. Residual solids in the tank bottom should be removed or controlled to minimize turbidity in the discharge.

b. The discharge shall be provided with controls such as check dams or temporary basins to prevent erosion, sedimentation, visible discoloration and foaming of the receiving water body and to dissipate energy prior to discharge to mitigate scouring of the streambed and adverse impacts.

c. Samples shall be taken from the first 10% and last 10% of the discharge from draining potable water storage tanks and analyzed separately. Such samples shall be analyzed for pH, total suspended solids, total copper, total zinc, total iron, and total residual chlorine. A record shall be kept of the discharge date, location, estimated flow, and total residual chlorine concentration. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

d. Water from potable water supply pipeline draining shall only be monitored for total residual chlorine. A record shall be kept of the discharge date, location, estimated flow, and total residual chlorine concentration. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

11.1.3 Numeric Effluent Limits

11.1.3.1 A discharge of water treatment wastewater to surface water shall comply with the following limits in Tables 11.1.3.1 and 11.1.3.2 below.

Table 11.1.3.1 Instantaneous Maximum Effluent Limit or Range for Discharges of Water Treatment Wastewater to Surface Water

Parameter	Effluent Limit	Unit	Minimum Level	NetDMR Parameter Code
Flow	2,000,000	gpd	not applicable	
pH[1]	6.0 – 9.0	S.U.	not applicable	
Acute Aquatic Toxicity, *Daphnia pulex* (freshwater)[2, 3]	≥90 [2,3]	percent	not applicable	
Acute Aquatic Toxicity, *Pimephales promelas* (freshwater)[2,3]	≥90 [2,3]	percent	not applicable	
Acute Aquatic Toxicity, *Mysidopsis bahia* (marine & estuarine)[2,3]	≥90 [2,3]	percent	not applicable	
Acute Aquatic toxicity, *Menidia beryllina* (marine & estuarine)[2,3]	≥90 [2,3]	percent	not applicable	
Iron, total	3.0	mg/L	0.040 mg/L	
PFAS Analytes[4]	Monitor	ng/l	--	
Total Suspended Solids	20 mg/L	mg/L	not applicable	
Total Dissolved Solids	Monitor	mg/L	not applicable	

Footnotes:

[1] The pH of the discharge shall not be less than 6.0 or more than 9.0 S.U.

[2] The results of the aquatic toxicity tests should be reported as percent survival in an undiluted sample of the effluent. See Appendix B for Whole Effluent Toxicity (WET) guidance and table.

[3] For aquatic toxicity, discharges to marine and estuarine waters shall perform the aquatic toxicity test using *Mysidopsis bahia* and *Menidia beryllina* and discharges to freshwater water shall use *Daphnia pulex* and *Pimephales promelas* species.

[4] Analysis for PFAS shall be performed using the method(s) approved by the EPA pursuant to 40 CFR 136 and by a laboratory certified to conduct such test methods. If no such test method is approved by EPA pursuant to 40 CFR 136, PFAS analyses shall be performed in accordance with EPA Method 1633 or 1633A (see https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas). See Appendix A for PFAS analyte list.

Table 11.1.3.2. Instantaneous Maximum Effluent Limits for Discharges of Water Treatment Wastewater to Surface Water by Instream Waste Concentration

Instream Waste Concentration [1]											
Parameter	**Reservoir & Lake**	**Less than 1%**	**1 to 5%**	**Greater than 5% to 20%**	**Greater than 20% to 40%**	**Greater than 40% to 70%**	**Greater than 70% to 100%**	**Intermittent Discharge[2]**	**Units**	**Minimum Level**	**NetDMR Parameter code**
Aluminum, total	1.5	1.50	1.41	0.36	0.18	0.10	0.071	1.5	mg/L	0.010 mg/L	
Arsenic, total[2] (Freshwater)	0.84	1.71	0.34	0.085	0.043	0.024	0.017	0.17	ug/L	5 ug/L	
Arsenic, total[3] (Estuarine, Marine)	---	3.26	0.65	0.16	0.082	0.047	0.033	0.33	ug/L	5 ug/L	
Manganese, total	3.0	3.00	1.53	0.38	0.19	0.11	0.077	3.0	mg/L	not applicable	
Copper, total[2] (Freshwater)	0.105	0.48	0.095	0.037	0.019	0.011	0.0075	0.12	mg/L	0.003 mg/L	
Copper, total[3] (Estuarine, Marine)	---	0.39	0.079	0.02	0.0098	0.0056	0.0039	0.039	mg/L	0.003 mg/L	
Lead, total	0.048	0.098	0.020	0.0049	0.0025	0.0014	0.00098	0.15	mg/L	0.001 mg/L	
Zinc, total	0.29	2.00	0.64	0.16	0.081	0.046	0.032	0.32	mg/L	0.010 mg/L	
Total Residual Chlorine[2] (Freshwater)	0.085	0.90	0.180	0.045	0.023	0.013	0.009	0.05	mg/L	0.020 mg/L	
Total Residual Chlorine[3] (Estuarine, Marine)	---	0.61	0.12	0.031	0.015	0.0088	0.0061	0.065	mg/L	0.020 mg/L	

Footnotes:

[1] The Instream Waste Concentration shall be calculated by dividing the maximum gallon/hr flow of the discharge by the sum of the maximum gallon/hr flow of the discharge and the seven-day ten-year low flow (7Q10) of the receiving stream and multiplying the result by 100.

[2]If discharge is to freshwater, these limits apply.

[3]If discharge is to estuarine or marine water, these limits apply.

11.1.4 Monitoring

The Permittee shall monitor the discharge for the parameters in Tables 11.1.3.1 and 11.1.3.2. The frequency of parameter and aquatic toxicity monitoring shall be determined by the discharge flow as follows in Table 11.1.4.1:

Table 11.1.4.1 Water Treatment Wastewater Discharge to Surface Water Toxicity Monitoring Frequency and Reporting

Maximum Daily Flow (gallons per day)	Parameter Monitoring Frequency	Aquatic Toxicity Monitoring Frequency	PFAS Monitoring Frequency	Reporting of Information[1]
0 to 500	No Monitoring	No Monitoring	No Monitoring	Not Applicable
501 to 5,000	Annually	Annually	Semi-annually	Submit DMR
5,001 to 50,000	Quarterly	Semi-annually	Semi-annually	Submit DMR
50,001 to 2,000,000	Monthly	Semi-annually	Semi-annually	Submit DMR

Footnotes:
[1] The results of all analyses shall be retained in accordance with the recordkeeping requirements of this general permit. A Discharge Monitoring Report (DMR) is not required to be submitted to the Commissioner unless otherwise specified in this permit.

11.1.4.1 Monitoring Location

All wastewater samples shall be representative of the discharge, collected after all treatment, prior to mixing with any other waters, and before discharge to waters of the state.

11.1.4.2 Sample Type

Samples collected for the purpose of determining compliance with the effluent limitations and monitoring requirements listed in this general permit shall be grab samples.

11.2 Water Treatment Wastewater Discharges to Ground Water

11.2.1 The following discharges from water treatment are prohibited to ground water:

11.2.1.1 Facility discharges containing detergents or surfactants.

11.2.1.2 Water treatment laboratory wastewater or discharges from on-line analytical instrumentation to which chemicals are added that contain any substances identified in Appendix B, Tables II, III, and V, and Appendix D of Section 22a-430-4 of the Regs. Conn. State Agencies, at concentrations that may be toxic, hazardous, or detrimental to any designated use of the ground water into which such wastewater will be discharged pursuant to Connecticut's Water Quality Standards with a maximum daily flow greater than 500 gpd.

11.2.1.3 Activated carbon backwash and regeneration wastewaters for filters which treat for volatile organic compounds, except that initial start-up backwash conducted for the removal of loose carbon fines may be discharged to any surface water or ground water provided such initial start-up backwash has been pretreated to remove solids.

11.2.1.4 Clarifier tank sludge blowdown shall not be discharged to subsurface disposal systems.

11.2.2 Permit Conditions

11.2.2.1 The following types of water treatment plant wastewater may be discharged to the ground water *only* after treatment for solids removal designed to meet the 20.0 mg/L effluent limit specified in Section 11.2.3 for total suspended solids:

a. Clarifier tank sludge blowdown;

b. Greensand filter ion exchange regeneration wastewaters; or

c. Filter media backwash and regeneration wastewaters.

11.2.2.2 For any lagoon constructed, installed, modified or expanded after May 1, 1995, that is used to treat or convey water treatment wastewater, the minimum elevation of the top of the berm of the lagoon shall be constructed and maintained above the 100-year base flood elevation.

11.2.2.3 Stormwater runoff shall not be discharged to any wastewater treatment systems including but not limited to lagoons, beds, subsurface disposal systems, etc.

11.2.2.4 For all discharges of water treatment wastewater to ground water, the following minimum separating distances shall be maintained between any point of a disposal system and any potable water supply well or other item listed which is not downgradient and also not associated with this discharge:

Table 11.2.2.5 Minimum Horizontal Separating Distances

Potential Receptor		Separating Distance (feet)
Public or Private Water Supply Well (not downgradient of an existing permitted wastewater disposal system) withdrawal rate:	Less than 10 gallons per minute	75
	10 to 50 gallons per minute	150
	Greater than 50 gallons per minute	200
Watercourse		50
Public Water Supply Reservoir		100
Property Line		15
Subsurface Sewage Disposal System		10

11.2.2.5 For discharges to a subsurface disposal system, a minimum separation distance of 1,000 feet is required between any part of the disposal system and any downgradient potable water supply well. If a Ground Water Monitoring Program has been approved in writing by the Commissioner, the minimum separation distance may be reduced to 200 feet. "Downgradient" refers to the ground water gradient, or if that is unknown, the topographic gradient.

11.2.2.6 For discharges of water treatment wastewater to a subsurface disposal system, there shall be a minimum depth of 2 feet between the bottom of any lagoon or bed used to treat water treatment wastewater and any underlying bedrock surface, and at least 2 feet separation between the bottom of any such lagoon or bed and the seasonal high ground water table.

11.2.2.7 Discharges of water treatment wastewater land applied to the ground or to a subsurface disposal system shall not interfere with another subsurface disposal system (permitted in accordance with section 19a-36 or 22a-430 of the Conn. Gen. Stat. and the regulations adopted thereunder) and its treatment of wastewater, or render a drain field or subsurface disposal system incapable of infiltration, or cause such drain field or subsurface system to exceed its hydraulic capacity. Permittees treating low flow water treatment wastewater should consult the local Director of Health if soil or ground water conditions provide uncertainty about placement of the water treatment wastewater dispersal structure.

11.2.2.8 For discharges of low flow water treatment wastewater, the water treatment wastewater dispersal structure shall have a storage volume that is at least one and a

half (1.5) times the volume of the maximum daily discharge of low flow water treatment wastewater.

11.2.2.9 Discharges from potable water tank or pipeline draining to *ground water* associated with hydrostatic testing, hydrant flushing, repair or maintenance, inspection, or new pipeline installation shall comply with the following:

a. Potable water storage tanks should be drained or pumped to the water supply system to the extent possible before draining. Residual solids in the tank bottom should be removed or controlled to minimize turbidity in the discharge.

b. Erosion and sediment controls shall be utilized when necessary, and structural practices must be implemented to divert flows away from exposed soils, retain the discharges where they will infiltrate the ground, and otherwise limit the discharge of pollutants from the site into surface waters. All steps must to be taken to avoid land application to the ground when the ground surface is frozen.

c. A record shall be kept of the discharge date, location, estimated flow. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

11.2.2.10 Discharges of Well Rehabilitation Wastewaters shall comply with the following:

a. Any substance used for the purpose of well rehabilitation has been approved for such use by the Connecticut Department of Public Health.

b. All water recovered during the initial recovery of well rehabilitation wastewater shall, to the extent practical, be collected for off-site disposal at either a licensed waste facility, a POTW that has been approved by the Commissioner to accept over-the-road wastewater, or for disposal to a sanitary sewer.

c. Final well pump-out, including yield tests and disinfection shall be treated for the neutralization of chlorine to a concentration of 3.0 mg/L or less and, to the extent practical, be land applied to the ground surface and not enter a surface water body. A record shall be kept of the discharge date, location, estimated flow, and total residual chlorine concentration. Records shall be retained by the Permittee and provided to the Commissioner within two (2) business days upon request.

11.2.3 Numeric Effluent Limits

11.2.3.1 A discharge of water treatment wastewater land applied to the ground, to a subsurface disposal system, or an infiltration basin shall comply with the following limits in Table 11.2.3.1 below:

Table 11.2.3.1 Maximum Effluent Limits for Discharges of Water Treatment Wastewater to Ground Water

Parameter	Maximum Limit	Unit	Minimum Level	NetDMR Parameter Code
Flow	50,000 to subsurface disposal system 500,000 to infiltration basin	gpd	not applicable	
pH	6.0 – 9.0	S.U.	not applicable	
PFAS Analytes[1]	Monitor	ng/L	---	
Lead, total	Monitor	mg/L	0.001 mg/L	
Lead, dissolved	0.01	mg/L	0.001 mg/L	
Aluminum, total	Monitor	mg/L	not applicable	
Aluminum, dissolved	1.5	mg/L	not applicable	
Iron, total	Monitor	mg/L	0.040 mg/L	
Iron, dissolved	3.0	mg/L	0.040 mg/L	
Manganese, total	Monitor	mg/L	not applicable	
Manganese, dissolved	3.0	mg/L	not applicable	
Copper, total	1.3	mg/L	0.003 mg/L	
Copper, dissolved	Monitor	mg/L	0.003 mg/L	
Zinc, total	Monitor	mg/L	0.010 mg/L	
Zinc, dissolved	Monitor	mg/L	0.010 mg/L	
Arsenic, total	Monitor	ug/L	5.0 ug/L	
Arsenic, dissolved	10.0	ug/L	5.0 ug/L	

Footnotes:

[1] Analysis for PFAS shall be performed using the method(s) approved by the EPA pursuant to 40 CFR 136 and by a laboratory certified to conduct such test methods. If no such test method is approved by EPA pursuant to 40 CFR 136, PFAS analyses shall be performed in accordance with EPA Method 1633 or 1633A (see https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas). Report in nanograms per liter (ng/L). See Appendix A for PFAS analyte list.

Table 11.2.3.2 Ground Water Monitoring Wells for Discharges of Water Treatment Wastewater to Ground Water

Each ground water monitoring well shall be sampled for the parameters listed below:

Parameter	Maximum Limit	Unit	Minimum Level	NetDMR Parameter Code
Depth to Ground Water	Monitor	Feet	not applicable	
pH	Monitor	S.U.	not applicable	
Specific Conductivity	Monitor	µmhos/cm	not applicable	
Total Coliforms (including fecal coliform and *Escherichia coli)*	Monitor	#/100mL	not applicable	
Nitrate-Nitrogen	Monitor	mg/L	not applicable	
Phosphorus, total	Monitor	mg/L	not applicable	
Lead, total	Monitor	mg/L	0.001 mg/L	
Aluminum, total	Monitor	mg/L	not applicable	
Iron, total	Monitor	mg/L	0.040 mg/L	
Manganese, total	Monitor	mg/L	not applicable	
Copper, total	Monitor	mg/L	0.003 mg/L	
Zinc, total	Monitor	mg/L	0.01 mg/L	
Arsenic, total	Monitor	ug/L	5.0 ug/L	

11.2.4 Monitoring

The Permittee shall monitor the discharge for the parameters in Table 11.2.3.1 and Table 11.2.3.2 at the frequency of parameter monitoring determined by discharge flow as follows in Table 11.2.4.1.

Table 11.2.4.1 Water Treatment Discharge to Ground Water Monitoring Frequency and Reporting

Permitted Maximum Daily Flow (gallons per day)	Parameter Monitoring Frequency	PFAS Monitoring Frequency	Reporting of Information[1]
0 to 500	No Sampling Required	No Monitoring	Not Applicable
501 to 5,000	Annually	Semi-annually	Retain onsite
5,001 to 50,000	Semi-Annually	Semi-annually	Submit DMR
50,001 to 500,000	Quarterly	Semi-annually	Submit DMR

Footnotes:

[1] The results of all analyses shall be retained in accordance with the recordkeeping requirements of this general permit. A Discharge Monitoring Report (DMR) is not required to be submitted to the Commissioner unless otherwise specified in this permit.

11.2.4.1 Monitoring Location

a. All samples shall be representative of the wastewater discharge.

b. Facilities with existing monitoring wells downgradient of the treatment unit shall monitor in accordance with Table 11.2.3.2 *Ground Water Monitoring Wells for Discharges of Water Treatment Wastewater to Ground Water* in addition to Table 11.2.3.1 *Maximum Effluent Limits for Discharges of Water Treatment Wastewater to Ground Water*

c. Facilities without existing monitoring wells shall monitor in accordance with Table 11.2.3.1 *Maximum Effluent Limits for Discharges of Water Treatment Wastewater to Ground Water.* The sample shall be collected at the end of the treatment system, prior to entering the ground. For some facilities, this may be the influent to the treatment system which directs the wastewater into the ground waters, in the lagoon, infiltration basin, subsurface disposal system, drain field, or other treatment unit that allows infiltration into ground water.

11.2.4.2 Sample Type

Samples collected for the purpose of determining compliance with the effluent limitations and monitoring requirements listed in this general permit shall be grab samples, unless otherwise specified.

11.2.5 Ground Water Monitoring Well Compliance Schedule and Monitoring

11.2.5.1 Within 36 months of the effective date of this general permit, Permittees who discharge 10,000 gpd or more of water treatment wastewater to the headworks of the wastewater treatment system must submit a plan for the installation of monitoring wells to assist in the evaluation of ground water quality. Well design and installation must be in accordance with the EPA Guidance Document titled "Design and Installation of Monitoring Wells," document number SESDGUID-101-RO, effective February 18, 2018, unless an alternative methodology is approved in writing by the Commissioner. The plan should include a potentiometric surface map to determine the location of at least one (1) upgradient monitoring well to determine background concentrations and sufficient downgradient monitoring wells at a point between the treatment unit and the edge of the property boundary at a representative location that will capture the vertical and horizontal impacts of the discharge based on ground water hydrology.

11.2.5.2 Within 54 months of the effective date of this general permit, Permittees must install the monitoring wells described in the plan required in section 11.2.5.1 of this general permit. The monitoring wells will be used to monitor the impacts of upgradient discharges to ground water during the term following the term of this general permit.

11.2.5.3 Beginning 60 months after the effective date of this general permit, Permittees shall monitor all ground water monitoring wells for the parameters in Table 11.2.3.2 semi-annually. The results shall be recorded on DMRs. The monitoring wells shall be identified in all reports as up-gradient, mid-field (if applicable), and downgradient.

Section 12 Regulations of Connecticut State Agencies Incorporated into this General Permit

Unless specific conditions, terms or limitations within this general permit are more restrictive, the Permittee shall comply with the following Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein:

12.1 Section 22a-430-3

Subsection (a)	Definitions
Subsection (b)	General
Subsection (c)	Inspection and Entry
Subsection (d)	Effect of a Permit
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
Subsection (j)	Monitoring, Records and Reporting Requirements
Subsection (k)	Bypass
Subsection (m)	Effluent Limit Violations
Subsection (n)	Enforcement
Subsection (o)	Resource Conservation
Subsection (p)	Spill Prevention and Control
Subsection (q)	Instrumentation, Alarms, Flow Recorders
Subsection (r)	Equalization

12.2 Section 22a-430-4

Subsection (a)	Duty to Apply
Subsection (b)	Duty to Reapply
Subsection (c)	Application Requirements
Subsection (o)	Permit or Application Transfer
Subsection (p)	Revocation, Denial, Modification
Subsection (q)	Variances
Subsection (t)	Prohibitions

Section 13 Standard Conditions

The following standard conditions have been included in this general permit for the convenience of the Permittee and are generally duplicative of the incorporated regulations in Section 12 of this general permit. If there are conflicting requirements, the regulations in section 22a-430 of the Regs. Conn. State Agencies take precedence.

13.1 Inspection and Entry

The Commissioner or his or her authorized representative may take any actions authorized by sections 22a-6 (5), 22a-425 or 22a-336 of the Conn. Gen. Stat. as amended.

13.2 Submission of Documents

All other documents, required to be submitted to the Commissioner will, unless otherwise specified in writing by the Commissioner or through this general permit, be directed to:

DEEP.IndustrialNPDESCompliance@ct.gov

With the subject line: "ATTN: Comprehensive General Permit for Discharges to Surface Water and Ground water Permit No. CTXXXXXXX".

For Permittees that are not required to submit an application to the Commissioner, the permit number will CTC000000. For Permittees required to submit an application, the unique permit number will be provided to the Permittee in the Notice of Coverage provided by the Commissioner.

13.3 Violations

Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the Conn. Gen. Stat. and the Regs. Conn. State Agencies.

13.4 Enforcement

The Commissioner may take any enforcement action provided by law, including but not limited to seeking injunctions, penalties and forfeitures as provided in sections 22a-6, 22a-7, 22a-430, 22a-432, 22a-435, 22a-438 and 22a-471 of the Conn. Gen. Stat. as amended, for any violations or acts of noncompliance with Chapter 446k of the Conn. Gen. Stat. or any regulation, order, permit or approval issued there under.

13.5 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

13.6 No Assurance

No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

13.7 Relief

Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

13.8 Duty to Provide Information

If the Commissioner requests any information pertinent to the authorized activity or to determine compliance with this general permit or with the Permittee's Notice of Coverage, the Permittee shall provide such information in writing within thirty (30) days of such request. Such information shall be certified in accordance with Section 13.21 of this general permit.

13.9 Reliance on Application

When evaluating an application, the Commissioner relies on information provided by the Applicant. If such information proves to be false or incomplete, the authorization issued 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.

13.10 Duty to Comply

13.10.1 The Permittee shall comply with all terms and conditions of the permit. Any permit noncompliance constitutes a violation of Chapter 446k of the Conn. Gen. Stat.. Permit noncompliance is grounds for enforcement action, permit revocation or modification, or denial of a permit renewal application.

13.10.2 The Permittee shall comply with effluent limitations, standards or prohibitions established under section 307 (a) of the Clean Water Act ("CWA") which are adopted in subsection (l) of section 22a- 430-4 of the Regs. Conn. State Agencies for toxic substances upon adoption, even if the permit has not yet been modified to incorporate the requirement.

13.10.3 Except for any toxic effluent standards and prohibitions imposed under section 307 CWA, compliance with a permit during its term shall constitute compliance, for purposes of enforcement, with sections 301, 302, 306, 307, 318, 403 and 405 of the CWA.

13.10.4 The Commissioner may modify the general permit or revoke permit coverage during its term for cause as provided in section 22a-430-4 of the Regs. Conn. State Agencies.

13.10.5 It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

13.11 Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of the permit or any discharge which has a reasonable likelihood of adversely affecting human health or the environment.

13.12 Sludge Disposal

The Permittee shall dispose of screenings, sludges, chemicals, and oils and any solid or liquid wastes resulting from the wastewater treatment processes at locations approved by the Commissioner for disposal of such materials, or by means of a waste hauler licensed under the provisions of the Conn. Gen. Stat.

13.13 Resource Conservation

All Permittees shall implement and maintain practices and/or facilities which, to the maximum extent practicable, result in the minimum amount of wastewater discharged. Such results may be achieved by methods including but not limited to water conservation, resource recovery, waste recycling, wastewater reuse, and material or product substitution. Excessive use of water or the addition of water to dilute an effluent in order to meet any permit limitations or conditions is prohibited.

13.14 Spill Prevention and Control

13.14.1 The Permittee shall maintain practices, procedures and facilities designed to prevent, minimize and control spills, leaks or such other unplanned releases of all toxic or hazardous substances and any other substances as the Commissioner deems necessary to prevent pollution of the waters of the state. Such requirements shall, unless otherwise allowed by the Commissioner, apply to all facilities used for storing, handling transferring, loading, or unloading such substances, including manufacturing areas.

13.14.2 The requirements of this section do not apply to facility components or systems already covered by plans prepared or approved under the Resource Conservation and Recovery Act and the Spill Prevention, Control and Countermeasure program.

13.15 Duty to Reapply

The permit shall be effective for a fixed term not to exceed five years. The general permit may be administratively continued in effect until DEEP has reissued the permit. The Commissioner will provide instructions on how and when to reapply.

13.16 Equalization

All treatment facilities shall be designed to prevent upsets, malfunctions or instances of noncompliance resulting from variations in wastewater strength or flow rate, and shall include, as the Commissioner deems necessary, equalization facilities separate from the treatment facilities.

13.17 Effect of an Upset

13.17.1 An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

13.17.2 A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

13.17.2.1 An upset occurred and that the Permittee can identify the cause(s) of the upset.

13.17.2.2 The permitted facility was at the time being properly operated.

13.17.2.3 The Permittee submitted notice of the upset timely as required in this general permit.

13.17.2.4 The Permittee complied with all remedial measures.

13.18 Bypass

The Permittee shall not at any time bypass the collection system or treatment facilities or any part thereof unless such bypass is unanticipated, unavoidable, and necessary to prevent loss of life, personal injury or severe property damage, and there were no feasible alternatives to the bypass, including but not limited to the use of auxiliary or back- up treatment facilities,

retention of untreated wastes, stopping the discharges, or maintenance during normal periods of equipment downtime; or the Permittee receives prior written approval of the bypass from the Commissioner in order to perform essential maintenance, and the bypass does not cause effluent limitations to be exceeded

13.18.1 Necessary Bypass

In the event such a bypass is necessary, the Permittee shall to the extent possible minimize or halt production and/or all discharges until the facility is restored or an alternative method of treatment is provided.

13.18.2 Bypass Prevention

In order to prevent a bypass, the Permittee may schedule maintenance during periods when no discharge is occurring or employ any necessary means, including but not limited to duplicate units and systems or alternative collection and treatment or pretreatment schemes. Any such means shall insure that the effluent limitations specified in the permit are achieved; be approved by DEEP in writing prior to its use, which approval shall include an alternative schedule for monitoring if appropriate; and be discontinued upon completion of the performance of the essential maintenance.

13.18.3 Notification to DEEP

The Permittee shall provide notice to DEEP not less than twenty-four (24) hours prior to the use of any alternative scheme and monitor and record the quality and quantity of the discharge in accordance with permit terms and conditions or an approved alternative schedule. Such monitoring shall be submitted with the next DMR required by the permit and shall not be used to meet routine scheduled monitoring report requirements of the permit.

If any bypass occurs or may occur, the Permittee shall, within two (2) hours of becoming aware of such condition or need, notify DEEP through the noncompliance reporting platform referenced in Section 4.20.2 of this general permit and DEEP's 24-hour Emergency Response Unit at 860-424-3338 or (866-337-7745. Within five days submit a Noncompliance Follow-up Report Form referenced in Section 4.13.3 of this general permit including the cause of the problem, duration including dates and times and corrective action taken or planned to prevent other such occurrences. Information about incident reporting can be found on DEEP's Emergency Response and Spill Prevention website: https://portal.ct.gov/deep/emergency-response-and-spill-prevention/emergency-response-and-spill-prevention

13.18.4 Bypass Monitoring

If the Permittee has reason to believe that any effluent limitation specified in the permit may be violated, the Permittee shall immediately take steps to prevent or correct such violation, including but not limited to employing an alternative scheme of collection or treatment, and/or control the production of the wastewater and shall monitor and record the quality and quantity of the discharge in accordance with the permit terms and conditions or an approved alternative schedule. Such monitoring shall be submitted with the next DMR required by the permit and shall not be used to meet the routine monitoring requirements of the permit.

13.19 Proper Operation and Maintenance

13.19.1 The Permittee shall at all times properly operate and maintain all facilities and systems and parts thereof for wastewater collection, storage, treatment and control which are installed or used by the Permittee to achieve compliance with the terms and conditions of the permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, and adequate operator staffing and training, including the employment of certified operators as may be required by the Commissioner and adequate laboratory and process controls, including appropriate quality assurance procedures.

13.19.2 Auxiliary Facilities and Spare Parts

In accordance with sections 22a-416 through 22a-471 of the Conn. Gen. Stat. as amended, the Permittee is required to install and operate a back-up or auxiliary facilities or similar systems or the inventory of spare parts and appurtenances.

13.19.3 Instrumentation, Alarms, and Flow Records

Except for batch treatment systems unless required by the Commissioner, process wastewater treatment systems shall include instrumentation to automatically and continuously indicate, record and/or control those functions of the system and characteristics of the discharge which the Commissioner deems necessary to assure protection of the waters of the state.

13.19.4 Inspection of Treatment Systems

13.19.4.1 The wastewater treatment system must be maintained at all times as described in the application.

13.19.4.2 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, but no less than monthly, to ensure proper operation of all equipment.

13.19.5 Inspection Log

A written log shall be maintained on-site or at the Permittee's principal place of business in Connecticut, as required by Section 22a-430-3(j) 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.

13.20 Signatory Requirements

All permit Applications and Notice of Change requests submitted to the Commissioner shall be signed as follows:

13.20.1 For a corporation, the signatory shall be a responsible corporate officer.

13.20.2 For the purposes of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function; any other person who performs similar policy-or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

13.20.3 For a partnership or sole proprietorship, the signatory shall be a general partner or the proprietor, respectively.

13.20.4 For a municipality, State, Federal, or other public agency, the signatory shall be either a principal executive officer or a ranking elected official.

13.20.5 For purposes of this section, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

13.20.6 Duly Authorized Representative

All reports required by permits, and other information submitted to the Commissioner shall be signed by a person described in Section 13.20.1 of this general permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

13.20.6.1 The authorization is made in writing by a person described in Section 13.20.1 of this general permit,

13.20.6.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated site or activity, such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

13.20.6.3 The written authorization is submitted to the Commissioner.

13.20.7 Notification to DEEP

If an authorization under this subsection is no longer accurate because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of this section must be submitted to the Commissioner prior to or together with any reports or other information to be signed by an authorized representative.

13.21 Certification of Documents

Any document, including but not limited to any notice, which is submitted to the Commissioner under this general permit shall be signed by, as applicable, the Applicant or the Permittee in

accordance with Section 22a-430-3(b)(2) of the Regs. Conn. State Agencies , and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

"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 the submitted information may be punishable as a criminal offense, in accordance with section 22a- 6 of the Conn. Gen. Stat., pursuant to section 53a-157b of the Conn. Gen. Stat., and in accordance with any other applicable statute."

13.22 Date of Submittal

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.

13.23 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 of the Conn. Gen. Stat., pursuant to section 53a-157b of the Conn. Gen. Stat., and in accordance with any other applicable statute.

13.24 Correction of Inaccuracies

Within fifteen (15) days after the date an Applicant or Permittee becomes aware of a change in any of the information submitted pursuant to this general permit, becomes aware that any such information is inaccurate or misleading, or that any relevant information has been omitted or has changed since submittal of the original application, such Applicant or Permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the Commissioner.

If the Commissioner has already issued a Notice of Coverage for the discharge in accordance with this general permit, then such Permittee shall provide the revised information in writing to the Commissioner on a Notice of Change form. Such information shall be certified and provided in accordance with Section 3.6 of this general permit.

13.25 Transfer of Authorization

A Notice of Coverage under this general permit is transferable only in accordance with the provisions of Section 22a-6o of the Conn. Gen. Stat. and Section 22a-430-4(o) of the Regs. Conn. State Agencies .

13.26 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.

13.27 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.

13.28 Effect of a Permit

The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege, authorize any injury to persons or property or invasion of other private rights, authorize any infringement of the Connecticut General Statutes, Regulations of Connecticut State Agencies or municipal ordinances, or affect the responsibility of the permittee to obtain all applicable federal, State and municipal authorizations or permits for the discharge and activities which generate the discharge.

Section 14 Commissioner's Powers

The Commissioner may approve an Application or modify a Notice of Coverage with reasonable conditions. If the Commissioner approves an Application with conditions, the Permittee shall be bound by such conditions as if they were a part of this general permit.

14.1 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 Regs. Conn. State Agencies. Nothing herein shall be construed to affect any remedy available to the Commissioner by law.

Violations of any of the terms, conditions or limitations contained in this general permit may subject the Permittee to enforcement action, including but not limit to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the Conn. Gen. Stat. and Regs. Conn. State Agencies . Specifically, civil penalties of up to twenty-five thousand dollars may be assessed per violation per day.

14.2 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.

14.3 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 in accordance with this general permit 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 Notice of Coverage. Nothing herein shall affect the Commissioner's power to revoke a Permittee's authorization under this general permit at any time.

Section 15 General Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in section 22a-423 of the Conn. Gen. Stat. and section 22a-430-3(a) of the Regs. Conn. State Agencies. As used in this general permit, the following definitions shall apply:

"Air compressor blowdown" means condensed moisture from compressed air that is drained from the interior of electrical or mechanical air compressor equipment.

"Air compressor condensate" means wastewater which accumulates on the exterior of electrical or mechanical air compressor equipment due to condensation.

"Annually," in the context of a sampling frequency, means the sample must be collected in the month of June unless otherwise approved in writing by the Commissioner.

"Applicant" means a person who or municipality which files an application pursuant to Section 3 of this general permit.

"Application" means an application form filed with the Commissioner pursuant to Section 3 of this general permit.

"Authorized activity" means any activity authorized by this general permit.

"Authorized discharge" means a discharge authorized under this general permit.

"Best Management Practice (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 limit treatment requirements, operating procedures, practices to control spillage or leaks, sludge or waste disposal, or providing for drainage from raw material storage.

"Boiler blowdown" means wastewater resulting from periodic or continuous bleed off or draining of bottom, bulk or surface water from a boiler during boiler operation for the purpose of eliminating excess solids from the boiler water, and shall include steam condensate from boiler operations but does not include boil-out or boiler acid cleaning wastewater.

"Boil-out" means wastewater and waste alkaline cleaning solution generated from hot alkaline cleaning to remove oil and grease, protective coatings or soil, performed as maintenance on a boiler or performed on a new boiler prior to operation.

"Certified Hazardous Materials Manager" or "CHMM" means a person who has gained recognition as a CHMM in accordance with the requirements developed and administered by the Institute of Hazardous Materials Management.

“Clean water” means water which in the judgment of the Commissioner is of a quality substantially similar to that occurring naturally in the receiving stream under consideration. Clean water may include minor cooling waters, residential swimming pool water, and stormwater.

“Coastal waters” means those waters of Long Island Sound and its harbors, embayments, tidal rivers, streams and creeks which contain a salinity concentration of at least five hundred parts per million under low flow conditions.

“CFR” means the Code of Federal Regulations.

“Chemical liquids” means chemical liquids as defined by section 22a-448 of the Conn. Gen. Stat..

“Commissioner” means the Commissioner as defined by section 22a-2(a) of the Conn. Gen. Stat..

“Condensate” means the product of the physical process in which water is removed from a vapor or vapor mixture (e.g., pipe sweat).

“Conn. Gen. Stat.” means Connecticut General Statutes.
“Contact cooling and heating wastewater” means water which, for the purpose of heat transfer, comes directly into contact with a product or manufacturing process.

“Day” 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.

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

“Discharge” means the emission of any water, substance or material into the waters of the state, whether or not such substance causes pollution as defined in section 22a-423 of the Connecticut General Statues.

"DMR" means Discharge Monitoring Report.

“Effluent limitation” means (1) any numerical limitation imposed by the commissioner on quantities, discharge rates or concentrations of any water, substance or material discharged to the waters of the State or (2) any limitation imposed by the commissioner on any other measure of the quality or quantity of the discharge.

“Emerging contaminants” means emerging contaminants as referenced at: Emerging Contaminants and Federal Facility Contaminants of Concern | Cleanups at Federal Facilities | US EPA or any other contaminant classified as emerging by the Commissioner.

“Estuarine” means a reference to a coastal body of water with an open connection to the sea in which saline sea water is measurably diluted by fresh water including tidal rivers, bays, lagoons and coves.

“Federal Water Pollution Control Act” means the federal Water Pollution Control Act, 33 USC Section 466 et seq.

“Facility” means any facility at which an authorized discharge originates.

"Filter to waste" means the initial volume of filtrate produced following backwash of a filter, or following the initial construction, rebuilding or maintenance of a filter.

"Filtration" means a physical, chemical or biological process that reduces concentrations of contaminants in water by passing it through filter media.

"Fire suppression system testing" means wastewater generated by the testing or maintenance of a fire sprinkler or suppression system and does not include foams or other fire-fighting additives.

"Geothermal heat pump" means a central heating and/or cooling system that transfers heat to or from ground water.

"Ground waters" means those waters of the state which naturally exist or flow below the surface of the ground.

"High Quality Waters" means surface waters where the water quality is better than necessary to meet the minimum criteria established in the Connecticut Water Quality Standards for the applicable classification and related designated uses.

"Hydrostatic pressure testing" means waters used to test the structural integrity of new tanks and pipelines, and tanks and pipelines which have been used to hold or transfer drinking water, sewage, petroleum, or natural gas.

"Hydrant flushing" means waters generated from the flushing of hydrants in order to remove accumulated rust and sediment from the pipes and water mains, assess water flow and pressure and to examine conditions of the water distribution system to determine any needed improvements.

"Impaired water(s)" 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.

"Intermittent Discharge" means an effluent discharge lasting less than 24 hours occurring at a maximum of once every three months with an instream waste concentration of less than 10% for a total of four (4) discharges per calendar year.

"In responsible charge" means (A) when used in the Qualified Professional Engineer definition in this general permit, professional experience for which the Commissioner determines that a professional's primary duties consistently involve a high level of responsibility and decision making in the planning and designing of engineered systems for the treatment of sanitary, industrial, and commercial wastewaters. The Commissioner shall consider the following in determining whether a professional's experience qualifies as responsible charge experience:

1. the level of independent decision-making exercised;
2. the number of individuals and the disciplines of the other professionals that the professional supervised or coordinated;

3. the extent to which a professional's responsibilities consistently involved the review of work performed by other professionals involved in the planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of sanitary, industrial, and commercial wastewaters;
4. the extent to which a professional's responsibilities consistently involved the planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters and whether such responsibilities were an integral and substantial component of the professional's position;
5. the nature of a professional's employer's primary business interests and the relation of those interests to planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters;
6. the extent to which a professional has engaged in the evaluation and selection of scientific or technical methodologies for planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters;
7. the extent to which a professional drew technical conclusions, made recommendations, and issued opinions based on the results of planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters; and
8. any other factor that the Commissioner deems relevant.

"Individual permit" a permit issued to a named Permittee under section 22a-430 of the Conn. Gen. Stat..

"Instantaneous limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"In-stream waste concentration" or "IWC" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated Zone of Influence.

"Land application" means the discharge of wastewater directed to the surface of the ground that is treated by soil in the unsaturated zone before being wholly absorbed by the soil and infiltrates into ground water.

"Licensed waste transporter" means a commercial waste transporter licensed by the Commissioner under the authority of section 22a-454(a) of the Conn. Gen. Stat..

"Local building official" means the municipal officer or other designated authority charged with the administration and enforcement of the State Building Code in accordance with section 29-253 of the Conn. Gen. Stat. or a duly authorized representative.

"Low flow water treatment wastewater" or "LFWTW" for the purpose of this general permit means:

1. A maximum of 500 gallons per day of wastewater generated by a point of entry water treatment device for the treatment of well water used to supply potable water to a residential building or institution or a non-residential building;
2. Where the treated water is not purchased by another party;
3. Does not include discharges from treatment system components for the removal of radionuclides; and
4. The discharge does not fall under the jurisdiction of the CT Department of Public Health.

“Maximum concentration” means the maximum concentration at any time as determined by a grab sample.

“Maximum Contaminant Level” or “MCL” means the maximum permissible level of a contaminant in water that is delivered to any consumer of a private water supply system or public water system as determined by sections 19-13-B101 and 19-13-B102 of the Regs. Conn. State Agencies.

“Maximum daily flow” means the greatest volume of wastewater that is discharged during an operating day.

“Maximum instantaneous flow” means the maximum flow at any time as measured in gallons per minute.

“Minimum level” means the lowest concentrations at which quantification is achieved and verified during the chemical analyses required for this general permit.

“Municipality” means any metropolitan district, town, consolidated town and city, consolidated town and borough, city, borough, village, fire and sewer district, sewer district and each municipal organization having authority to levy and collect taxes or make charges for its authorized function as defined by section 22a-423 of the Conn. Gen. Stat..

"No Observable Acute Effect Level” or “NOAEL" means the highest concentration of a substance or combination of substances which does not cause acute toxicity to aquatic organisms.

“Non-contact cooling" means wastewater which has been used for cooling purposes, does not come into direct contact with a product or process, and has a maximum daily flow of no greater than 500,000 gallons per day. This definition does not include air compressor condensate or blowdown from boiler equipment.

“Non-point source” means any unconfined and diffuse source of pollution such as stormwater or snowmelt runoff, atmospheric deposition, or ground water not conveyed to a surface water discharge point within a discrete conveyance.

“Nonresidential building” means any commercial, industrial, institutional, public or other building not occupied as a dwelling, including transient hotels and motels.

"NPDES permit" means a permit authorizing a discharge to the surface waters of the state either directly, or indirectly by means other than through a POTW or the ground waters, which is issued by the Commissioner pursuant to section 22a-430 of the Conn. Gen. Stat..

“Oil or petroleum” means oil or petroleum as defined in section 22a-448 of the Conn. Gen. Stat..

“Permittee” unless the context indicates otherwise, means any person who or municipality which initiates, creates, originates or maintains a discharge of wastewater for which a Notice of Coverage has been issued by the Commissioner pursuant to this general permit.

“Person” means person as defined by section 22a-2(c) of the Connecticut General Statutes.

Perfluoroalkyl and polyfluoroalkyl substances” or “PFAS” means all members of the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom.

“Point source” means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, or vessel or other floating craft, from which pollutants are or may be discharged. Point source does not include agricultural stormwater discharges and return flows from irrigated agriculture.

"Pollutant" or “Parameter” means any water, substance or material for which the permit in question specifies an effluent limitation.

“Potable water system maintenance or sampling wastewaters” means 1) potable water storage tank or water line draining for maintenance or hydrostatic testing purposes or 2) raw or treated water from process sampling points, on-line process analytical instrumentation; or 3) raw or treated water from equipment leakage and bleed-off.

“POTW” means a publicly owned treatment works, also known as a sewage treatment plant, as that term is defined by section 22a-430-3(a) of the Conn. Gen. Stat..

“POTW authority” means the chairperson, or duly authorized representative, of the Water Pollution Control Authority which owns or operates a Publicly Owned Treatment Works (POTW).

"Pressure washing" for the purpose of this general permit shall mean the hydraulic cleaning of structures and other hard surfaces, including but not limited to masonry, metals and concrete, without the use of chemical or biological agents. Most often used in washing dirt, graffiti or oily or atmospheric deposits from the exterior of buildings, cooling towers, bridges, sidewalks or gas station pads, this definition does not include the washing of vehicles (with the exception of boats and construction equipment), trailers or tank interiors or the chemical stripping of paint (with the exception of graffiti removal).

“Professional Engineer” or “P.E.” means a person with a currently effective license issued in accordance with Chapter 391 of the Conn. Gen. Stat..

“Publicly Owned Treatment Works (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 Regs. Conn. State Agencies which discharges to the waters of the state and which is owned by a municipality or the state.

“Public water system” means public water system as defined in section 19-13-B102(a) of the Regs. Conn. State Agencies.

“Qualified Professional” means a professional engineer who has, for a minimum of eight years, engaged in the planning and designing of engineered systems for the collection and treatment of sanitary, industrial and commercial wastewaters including, but not limited to, a minimum of four years in responsible charge of the planning and designing of such engineered systems.

"Quarterly", in the context of a sampling frequency, means samples must be collected in the months of March, June, September and December unless otherwise approved in writing by the Commissioner.

“RCSA” or “Regs. Conn. State Agencies” means Regulations of Connecticut State Agencies.

“Raw water” means water withdrawn from a reservoir or well prior to any physical treatment of such water.

“Residential building” means any house, apartment, condominium, trailer or mobile home, or other structure occupied by individuals permanently or temporarily as a dwelling place but not including residential institutions.

“Residential institution” means any institutional or commercial building occupied by individuals permanently or temporarily as a dwelling, including dormitories, boarding houses, hospitals, nursing homes, jails, and residential hotels or motels.

“Residuals” for the purpose of this general permit means the solid or semi-solid residue removed during the production of potable water with a solids content of 2% or greater.

“Semi-annually,” in the context of a sampling frequency, means samples must be collected in the months of June and December unless otherwise approved in writing by the Commissioner.

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

“Site” means geographically contiguous land or water on which an authorized activity takes place or on which an activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person and connected by a right-of-way which such person controls and to which the public does not have access 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 waters” means those waters of the state which are not ground water and 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. Surface water does not include ground water.

"Total Maximum Daily Load or (TMDL)" means the maximum capacity of a surface water to assimilate a pollutant as established by the Commissioner, including pollutants contributed by point and non-point sources and a margin of safety.

"Unsewered area" means an area that does not have direct access to a POTW by means of a permanent sewer line.

"Watercourse" means watercourse as defined in section 22a-38 of the Conn. Gen. Stat.

"Water Pollution Control Authority" means water pollution control authority as referred to in Chapter 103, Title 7.

"Water quality standards" means water quality standards as adopted by the Commissioner in accordance with section 22a-426 of the Conn. Gen. Stat.

"Water treatment facility" means any system, excluding a reservoir, used for potable or industrial process use, including but not limited to any industrial, municipal or private water treatment facility.

"Water treatment laboratory wastewater" means raw water samples, finished (drinking) water samples, other water treatment laboratory wastewaters, and/or laboratory utensil cleaning wastewaters which have no chemical additives or reagents containing any of the substances listed in Appendix B, Tables II, III, and V, or Appendix D of Section 22a-430-4 of the Regs. Conn. State Agencies.

"Water treatment wastewater dispersal structure" means a structure, excavation or other facility designed to direct low flow water treatment wastewater to percolate into the underlying soil. Water treatment wastewater dispersal structures include but are not limited to stone filled excavations, leaching trenches, plastic leaching chambers, leaching galleries, leaching pits, etc.

"Water treatment wastewaters" means wastewaters generated by a well or water treatment facility used to produce water supplies for potable or industrial process use, including but not limited to wastewaters from the following:

1. clarifier tank sludge blowdown;
2. clarifier tank supernatant;
3. facility and equipment cleaning rinsewaters, excluding rinsewaters generated by the rinse out of containers used to store any chemical for which an effluent limit is not specified in this general permit;
4. activated carbon and filter media backwash, including filter to waste, and regeneration wastewaters;
5. raw or treated water from equipment leakage and bleed-off;
6. mechanical and non-mechanical sludge dewatering wastewaters;
7. infiltration bed and settling lagoon wastewaters;
8. raw or treated water from process sampling points and on-line process analytical instrumentation;
9. designed overflows from storage tanks and other WTW facilities resulting from emergency conditions and routine maintenance;
10. potable water system maintenance or sampling wastewaters;

11. start-up wastewaters for water treatment plants, facilities or equipment which commenced operation after the date of issuance of this general permit;
12. ion exchange regeneration wastewaters;
13. reverse osmosis reject water;
14. laboratory wastewaters, and
15. Low flow water treatment wastewater.

“Well rehabilitation” means to physically or chemically treat a 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.

Appendix A: PFAS Analytes

	Target Analyte Name	Analyte Abbreviation	NetDMR Code	CAS Number
Perfluoroalkyl carboxylic acids				
1	Perfluorobutanoic acid	PFBA	51522	375-22-4
2	Perfluoropentanoic acid	PFPeA	51623	2706-90-3
3	Perfluorohexanoic acid	PFHxA	51624	307-24-4
4	Perfluoroheptanoic acid	PFHpA	51625	375-85-9
5	Perfluorooctanoic acid	PFOA	51521	335-67-1
6	Perfluorononanoic acid	PFNA	51626	375-95-1
7	Perfluorodecanoic acid	PFDA	51627	335-76-2
8	Perfluoroundecanoic acid	PFUnA	51628	2058-94-8
9	Perfluorododecanoic acid	PFDoA	51629	307-55-1
10	Perfluorotridecanoic acid	PFTrDA	51630	72629-94-8
11	Perfluorotetradecanoic acid	PFTeDA	51631	376-06-7
Perfluoroalkyl sulfonic acids-Acid Form				
12	Perfluorobutanesulfonic acid	PFBS	52602	375-73-5
13	Perfluoropentansulfonic acid	PFPeS	52610	2706-91-4
14	Perfluorohexanesulfonic acid	PFHxS	52605	355-46-4
15	Perfluoroheptanesulfonic acid	PFHpS	52604	375-92-8
16	Perfluorooctanesulfonic acid	PFOS	52606	1763-23-1
17	Perfluorononanesulfonic acid	PFNS	52611	68259-12-1
18	Perfluorodecanesulfonic acid	PFDS	52603	335-77-3
19	Perfluorododecanesulfonic acid	PFDoS	52632	79780-39-5
Fluorotelomer sulfonic acids				
20	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	4:2FTS	52607	757124-72-4
21	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	6:2FTS	52608	27619-97-2
22	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	8:2FTS	52609	39108-34-4
Perfluorooctane sulfonamides				
23	Perfluorooctanesulfonamide	PFOSA	51525	754-91-6
24	N-methyl perfluorooctanesulfonamide	NMeFOSA	52641	31506-32-8
25	N-ethyl perfluorooctanesulfonamide	NEtFOSA	52642	4151-50-2
Perfluorooctane sulfonamidoacetic acids				
26	N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	51644	2355-31-9
27	N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	51643	2991-50-6
Perfluorooctane sulfonamide ethanols				

	Target Analyte Name	Analyte Abbreviation	NetDMR Code	CAS Number
28	N-methyl perfluorooctanesulfonamidoethanol	NMeFOSE	51642	24448-09-7
29	N-ethyl perfluorooctanesulfonamidoethanol	NEtFOSE	51641	1691-99-2
Per- and Polyfluoroether carboxylic acids				
30	Hexafluoropropylene oxide dimer acid	HFPO-DA	52612	13252-13-6
31	4,8-Dioxa-3H-perfluorononanoic acid	ADONA	52636	919005-14-4
32	Perfluoro-3-methoxypropanoic acid	PFMPA	PF002	377-73-1
33	Perfluoro-4-methoxybutanoic acid	PFMBA	PF006	863090-89-5
34	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	52626	151772-58-6
Ether sulfonic acids				
35	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	PF003	756426-58-1
36	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	PF004	763051-92-9
37	Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	52629	113507-82-7
Fluorotelomer carboxylic acids				
38	3-Perfluoropropyl propanoic acid	3:3FTCA	PF001	356-02-5
39	2H,2H,3H,3H-Perfluorooctanoic acid	5:3FTCA	PF007	914637-49-3 3
40	3-Perfluoroheptyl propanoic acid	7:3FTCA	PF005	812-70-4

Appendix B: Whole Effluent Toxicity (WET)

Note: The following language and/or effluent table may be modified in the final permit.

Acute aquatic toxicity monitoring shall be performed using the NOAEL protocol specified in section 22a-430-3(j)(7)(A) of the Regs. Conn. State Agencies and as prescribed in the reference document *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th edition* (EPA-821-R-02-012), or the most current version, with any exceptions or clarifications noted below.

15.1 Sample collection and handling

15.1.1 All samples collected to determine compliance with aquatic toxicity limits in this general permit shall be grab samples.

15.1.2 Samples used for aquatic toxicity analysis shall not be dechlorinated, filtered, or modified in any way prior to testing, except for samples which require salinity adjustment. For salinities between 5 ppt and 15 ppt, the salinity of the effluent may be adjusted to 15 ppt using artificial sea salts.

15.2 Analytical Testing

15.2.1 Chemical analyses of the parameters identified in all numeric limit tables in the Permittee's Notice of Coverage (excluding PFAS analytes) shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

15.2.2 In addition, copper, lead, iron, manganese, nickel, zinc, total residual chlorine, pH, temperature, salinity, total hardness, total alkalinity, dissolved oxygen, total suspended solids, total dissolved solids, turbidity, specific conductance, and appearance shall be measured in the sample tested for Aquatic Toxicity and in the dilution (control) water at the

beginning of the test and at test termination. If total residual chlorine is not detected at test initiation, it does not need to be measured at test termination.

15.2.3 For tests with saltwater organisms that require salinity adjustment of the effluent, chemical analyses specified in Section 15.2.1 shall be conducted on an aliquot of the sample collected for Aquatic Toxicity testing and on an aliquot of the effluent following salinity adjustment.

15.2.4 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.

15.2.5 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.

15.2.6 Copper nitrate shall be used as the reference toxicant for freshwater organisms and sodium lauryl sulfate, or sodium dodecyl sulfate shall be used as the reference toxicant for saltwater organisms.

15.3 WET Limit

Compliance with aquatic toxicity limits shall be demonstrated when the results of a valid pass/fail aquatic toxicity test indicate there is 90% or greater survival in the undiluted effluent.

15.4 Aquatic Toxicity Monitoring Report

All Aquatic Toxicity Monitoring Reports must be submitted via NetDMR as an attachment to the DMR.

15.5 Retest

If any of the below conditions occur, the permittee shall report the noncompliance in accordance with the general permit requirements and collect and analyze another sample of the discharge for aquatic toxicity within 30 days of the previous test.

- The survival of the test organisms was less than 90% in the average of the test chambers containing undiluted effluent. Note if survival of the test organisms was less than 90% in the average of the test chambers containing undiluted effluent, the result is interpreted as a permit limit exceeded.

- The survival of test organisms was less than 90% in each replicate control test chamber or test conditions were not achieved as specified in section 22a-430-3(j)(7)(A) of the Regs. Conn. State Agencies, such as maintenance of appropriate environmental controls. Note: if the survival of test organisms was less than 90% in each replicate control test chamber or test conditions were not achieved as specified in section 22a-430-3(j)(7)(A) of the Regs. Conn. State Agencies the toxicity test is interpreted as an invalid test.

- Failure to collect concurrent effluent chemistry.

15.6 Toxicity Reduction Evaluation

If any two consecutive test results or any three test results in a twelve-month period indicate that an aquatic toxicity limit has been exceeded, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and submit a Toxicity Identification/Reduction Evaluation (see Methods for Aquatic Toxicity Identification Evaluations, Publication No. EPA/600/6-91/003) for the review, and if necessary written approval of the Commissioner, which describes in detail the steps taken or shall be taken to eliminate the toxic impacts of the discharge on the receiving water. The report shall also include a proposed schedule for implementation. Such report shall be submitted within 30 days of the last exceedance. The Permittee shall implement all actions in accordance with the approved report and schedule.

Table B – Acute Toxicity Monitoring

Discharge Serial Number: **DSN 001-AT**

Monitoring Location Codes:
Y – Acute toxicity effluent results
O – Acute toxicity chemical analyses
U – Salinity adjusted effluent chemical analyses

Wastewater Description: **Wastewater description consistent with effluent outfall.**

Monitoring Location Description: **Sampling location consistent with effluent outfall.**

Discharge is to:

Instream Waste Concentration: **XXX %**

Outfall Location: **Latitude (41° 37' 38.38") and Longitude (73° 04' 10.53")**

PARAMETER	NET DMR CODE	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			MINI-MUM LEVEL[5]	MONIT-ORING LOCA-TION
			Average Monthly Limit	Minimum Daily Limit or Maximum Daily Limit[1]	Sample/ Reporting Frequency [2, 3]	Sample Type or Measurement to be reported [4]	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported		
Whole Effluent Toxicity (WET)											
Acute Aquatic Toxicity[6] *Daphnia pulex,* NOAEL @ % effluent	TAA3D	%	NA	≥90	Flow Dependent	Grab	≥90	NR	Grab		
Acute Aquatic Toxicity[6] *Pimephales promelas,* NOAEL @ % effluent	TAA6C	%	NA	≥90	Flow Dependent	Grab	≥90	NR	Grab		
Chemical Analyses Required with Acute Whole Effluent Toxicity Monitoring – See Appendix B. for Acute Testing [7]											
Date of Acute WET Chemistry Sample Collection[8]	51883	YYYYMMDD	NA	---	Flow Dependent	Calculated	NA	NR	NA		O, U
Alkalinity	00410	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Aluminum, Dissolved	01106	µg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Aluminum, Total	01105	µg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Biochemical Oxygen Demand, 5-day (BOD_5)	00310	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Carbon, Dissolved Organic	00681	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Chlorine, Total Residual	50060	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U

Table B – Acute Toxicity Monitoring

Discharge Serial Number: **DSN 001-AT**

Monitoring Location Codes:
Y – Acute toxicity effluent results
O – Acute toxicity chemical analyses
U – Salinity adjusted effluent chemical analyses

Wastewater Description: **Wastewater description consistent with effluent outfall.**

Monitoring Location Description: **Sampling location consistent with effluent outfall.**

Discharge is to:

Instream Waste Concentration: **XXX %**

Outfall Location: **Latitude (41° 37' 38.38") and Longitude (73° 04' 10.53")**

PARAMETER	NET DMR CODE	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			MINIMUM LEVEL[5]	MONITORING LOCATION
			Average Monthly Limit	Minimum Daily Limit or Maximum Daily Limit[1]	Sample/ Reporting Frequency [2, 3]	Sample Type or Measurement to be reported [4]	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported		
Copper, Dissolved	01040	µg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Copper, Total	01042	µg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Dissolved Oxygen	00300	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Hardness, Total	00900	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Lead, Dissolved	01049	µg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Lead, Total	01051	µg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Nitrogen, Ammonia (total as N)	00610	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Nitrogen, Kjeldahl (total as N)	00625	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U

Table B – Acute Toxicity Monitoring

Discharge Serial Number: **DSN 001-AT**

Monitoring Location Codes:
Y – Acute toxicity effluent results
O – Acute toxicity chemical analyses
U – Salinity adjusted effluent chemical analyses

Wastewater Description: **Wastewater description consistent with effluent outfall.**

Monitoring Location Description: **Sampling location consistent with effluent outfall.**

Discharge is to:

Instream Waste Concentration: **XXX %**

Outfall Location: **Latitude (41° 37' 38.38") and Longitude (73° 04' 10.53")**

PARAMETER	NET DMR CODE	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			MINIMUM LEVEL[5]	MONITORING LOCATION
			Average Monthly Limit	Minimum Daily Limit or Maximum Daily Limit[1]	Sample/ Reporting Frequency [2, 3]	Sample Type or Measurement to be reported [4]	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported		
Nitrogen, Nitrate (total as N)	00620	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Nitrogen, Nitrite (total as N)	00615	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Nitrogen, Total (as N)[9]	00600	mg/L	NA	---	Flow Dependent	Calculation	NA	NR	NA		O, U
pH	00400	SU	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Phosphorus, Total	00665	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Specific Conductance	51409	uMhos	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Temperature	00011	Deg. F.	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Total Suspended Solids	00530	mg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U

Table B – Acute Toxicity Monitoring

Discharge Serial Number: **DSN 001-AT**	Monitoring Location Codes: **Y – Acute toxicity effluent results** **O – Acute toxicity chemical analyses** **U – Salinity adjusted effluent chemical analyses**
Wastewater Description: **Wastewater description consistent with effluent outfall.**	
Monitoring Location Description: **Sampling location consistent with effluent outfall.**	
Discharge is to:	Instream Waste Concentration: **XXX %** / Outfall Location: **Latitude (41° 37' 38.38") and Longitude (73° 04' 10.53")**

PARAMETER	NET DMR CODE	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			MINIMUM LEVEL[5]	MONITORING LOCATION
			Average Monthly Limit	Minimum Daily Limit or Maximum Daily Limit[1]	Sample/ Reporting Frequency [2, 3]	Sample Type or Measurement to be reported [4]	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported		
Zinc, Dissolved	01090	µg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U
Zinc, Total	01092	µg/L	NA	---	Flow Dependent	Grab	NA	NR	NA		O, U

TABLE FOOTNOTES AND REMARKS

Footnotes:

[1] WET limits are expressed as a minimum daily limit, meaning the minimum allowable daily discharge over the course of the 24-hour sampling period. Chemical results analyzed in conjunction with WET tests shall be reported as the max value collected during the 24-hour sampling period.

[2] The first entry in this column is the "Sample Frequency". If a "Reporting Frequency" does not follow this entry and the "Sample Frequency" is more frequent than monthly, then the "Reporting Frequency" is monthly. If the "Sample Frequency" is specified as monthly, or less frequent, then the "Reporting Frequency" is monthly.

[3] If more than one toxicity sample is collected during a single month, report subsequent WET and chemistry results as an attachment to the DMR in accordance with Section 4.9.1 of this permit.

[4] Grab samples shall be collected for acute toxicity tests consistent with the methodology outlined in Appendix B of this permit.

[5] "Minimum Level" refers to Section 4.6 of this permit.

[6] Acute toxicity testing shall be conducted in accordance with Appendix B of this permit. The NOAEL results at 100% effluent (in % survival) for the acute toxicity test shall be reported on the DMR. The Aquatic Toxicity Monitoring Report ("ATMR") shall be completed for each toxicity testing event and submitted in accordance with Appendix B of this permit.

[7] Chemical analyses shall be conducted on samples used in the acute toxicity tests. These analyses shall be conducted on all samples used in the acute toxicity test and reported under Monitoring Location T. Results shall also be included on the ATMR and submitted in accordance with Appendix B of this permit.

[8] The Permittee shall report the date of sample collection for the acute toxicity test and associated chemistry data in the format: year month day (YYYYMMDD).

[9] Total Nitrogen means the sum of the concentrations of: Total Kjeldahl Nitrogen + Nitrate Nitrogen + Nitrite Nitrogen. The concentration-based value shall be multiplied by the Total Daily Flow and converted to lbs/day.

Remarks:

Table B – Acute Toxicity Monitoring												
Discharge Serial Number: **DSN 001-AT**									Monitoring Location Codes: **Y – Acute toxicity effluent results** **O – Acute toxicity chemical analyses** **U – Salinity adjusted effluent chemical analyses**			
Wastewater Description: **Wastewater description consistent with effluent outfall.**												
Monitoring Location Description: **Sampling location consistent with effluent outfall.**												
Discharge is to:				Instream Waste Concentration: **XXX %**					Outfall Location: **Latitude (41° 37' 38.38") and Longitude (73° 04' 10.53")**			
PARAMETER	**NET DMR CODE**	**UNITS**	**FLOW/TIME BASED MONITORING**				**INSTANTANEOUS MONITORING**			**MINI-MUM LEVEL[5]**	**MONIT-ORING LOCA-TION**	
			Average Monthly Limit	Minimum Daily Limit or Maximum Daily Limit[1]	Sample/ Reporting Frequency [2, 3]	Sample Type or Measurement to be reported [4]	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported			

1. Abbreviations used for units are as follows: kg/day means kilograms per day; lbs/day means pounds per day; mg/L means milligrams per liter; mgd means millions of gallons per day; SU means Standard Units; mg/L means micrograms per liter. Other abbreviations are as follows: NA means Not Applicable; NR means Not Reportable (unless sampling is conducted relative to Section 5.4 of this permit); RDS means Range During Sampling; RDM means Range During Month.
2. If "---" is noted in the limits column in the table, this means that a limit is not specified but a value must be reported on the DMR.
3. Analyses that indicate that a parameter was not detected or that was detected less than the noted ML shall be reported in accordance with Section 4.6.

Connecticut
Department of Energy &
Environmental Protection

National Pollutant Discharge Elimination System

Comprehensive General Permit for Discharges to Surface and Ground Water

Fact Sheet

This fact sheet sets forth the significant factual, legal, and policy considerations examined during preparation of this draft master general permit. This action has been prepared in accordance with the Connecticut General Statutes and its implementing regulations, the Regulations of Connecticut State Agencies. Issuance of a general permit serves to simplify and streamline the National Pollutant Discharge Elimination System ("NPDES") and state ground water permitting process by authorizing multiple similar activities under one permit in lieu of each facility having to obtain an individual permit. This general permit provides permit conditions and limitations to protect waters of the State from pollution.

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Section 1.0 General Permit History & Authority

In 1965, the Connecticut Clean Water Task Force was commissioned to investigate the condition of rivers and harbors in Connecticut. The Connecticut Clean Water Task Force developed an action program called Clean Water for Connecticut in 1966. On May 1, 1967, Connecticut's Clean Water Bill was signed into law, inaugurating the state's modern water pollution control program. The Connecticut Water Quality Standards were then approved by the federal government in 1970. A year later the Department of Environmental Protection was created, and Congress began drafting the federal legislation for the first national Clean Water Act using Connecticut's Clean Water Act as a guide.

Congress passed the Federal Water Pollution Control Act of 1972 ("Clean Water Act" or "CWA") on October 18, 1972, 33 U.S.C. 1251 et seq., with the objective to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" section 101(a), 33 U.S.C. 1251(a). To help achieve this objective, the CWA provides that "the discharge of any pollutant by any person shall be unlawful" except in compliance with other provisions of the statute, CWA section 301(a), 33 U.S.C. 1311(a).

Pursuant to the CWA and Title 22a 430 of the Connecticut General Statutes, any person who initiates or creates a discharge of pollutants to the waters of the state must first obtain a permit authorizing the discharge. The Connecticut Department of Energy and Environmental Protection ("DEEP") is a delegated authority to implement the federal National Pollutant Discharge Elimination System ("NPDES") Program. In accordance with this delegation, DEEP has been provided the authority to promulgate regulations and issue permits in accordance with the Connecticut General Statutes ("CGS") and Regulations of Connecticut State Agencies ("RCSA").

The *Comprehensive General Permit for Discharges to Surface and Ground Water* ("Comprehensive general permit") provides discharge authorizations for wastewater discharge categories that were previously provided by separate general permits for each category. DEEP issued the first Comprehensive GP December 14, 2017, which became effective March 30, 2018, (and will hereafter be referred to in this document as the "2018 General Permit"). The current Comprehensive GP was reissued March 15, 2023, effective April 1, 2023, and expires on April 1, 2026. The draft general permit is expected to become effective April 1, 2026 (and will hereafter be referred to in this document as the "2026 General Permit").

Section 2.0 Authorization Under This General Permit

The Comprehensive GP provides discharge authorizations for the following categories of wastewater as each is defined in "Section 15. General Definitions" of the general permit. Authorization for each category of discharge listed below is limited to the classification of the receiving waterbody and maximum discharge flows identified in Table 2.1 – Authorized Discharges by Category, Waterbody Type, and Maximum Flow (of the 2026 General Permit and provided below). Authorization is subject to the terms of this permit.

- Non-contact cooling water
- Geothermal heat pump water
- Hydrostatic pressure testing of natural gas, petroleum tanks, and pipeline
- Fire suppression system testing
- Hydrant flushing
- Boiler blowdown
- Pressure washing
- Water treatment wastewater

All other discharges of water, substance or material into the waters of the state other than those specified in this permit are not authorized by this general permit.

Any person or municipality which initiates, creates, originates, or maintains such a discharge shall apply for and obtain authorization under Section 22a-430 of the Conn. Gen. Stat. prior to the occurrence of such discharge.

Non-contact cooling water and water treatment wastewater are allowable discharges to waterbody Classes AA, A, and SA; as well as to Class GAA and GA provided the permittee complies with the permit conditions and effluent limits in the permit. Other wastewater categories are limited to Class B, SB, and C surface waters and Class GB and GC ground waters. Authorized discharge locations and maximum daily flows can be found in Table 2.1 of the 2026 General Permit and provided below.

Table 2.1 of the 2026 General Permit — Authorized Discharges by Category, Waterbody Type, and Maximum Flow

Category of Discharge	Ground Water Classification	Maximum Daily Flow to Ground Water (GPD)	Authorized Surface Water Classification	Maximum Daily Flow to Surface Water (GPD)
Non-Contact Cooling Water	All	500,000	All	500,000
Geothermal Heat Pump Water	GB, GC	500,000	B, SB, C	500,000
Hydrostatic Pressure Testing (Natural Gas, Petroleum Tanks, Pipelines)	GB, GC	500,000	B, SB, C	500,000
Fire Suppression System Testing	GB, GC	500,000	B, SB, C	500,000
Hydrant Flushing	GB, GC	500,000	B, SB, C	500,000
Boiler Blowdown	GB, GC	50,000	Not Authorized	Not Authorized
Pressure Washing	GB, GC	500,000	B, SB, C	500,000
Water Treatment System Wastewater	All	50,000 (subsurface system) And 500,000 (infiltration basin)	All	2,000,000

Section 3.0 Discharges to Impaired Waters or Waters with Total Maximum Daily Loads (TMDL)

Discharges directed to an impaired waterbody that is listed in the most recent Connecticut Integrated Water Quality Report pursuant to Clean Water Act section 303(d) and 305(b) must comply with the requirements listed in Section 2.2 of this general permit. Discharges to an impaired water must provide additional documentation to the Commissioner that demonstrates that the discharge is not expected to cause or contribute to an exceedance of the water quality standard(s) that caused the impairment. The Commissioner may require additional control measures for discharges to impaired waterbody segments or other sensitive areas.

For discharges to waters with an established TMDL, the Commissioner will determine if there are sufficient remaining allocations in the TMDL to allow the discharge and the Commissioner may authorize the discharge with additional permit conditions or compliance schedules designed to meet the requirements of the TMDL or load allocation.

Section 4.0 Significant Changes to the General Permit

4.1 Structural Reorganization of Permit Content

While the discharge categories, conditions, and limits remain largely consistent with those in the 2018 General Permit, the 2026 General Permit incorporates substantial improvements to its organization and formatting. Content is now arranged to allow permittees to more easily identify requirements specific to their industrial activity (e.g., non-contact cooling, hydrostatic pressure testing) and their discharge destination (surface water or ground water). The revised structure directs users to sections containing all applicable conditions, numeric effluent limitations, and monitoring requirements for their particular discharge scenario.

4.2 Removal of the Instream Waste Concentration Eligibility Restriction

The 2018 General Permit included an eligibility threshold based on the instream waste concentration (IWC) of the discharge. Facilities with an IWC greater than 15 percent were ineligible for coverage and required to obtain an individual NPDES permit. For the 2026 General Permit, this restriction has been removed. The permit has been expanded to include a broader set of numeric effluent limits designed to ensure compliance with applicable water quality standards at all IWCs. The 2026 General Permit now provides effluent limits corresponding to the following IWC ranges:

- <1%
- 1%–5%
- 5%–20%
- 20%–40%
- 40%–70%
- 70%–100%

Additionally, the permit includes new numeric limits for copper and total residual chlorine for discharges to estuarine or marine waters. Arsenic has also been added for facilities discharging water treatment wastewater.

4.3 Addition of Pressure Washing as a Regulated Discharge Category

The 2026 General Permit adds “Pressure Washing” as a new industrial discharge category. Discharge to a sanitary sewer remains the preferred management option. However, when sewer access is unavailable or the wastewater cannot reasonably be collected and transported to a POTW, the general permit allows discharge to ground or surface waters, provided the permittee meets all applicable terms and conditions.

4.4 NetDMR Reporting Required for All Registered Permittees

Under the 2018 General Permit, only registrants with discharges to surface water were required to submit monitoring results through NetDMR. The 2026 General Permit expands this requirement to all registered permittees that are required to submit an application, regardless of discharge location. All

monitoring data collected under the permit must now be reported electronically through NetDMR.

4.5 Compliance Schedule for Ground Water Monitoring Wells

The 2026 General Permit requires water treatment facilities discharging 10,000 gallons per day or more to ground water to install ground water monitoring wells. A plan for well installation must be submitted within three (3) years of the permit's effective date. All required monitoring wells must be installed no later than the end of the five-year permit term.

The requirement to install groundwater monitoring wells is foundational to determining compliance with the core mandates of the Connecticut Water Pollution Control Act, specifically Sections 22a-426 and 22a-430 of the Connecticut General Statute**s**.

The data gathered through this monitoring is essential to satisfy the Department's policy to:

- Maintain or Restore Natural Quality: In Class GAA, GAAs, or GA areas, the Department's policy is to "maintain or restore all ground water in such areas to its natural quality" (CGS 22a-426 (a)(1)).
- Assure Potable Water Suitability: The monitoring must confirm that the ground water remains "suitable for drinking and other domestic uses without treatment" (CGS 22a-426 (a)(2)(A)).
- Prevent Pollution: Regulate discharges to "prevent pollution" (CGS 22a-426 (a)(2)(D)).

The resulting data should provide robust and scientifically sound information that is critical for the Department to:

- Evaluate attenuation and zones of influence.
- Ensure that outside the ZOI the groundwater meets MCL-based health criteria.
- Ensure that surface-water standards are not violated.
- Inform Future Permit Requirements: Develop targeted, data-driven regulatory standards for subsequent permits, ensuring they are protective yet efficient.
- Guide Responsible Siting: Establish best practices and criteria for the responsible and sustainable siting of future water treatment facilities within these sensitive areas.

This requirement is an investment in protecting a shared, finite resource—our groundwater—and enables the Department to create a more stable and predictable regulatory framework for the industry by ensuring every discharge meets the mandates of state law.

Section 5.0 Application Requirements

5.1 Authorization to Discharge Under This General Permit

Authorization to discharge under this general permit may be granted automatically when all eligibility requirements are met, or it may require submittal of a complete application followed by issuance of a Notice of Coverage by the Commissioner. Table 3.1 of the 2026 General Permit (and provided below) summarizes the application requirements and associated fees for discharge categories that require an application.

Table 3.1 of the 2026 General Permit - Summary of Application Requirements and Application Fees

Discharge Category	Discharge Location	Maximum Daily Flow (gpd)	Application Fee
Non-Contact Cooling Water	Surface Water	500,000	$1250
	Ground Water	Greater than 5,000	$1250
Geothermal Heat Pump Water	Surface Water	500,000	$1250
	Ground Water	Greater than 5,000	$1250
Boiler Blowdown	Ground Water	Greater than 5,000	$1250
Hydrostatic Pressure Testing Water	Surface & Ground Water	500,000	$1250
Water Treatment Wastewater	Surface Water	2,000,000	$1250
	Ground Water	Greater than 500	$1250

5.2 Wastewater Screening

Wastewater screening is required for emerging contaminants and for any pollutants that may be toxic, hazardous, or otherwise detrimental to the designated uses of the receiving watercourse under Connecticut's Water Quality Standards, when such contaminants or pollutants are reasonably known to be present or to have been handled, stored, released, or disposed of at the site where the wastewater originates. The existing requirements to screen water treatment plant wastewater and noncontact cooling water for nitrogen, phosphorus, or bacteria have been revised.

5.3 Professional Certifications

Professional certifications from a Qualified Professional, as defined in the general permit, remain required for all applications.

5.4 Modifications to Notice of Coverage

If a permittee with an existing authorization under this general permit seeks to modify the conditions or numeric effluent limits of the approved discharge, a new application form must be submitted to DEEP prior to the modification occurring. If the modification is approvable, the permittee must obtain a new Notice of Coverage from DEEP prior to any expansion, alteration, or modification that may result in:

- a change in the nature of the activity generating the discharge;
- the introduction of a new source of discharge;
- the introduction of a pollutant not previously present in the discharge at the time of application;
- an increase in maximum daily flow; or
- relocation of the discharge to a different receiving water.

A Notice of Change, as outlined in Section 3.5 of the general permit, is used to correct inaccurate or misleading information, submit required discharge screening analyses under Section 3.4.7 at the initiation of a discharge, update contact information, or revise the wastewater description.

Modifications to treatment systems that are made to meet the terms and conditions of the general permit do not require prior DEEP approval, provided the permittee remains in full compliance with the permit. However, the permittee must notify the Commissioner at least 30 days before altering their wastewater collection or treatment system or changing their method of operation, as specified in Section 3 of the general permit.

5.5 Termination of Discharge

Permittees required to submit an application under this general permit must file a Notice of Termination with the Commissioner, using the prescribed form, within 14 days after the discharge has ceased.

Section 6.0 Pollutants of Concern Identified for Industrial Categories Covered Under the General Permit

6.1 Temperature

Temperature is a key physicochemical parameter influencing dissolved oxygen levels, metabolic rates, reproduction, and survival of aquatic organisms. Thermal enrichment from noncontact cooling water and geothermal heat pump systems can alter receiving water temperature regimes, potentially exceeding biological tolerance thresholds and impairing designated uses.
The 2026 General Permit therefore continues to require temperature monitoring to ensure compliance with applicable thermal criteria and to protect aquatic life and ecosystem function.

6.2 pH

Effluent pH strongly affects chemical speciation, bioavailability, and toxicity of many pollutants, including metals and ammonia. The retained effluent limitation of 6.0–9.0 standard units reflects the scientifically supported range necessary to maintain biological integrity and avoid solubilization of toxic metals in receiving waters. Maintaining pH within this range protects both human health and aquatic ecosystems, consistent with Connecticut's Water Quality Standards.

6.3 Total Suspended Solids (TSS)

TSS influences turbidity, light penetration, sedimentation, and the transport of particle-bound contaminants. In noncontact cooling water, TSS forms through the precipitation of hardness constituents (e.g., Ca^{2+}, Mg^{2+}) when water is heated; in water treatment residuals, TSS reflects particulates removed from the potable water supply.

The 2026 General Permit retains the 20 mg/L instantaneous maximum TSS limit for surface-water discharges to prevent sedimentation, smothering of benthic habitat, and pollutant transport. Groundwater discharges are not assigned a TSS limit due to rapid filtration and adsorption processes within subsurface soils. These natural attenuation processes protect groundwater quality and prevent migration of suspended particulates.

6.4 Metals

Metals included in the numeric effluent limit tables pose toxicity risks at relatively low concentrations, depending on oxidation state, speciation, and water chemistry (e.g., hardness, pH). Monitoring requirements remain in place to characterize treatment performance and pollutant partitioning and to ensure protection of both human health (e.g., drinking water pathways) and aquatic life.

6.5 Aluminum

Aluminum is widely used in coagulation processes and frequently occurs in drinking water treatment residuals. Aluminum toxicity to aquatic life is strongly dependent on pH, dissolved organic carbon, and hardness. Elevated concentrations can impair fish gill function, disrupt ion regulation, and cause acute toxicity in sensitive species.

The 2026 General Permit maintains aluminum monitoring and limits where applicable. EPA's 2018

updates to the Clean Water Act §304(a) recommended aquatic life criteria acknowledge the complex water chemistry governing aluminum solubility and toxicity. DEEP continues to collect data to support development of Connecticut-specific aluminum criteria, ensuring adequate protection of aquatic ecosystems.

6.6 Manganese

Manganese occurs naturally in Connecticut groundwater and may appear in wastewater from groundwater-derived systems. While manganese is an essential nutrient, elevated concentrations can pose risks including neurotoxicity (primarily via drinking water ingestion) and aesthetic or operational issues (staining, deposition). Monitoring ensures concentrations discharged to the environment do not accumulate in surface water or groundwater at levels of concern for human or ecological receptors.

6.7 Iron

Iron is abundant in groundwater and may also enter wastewater through use of iron-based coagulants. The 3.0 mg/L effluent limit is retained to prevent aesthetic impacts, ecological toxicity associated with iron hydroxide deposition, and interference with drinking water supply operations. Iron and manganese may occur in multiple physicochemical forms (colloidal, ferrous, chelated). Treatment requires: coagulation/flocculation for colloidal particles, oxidation (e.g., aeration, chlorine, permanganate) for soluble or complexed species, followed by precipitation and solids separation. pH manipulation is often critical to optimize hydroxide formation and ensure treatment efficacy.

6.8 Copper and Lead

Copper and lead primarily originate from corrosion and leaching of plumbing systems and distribution components. Copper toxicity affects fish olfactory function, behavior, and survival at low concentrations. Lead is a neurotoxin with no known safe level of exposure for humans, particularly children.

Leaching potential increases under low-pH or low-alkalinity conditions. For this reason, drinking water systems commonly add alkaline agents (e.g., sodium hydroxide, lime) to maintain non-corrosive conditions. Copper may also enter wastewater through copper-based algaecide use in surface water reservoirs. Boiler blowdown, a potential source of elevated copper and lead, is restricted to groundwater discharge only, where soil contact reduces mobility through adsorption and precipitation.

6.9 Zinc

Zinc enters water through corrosion of galvanized materials and dissolution under high dissolved solids or chloride conditions. Although an essential trace element, zinc exhibits aquatic toxicity at elevated concentrations and can impair fish gill function and invertebrate reproduction.

Zinc orthophosphate, commonly used as a corrosion inhibitor, plays an important role in minimizing lead leaching and thus indirectly supports human health protection. Monitoring is maintained to ensure zinc discharges remain below levels that may cause ecological harm.

6.10 Total Residual Chlorine (TRC)

Chlorine is applied as a disinfectant in drinking water systems to control pathogens; the Maximum Residual Disinfectant Level (MRDL) established by EPA is 4 mg/L. However, chlorine is acutely toxic to aquatic organisms at concentrations several orders of magnitude lower than those used for disinfection. Even short-term exposures can cause mortality in fish and invertebrates due to oxidative damage to gill and cellular tissues.

In groundwater, there can be the formation of Chlorinated By-products (including Disinfection By-Products (DBP)). When chlorine reacts with natural organic matter or reduced minerals in soil and groundwater, it can form:

- Chlorinated organics (e.g., chloroform, chlorinated acids)
- Haloacetic acids (HAAs)
- Trihalomethanes (THMs)

Some of these compounds are: carcinogenic (e.g., chloroform), persistent and mobile in groundwater and toxic to aquatic and human receptors. While reaction rates and formation potential depend on local geochemistry, formation of DBPs is a recognized risk when chlorine contacts organic carbon sources. The general permit therefore requires complete dechlorination prior to discharge to either surface or ground water to prevent toxicity and ensure compliance with Connecticut's Water Quality Standards.

6.11 Arsenic

Arsenic is a naturally occurring metalloid and a Class A human carcinogen. Drinking water treatment systems use coagulation, adsorption, ion exchange, and membrane filtration to remove arsenic from source waters, resulting in residuals that may contain elevated arsenic concentrations. Monitoring ensures that discharges containing arsenic do not adversely impact groundwater used for drinking water supply, do not accumulate in sediments, and do not pose chronic toxicity risks to aquatic life.

Section 7.0 Technology Based Effluent Limitations

Technology-based treatment requirements represent the minimum level of control that must be imposed under CWA § 301(b) and 402 to meet best practicable control technology currently available ("BPT") for conventional pollutants and some metals, best conventional control technology ("BCT") for conventional pollutants, and best available technology economically achievable ("BAT") for toxic and non-conventional pollutants. *See* 40 CFR § 125 Subpart A and RCSA Section 22a-430-4(l)(4)(A).

Subpart A of 40 CFR § 125 establishes criteria and standards for the imposition of technology-based treatment requirements in permits under § 301(b) of the CWA, including the application of EPA promulgated Effluent Limitation Guidelines ("ELGs") and case-by-case determinations of effluent limitations under CWA § 402(a)(1). EPA promulgates New Source Performance Standards (NSPS) under CWA § 306 and 40 CFR § 401.12. *See also* 40 CFR § 122.2 (definition of "new source") and 122.29. In the absence of published technology-based effluent guidelines, the permit writer is authorized under CWA § 402(a)(1)(B) and RCSA Section 22a-430-4(m) to establish effluent limitations on a case-by-case basis using best professional judgment ("BPJ").

Section 8.0 Reasonable Potential Analysis and Water Quality Based Effluent Limits Calculation

Pursuant to CWA § 301(b)(1)(C) and 40 CFR § 122.44(d)(1), NPDES permits must contain any requirements in addition to Technology-Based Effluent Limits ("TBELs") that are necessary to achieve water quality standards established under § 303 of the CWA. *See also* 33 U.S.C. § 1311(b)(1)(C). In addition, limitations "must control any pollutant or pollutant parameter (conventional, non-conventional, or toxic) which the permitting authority determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard, including State narrative criteria for water quality." *See* 40 CFR § 122.44(d)(1)(i).

To determine if the discharge causes, or has the reasonable potential to cause, or contribute to an excursion above any water quality standard (WQS), EPA considers: 1) existing controls on point and non-point sources of pollution; 2) the variability of the pollutant or pollutant parameter in the effluent; 3) the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity); and 4) where appropriate, the dilution of the effluent by the receiving water. *See* 40 CFR § 122.44(d)(1)(ii).

If the permitting authority determines that the discharge of a pollutant will cause, has the reasonable potential to cause, or contribute to an excursion above WQSs, the permit must contain Water Quality Based Effluent Limits ("WQBELs") or require additional monitoring if there is insufficient data to develop a WQBEL, for that pollutant. *See* 40 CFR § 122.44(d)(1)(i).

8.1 Calculation of Numeric Water Quality Effluent Limits

During development of the 2026 general permit, DEEP conducted a comprehensive technical evaluation of available effluent data, including Discharge Monitoring Reports (DMRs) submitted by permittees since 2018. For discharges of noncontact cooling water and water treatment wastewater to surface waters, the dataset was sufficient to support Reasonable Potential Analyses (RPAs) to determine whether pollutants have the potential to exceed applicable Water Quality Standards and therefore require Water Quality–Based Effluent Limits (WQBELs).

Due to limited long-term and high-frequency data for several pollutants in both the 2018 and 2026 General Permit data sets, the Average Monthly Limit (AML) calculated through RPA was applied as the Instantaneous Maximum Effluent Limit in the general permit. This approach provides a conservative and protective numeric limit in situations where data availability is insufficient to derive statistically robust, multi-tier limits (AML and Maximum Daily Limit). Applying the AML as the instantaneous maximum ensures protection of both human health and aquatic life by preventing short-duration exceedances that may otherwise go unregulated.

Results of the 2026 RPA yielded effluent limits that are generally consistent with those established under the 2018 General Permit, indicating similar pollutant variability and environmental loading potential across the two permitting cycles. This alignment supports the scientific validity and continuity of DEEP's water quality–based permitting framework.

Evaluation of Whole Effluent Toxicity ("WET") data found mean No Observed Adverse Effect Level ("NOAEL") in undiluted samples at 94% for *Daphnia pulex* and 98% for *Pimephales promelas* with median values of 100%. Based on this information, DEEP determined that the permit conditions and numeric and narrative effluent limits of the general permit continue to be protective of the waters of the state and therefore the most stringent values are carried forward from the previous permit.

8.1.1 Effluent Limits for Surface Water Discharges

The permit includes permit limits and conditions to meet all applicable narrative and numeric water quality standards, criteria and associated policies contained in Section 22a-426 of the RCSA, Connecticut Water Quality Standards. Numeric WQBEL were calculated for all parameters with an instream water quality criteria. Each parameter was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria, considering the IWC. These parameters and limits are included in the numeric effluent limits tables of the general permit based on instream waste concentration.

8.1.2 Whole Effluent Toxicity

Discharges of noncontact cooling water or water treatment wastewater to surface water must monitor and meet whole WET limits at a frequency based on maximum daily discharge flow. WET testing shall be performed in accordance with Appendix B of the general permit. Acute aquatic toxicity monitoring shall be performed using the NOAEL protocol specified in section 22a-430- 3(j)(7)(A) of the RCSA and as prescribed in the reference document *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA-821- R-02-012), or the most current version, with any exceptions or clarifications noted in Appendix B of the general permit or prescribed by the Commissioner.

Section 9.0 Changes to Each Industrial Category

Below is a summary of parameters included in this general permit and any changes made to permit limits from the previous iterations of the permit.

9.1 Non-Contact Cooling and Geothermal Heat Pump Discharges to Surface Water

The 2026 General Permit defines "Non-contact cooling" as "wastewater which has been used for cooling purposes, does not come into direct contact with a product or process, and has a maximum daily flow of no greater than 500,000 gallons per day. This definition does not include air compressor condensate or blowdown from boiler equipment."

The 2026 General Permit defines a "Geothermal heat pump" as "a central heating and/or cooling system that transfers heat to or from ground water." The wastewater produced is the wastewater after the pump has transferred the heat to or from the ground water. Non-contact cooling water and geothermal heat pump water are combined in this section because the effluent characteristics of the two wastewaters are generally similar in nature and same conditions apply to both categories of wastewater.

The general permit contains conditions and prohibitions for non-contact cooling water and geothermal heat pump water discharges to surface water. The discharge must be solely comprised of once-through heat exchange system water to which no chemicals have been added for water conditioning. The source of the water can be uncontaminated ground water, a public source (often referred to as city water), or a surface water (preferably flowing sources such as a river or stream). The use of contaminated source water is prohibited.

9.1.1 Numeric Effluent Limits

Noncontact cooling water or geothermal heat pump water may be discharged to surface water if the discharge complies with the following permit conditions and limits in Tables 5.1.2.1 and 5.1.2.2 of the 2026 General Permit and provided below.

Table 5.1.2.1. Instantaneous Maximum Effluent Limit or Range for Discharges of Noncontact Cooling Water or Geothermal Heat Pump Water to Surface Water

Parameter	Limit	Unit	Permit Limit Development
Flow	500,000	gpd	Limited by definition of noncontact cooling water
pH[1]	6.0 – 9.0	s.u.	WQBEL Carried forward from current permit
Acute Aquatic Toxicity, *Daphnia pulex* (freshwater)[2,3]	≥90[2,3]	percent	WQBEL Carried forward from current permit
Acute Aquatic Toxicity, *Pimephales promelas* (freshwater)[2,3]	≥90[2,3]	percent	WQBEL Carried forward from current permit
Acute Aquatic Toxicity, *Mysidopsis bahia*	≥90[2,3]	percent	WQBEL Carried forward from current permit

Parameter	Limit	Unit	Permit Limit Development
(marine & estuarine)[2,3]			
Acute Aquatic Toxicity, *Menidia beryllina* (marine & estuarine)[2,3]	≥90[2,3]	percent	WQBEL Carried forward from current permit
Oil & Grease, Non-polar Material	5.0	mg/L	TBEL Carried forward from current permit
Iron, total	3.0	mg/L	TBEL Carried forward from current permit
Total Phosphorus	Monitor	mg/L	
Total Suspended Solids	20	mg/L	TBEL Carried forward from current permit
Temperature (marine & estuarine)[4]	83	°F	WQBEL Carried forward from current permit
Temperature (freshwater)[4]	85	°F	WQBEL Carried forward from current permit

Footnotes:

[1] The pH of the discharge shall not be less than 6.0 or more than 9.0 S.U.

[2] The results of the aquatic toxicity tests should be reported as percent survival of an undiluted sample in the effluent. See Appendix B for Whole Effluent Toxicity (WET) guidance and table.

[3] For aquatic toxicity, discharges to marine and estuarine waters shall perform the aquatic toxicity test using *Mysidopsis bahia* and *Menidia beryllina* and discharges to freshwater water shall use *Daphnia pulex* and *Pimephales promelas* species.

[4] Discharges to marine and estuarine waters shall not exceed 83°F and discharges to freshwater shall not exceed 85°F.

Table 5.1.2.2. Instantaneous Maximum Effluent Limits for Discharges of Non-contact Cooling Water or Geothermal Heat Pump Water to Surface Water by Instream Waste Concentration

Parameter		Instream Waste Concentration [1]								
	Reservoir & Lake	<1%	1 to 5%	>5% to 20%	>20% to 40%	>40% to 70%	>70% to 100%	Inter-mittent Discharge	Units	Permit Limit Development
Aluminum, total	1.5	1.50	1.41	0.36	0.18	0.10	0.071	1.5	mg/L	WQBEL calculated using RPA
Manganese, total	3.0	3.00	1.53	0.38	0.19	0.11	0.077	3.0	mg/L	WQBEL calculated using RPA
Copper, total[2] (Freshwater)	0.105	0.48	0.095	0.037	0.019	0.011	0.0075	0.12	mg/L	WQBEL calculated using RPA
Copper, total[3] (Est., Marine)	---	0.39	0.079	0.02	0.0098	0.0056	0.0039	0.039	mg/L	WQBEL calculated using RPA
Lead, total	0.048	0.098	0.020	0.0049	0.0025	0.0014	0.00098	0.15	mg/L	WQBEL calculated using RPA
Zinc, total	0.29	2.00	0.64	0.16	0.081	0.046	0.032	0.32	mg/L	WQBEL calculated using RPA
Total Residual Chlorine[2] (Freshwater)	0.085	0.90	0.180	0.045	0.023	0.013	0.009	0.05	mg/L	WQBEL calculated using RPA
Total Residual Chlorine[3] (Estuarine, Marine)	---	0.61	0.12	0.031	0.015	0.0088	0.0061	0.039	mg/L	WQBEL calculated using RPA

Footnotes:

[1] The Instream Waste Concentration shall be calculated by dividing the maximum gallon/hr flow of the discharge by the sum of the maximum gallon/hr flow of the discharge and the seven-day ten-year low flow (7Q10) of the receiving stream and multiplying the result by 100.

[2] If discharge is to freshwater, these limits apply.

[3] If discharge is to estuarine or marine water, these limits apply.

9.2. Non-Contact Cooling and Geothermal Heat Pump Discharges to Ground Water

The general permit contains conditions and prohibitions for non-contact cooling water and geothermal heat pump water discharges to ground water. The discharge must be comprised of once-through heat exchange system water to which no chemicals have been added for water conditioning. The source of the water can be uncontaminated ground water, a public source (often referred to as city water), or a surface water (preferably flowing sources such as a river or stream). The use of contaminated source water is prohibited.

9.2.1. Numeric Effluent Limits

Noncontact cooling water or geothermal heat pump water may be land applied to the ground, to a subsurface disposal system, or an infiltration basin provided the discharge complies with the limits in Table 5.2.2.1 of the 2026 General Permit and provided below:

Table 5.2.2.1 — Maximum Limits for Discharges of Noncontact Cooling Water or Geothermal Heat Pump Water to Ground Water

Parameter	Maximum Limit	Unit	Permit Limit Development
Flow	500,000	gpd	Limited by definition of noncontact cooling water
pH	6.0 – 9.0	S.U.	WQBEL Carried forward from current permit
Lead, total	0.01	mg/L	EPA Drinking Water Action Level
Aluminum, total	1.5	mg/L	WQBEL Carried forward from current permit
Iron, total	3.0	mg/L	TBEL Carried forward from current permit
Manganese, total	3.0	mg/L	TBEL Carried forward from current permit
Copper, total	1.3	mg/L	EPA Drinking Water Action Level
Temperature	Monitor	°F	NA
Zinc, total	Monitor	mg/L	NA

9.3. Petroleum and Natural Gas Hydrostatic Pressure Testing Discharges to Surface Water

The 2026 General Permit defines "Hydrostatic pressure testing" as "waters used to test the structural integrity of new tanks and pipelines, and tanks and pipelines which have been used to hold or transfer drinking water, sewage, petroleum, or natural gas." This general permit specifies petroleum and natural gas tanks because these tanks represent the majority of tanks tested and the petroleum-based pollutants that could be present in the tank pose a greater environmental risk than tanks holding just water or sewage. Water is used to test the structural integrity of the tanks before placing the tank back into service because, if a leak is found, it is much easier and less expensive to discharge just the wastewater rather than empty and temporarily store the product the tank might have been holding.

Conditions for the discharge of petroleum and natural gas hydrostatic pressure testing discharges to surface water include common requirements pertaining to aesthetics, toxicity, temperature, and a prohibition against the use of toxic chemicals listed in the Regulations of Connecticut State Agencies.

Unique to the petroleum and natural gas hydrostatic testing category are requirements for a thorough cleaning of the interior of tanks and pipelines prior to any hydrostatic pressure testing. Options to clean include compressed air, pressure washing, a combination of the two or any technique that will reduce pollutants from entering the hydrostatic testing water. Wastewaters generated from those cleaning procedures are not authorized to be discharged by this general permit and must be collected for off-site transport and disposal by a licensed waste transporter.

Best management practices such as check dams, or temporary basins must be employed to prevent erosion and any visible discoloration and foaming of the receiving water. An additional requirement included the intake point of the pipe used to draw the test water from the surface water to be located at a depth which minimizes the entrainment of sediments.

9.3.1 Numeric Effluent Limits

Hydrostatic pressure testing wastewater may be discharged to surface water if the discharge complies with the following permit conditions and limits in Tables 6.1.2.1 and 6.1.2.2 of the 2026 General Permit and provided below.

Table 6.1.2.1. Instantaneous Maximum Effluent Limit or Range for Petroleum and Natural Gas Hydrostatic Pressure Testing Discharges to Surface Water

Parameter	Limit	Unit	Permit Limit Development
Flow	500,000	gpd	NA
pH	6.0 – 9.0	S.U.	WQBEL Carried forward from current permit
Oil & Grease, Non-polar Material	5.0	mg/L	WQBEL Carried forward from current permit
Iron, total	3.0	mg/L	TBEL Carried forward from current permit

Parameter	Limit	Unit	Permit Limit Development
Total Suspended Solids	45	mg/L	TBEL Carried forward from current permit
Footnotes: [1] The pH of the discharge shall not be less than 6.0 or more than 9.0 S.U.			

Table 6.1.2.2. Instantaneous Maximum Effluent Limits for Discharges of Petroleum and Natural Gas Hydrostatic Pressure Testing Water to Surface Water by Instream Waste Concentration

Parameter		Instream Waste Concentration (1)								
	Reservoir & Lake	<1%	1 to 5%	>5% to 20%	>20% to 40%	>40% to 70%	>70% to 100%	Inter-mittent Discharge	Units	Permit Limit Development
Aluminum, total	1.5	1.50	1.41	0.36	0.18	0.10	0.071	1.5	mg/L	WQBEL calculated using RPA
Manganese, total	3.0	3.00	1.53	0.38	0.19	0.11	0.077	3.0	mg/L	WQBEL calculated using RPA
Copper, total[2] (Freshwater)	0.105	0.48	0.095	0.037	0.019	0.011	0.0075	0.12	mg/L	WQBEL calculated using RPA
Copper, total[3] (Estuarine, Marine)	---	0.39	0.079	0.02	0.0098	0.0056	0.0039	0.039	mg/L	WQBEL calculated using RPA
Lead, total	0.048	0.098	0.020	0.0049	0.0025	0.0014	0.00098	0.15	mg/L	WQBEL calculated using RPA
Zinc, total	0.29	2.00	0.64	0.16	0.081	0.046	0.032	0.32	mg/L	WQBEL calculated using RPA
Total Residual Chlorine[2] (Freshwater)	0.085	0.90	0.180	0.045	0.023	0.013	0.009	0.05	mg/L	WQBEL calculated using RPA
Total Residual Chlorine[3] (Estuarine, Marine)	---	0.61	0.12	0.031	0.015	0.0088	0.0061	0.039	mg/L	WQBEL calculated using RPA

Parameter		Instream Waste Concentration (1)								
	Reservoir & Lake	<1%	1 to 5%	>5% to 20%	>20% to 40%	>40% to 70%	>70% to 100%	Inter-mittent Discharge	Units	Permit Limit Development
Footnotes: [1] The Instream Waste Concentration shall be calculated by dividing the maximum gallon/hr flow of the discharge by the sum of the maximum gallon/hr flow of the discharge and the seven-day ten-year low flow (7Q10) of the receiving stream and multiplying the result by 100. [2]If discharge is to freshwater, these limits apply. [3]If discharge is to estuarine or marine water, these limits apply.										

9.4. Petroleum and Natural Gas Hydrostatic Pressure Testing Discharges to Ground Water

Conditions for the discharge of petroleum and natural gas hydrostatic pressure testing discharges to ground water include common requirements pertaining to aesthetics, toxicity, temperature, and a prohibition against the use of toxic chemicals listed in the Regulations of Connecticut State Agencies.

Unique to the petroleum and natural gas hydrostatic testing category are requirements for a thorough cleaning of the interior of tanks and pipelines prior to any hydrostatic pressure testing. Options to clean include compressed air, pressure washing, a combination of the two or any technique that will reduce pollutants from entering the hydrostatic testing water. Wastewaters generated from those cleaning procedures are not authorized to be discharged by this general permit and must be collected for off-site transport and disposal by a licensed waste transporter.

Best management practices such as check dams or temporary basins must be employed to prevent erosion and any visible discoloration and foaming of the receiving water. An additional condition requires the intake point of the pipe used to draw the test water from the surface water to be located at a depth which minimizes the entrainment of sediments.

9.4.1 Numeric Effluent Limits

Hydrostatic pressure testing wastewater may be discharged to ground water if the discharge complies with the following permit conditions and limits in Table 6.2.2.1 of the 2026 General Permit and provided below.

Table 6.2.2.1 — Maximum Limits for Petroleum and Natural Gas Hydrostatic Pressure Testing Wastewater Discharges to Ground Water\

Parameter	Maximum Limit	Unit	Permit Limit Development
Flow	500,000	gpd	NA
Temperature	Report	°F	NA

Parameter	Maximum Limit	Unit	Permit Limit Development
pH	6.0 – 9.0	S.U.	WQBEL Carried forward from current permit
Oil & Grease, Non-polar Material	5.0	mg/L	TBEL Carried forward from current permit
Aluminum, total	1.5	mg/L	TBEL Carried forward from current permit
Copper, total	1.3	mg/L	EPA Drinking Water Action Level
Iron, total	3.0	mg/L	TBEL Carried forward from current permit
Lead, total	0.01	mg/L	EPA Drinking Water Action Level
Manganese, total	3.0	mg/L	TBEL Carried forward from current permit
Zinc, total	Report	mg/L	NA

9.5. Fire Suppression System Testing Discharges to Surface Water

The 2026 General Permit defines "Fire suppression system testing" as "wastewater generated by the testing or maintenance of a fire sprinkler or suppression system and does not include foams or other fire-fighting additives."

The 2018 General Permit provided the first permit authorization of these discharges and separated fire suppression system testing wastewater and hydrant flushing wastewater as distinct categories. The 2026 General Permit maintains that separation. The water quality of fire suppression system testing discharges can often be far worse aesthetically and qualitatively than hydrant flushing discharges. Fire suppression water has often been contained in a facilities fire suppression system for an extended period of time. During this period, this stagnant water can harbor bacteria and microbial growth that could be harmful to humans who comes in contact with it. The water can also accumulate metals such as iron, copper, and lead from pipe corrosion, as well as debris, sediment, and treatment chemicals (like corrosion inhibitors or antifreeze additives). Discharging it directly to surface water can introduce these pollutants, harming aquatic organisms, altering habitat chemistry, and violating water quality regulations. Instead, it should be captured, treated, or directed to a sanitary sewer for proper handling.

Conversely, hydrant flushing water comes from an active water distribution system meaning it has

already been treated to meet stringent drinking water standards for pathogens, metals, and other contaminants. The only volume of water that might remain stagnant between hydrant flushings is the water that might get locked up in the hydrant column. Unlike stagnant water in fire suppression systems, it is fresh, chlorinated, and generally free of harmful substances. When discharged, the small residual chlorine rapidly dissipates, and because the water is clean, it poses minimal risk to aquatic life or water quality. This makes surface water discharge acceptable in most cases, provided flows are managed to prevent erosion or physical disturbance.

Conditions for the discharge of fire suppression system testing discharges to surface water include discharge to a surface water only if a discharge to a municipal sanitary sewer, a subsurface disposal system, or land application to the ground surface are not available as options.

The 2026 General Permit also requires controls as necessary to remove accumulated solids from the discharge and to prevent erosion, sedimentation, visible discoloration, and foaming of the receiving water body. The 2026 General Permit also requires energy dissipation to prevent erosion and scouring.

9.6. Fire Suppression System Testing Discharges to Ground Water

Conditions for the discharge of fire suppression system testing discharges to ground water include erosion and sediment controls and structural practices to divert flows away from exposed soils and limit the discharge of pollutants from the site into surface waters. The general permit requires that all steps be taken to avoid land applying the discharge to the ground when the ground surface is frozen. Table 7.2.1.2 of the 2026 General Permit also prescribes varying minimum horizontal separating distances from private or public water supply wells based on the withdrawal rate of the well to prevent contamination of the well from the fire suppression discharge.

9.7 Hydrant Flushing Wastewater Discharges to Surface Water

The 2026 General Permit defines "Hydrant flushing wastewater" as "waters generated from the flushing of hydrants in order to remove accumulated rust and sediment from the pipes and water mains, assess water flow and pressure and to examine conditions of the water distribution system to determine any needed improvements."

Like fire suppression discharges, hydrant flushing discharges can only be directed to a surface water if discharge to a municipal sanitary sewer or to a subsurface disposal system or land application to the ground surface are not available as options.

The 2026 General Permit also requires controls as necessary to remove accumulated solids from the discharge and to prevent erosion, sedimentation, visible discoloration, and foaming of the receiving water body. Because hydrant flushing is a high pressure, high volume discharge of water, the 2026 General Permit also requires energy dissipation to prevent erosion and scouring.

Whereas the amount of residual chlorine in fire suppression testing water might be low because the water has remained stagnant in the pipes for a long period of time, residual chlorine in hydrant flushing water is at a higher level. The 2026 General Permit suggests maximizing the travel time of the water over the ground or along paved surfaces to dissipate the chlorine.

The 2026 General Permit requires the Permittee undertaking the hydrant flushing to train their employees in standard operating procedures to ensure the employees are familiar with the requirements of this general permit and the procedures to minimize erosion, dissipate energy, and reduce chlorine in the hydrant flushing wastewater discharge.

9.8 Hydrant Flushing Discharges to Ground Water

Hydrant flushing Best Management Practices for discharges to ground water require erosion and sediment controls and structural practices to divert flows away from exposed soils and prevent the discharge from flowing off the discharger's property or into surface waters. The 2026 General Permit also requires that all steps must be taken to avoid land applying to the ground when the ground surface is frozen.

Table 8.2.1 of the 2026 General Permit also prescribes varying minimum horizontal separating distances from private or public water supply wells based on the withdrawal rate of the well to prevent contamination of the well from the hydrant flushing discharge.

9.9. Boiler Blowdown Discharges to Ground Water

The 2026 General Permit defines "boiler blowdown" as "wastewater resulting from periodic or continuous bleed off or draining of bottom, bulk or surface water from a boiler during boiler operation for the purpose of eliminating excess solids from the boiler water and shall include steam condensate from boiler operations but does not include boil-out or boiler acid cleaning wastewater."

Conditions for the discharge of boiler blowdown discharges to ground water include authorization only for boiler blowdown discharges from boiler water to which chemicals are not added and a requirement that all boiler blowdown discharges be directed to an engineered subsurface disposal system. Discharges of boiler blowdown wastewaters can only be discharged to ground water that has an existing or future Water Quality Classification of GB or GC in the Connecticut Water Quality Standards. Boil-out and boiler acid wastewaters must be permitted separately or collected by a waste transporter holding a valid license issued by the Commissioner for that purpose.

9.9.1 Numeric Effluent Limits

Boiler blowdown wastewaters may be discharged to ground water if the discharge complies with the following permit conditions and limits in Tables 9.1.2.1 of the 2026 General Permit and provided below:

Table 9.1.2.1. Instantaneous Maximum Limits for Boiler Blowdown Discharges to Ground Water

Parameter	Maximum Limit	Unit	Permit Limit Development
Flow	50,000	gpd	NA
Temperature	Monitor	°F	NA
pH	6.0 – 9.0	S.U.	WQBEL Carried forward from current permit
Copper, total	1.3	mg/L	EPA Drinking Water Action Level
Iron, total	3.0	mg/L	TBEL Carried forward from current permit
Lead, total	0.01	mg/L	EPA Drinking Water Action Level
Zinc, total	Monitor	mg/L	NA

9.10. Pressure Washing Discharges to Surface Water

Pressure wash wastewater is a new category of discharge in the 2026 General Permit. The 2026 General Permit defines "pressure washing" as the hydraulic cleaning of structures and other hard surfaces, including but not limited to masonry, metals and concrete, without the use of chemical or biological agents. Most often used in washing dirt, graffiti or oily or atmospheric deposits from the exterior of buildings, cooling towers, bridges, sidewalks or gas station pads, this definition does not include the washing of vehicles, trailers or tank interiors or the chemical stripping of paint.

Conditions for the discharge of pressure washing wastewater to surface water contain common requirements pertaining to aesthetics, toxicity, temperature, and a prohibition against the use of toxic chemicals listed in the Regulations of Connecticut State Agencies. Additional conditions prohibit the use of cleaners, detergents, chemical or biological additives to the pressure wash water. A condition also prohibits the discharge of pressure washing wastewater used for the chemical and/or mechanical stripping of paint, other than graffiti removal, including the pressure washing of boat bottom hulls or other surfaces that are painted with an anti-fouling paint.

9.11. Pressure Washing Wastewater Discharges to Ground Water

Conditions for the discharge of pressure washing wastewater to ground water are similar to those for discharge to surface water. To begin, all discharges of pressure washing wastewater must be land applied to a pervious ground surface without runoff to storm drains or surface water bodies. To achieve this, all storm drains in the vicinity of the pressure washing operation must be obstructed in a manner which ensures that no pressure washing wastewater reaches any storm drain or surface water

body. Other conditions contain common requirements pertaining to aesthetics, toxicity, temperature, and a prohibition against the use of toxic chemicals listed in the Regulations of Connecticut State Agencies. Additional conditions prohibit the use of cleaners, detergents, chemical or biological additives to the pressure wash water. A condition also prohibits the discharge of pressure washing wastewater used for the chemical and/or mechanical stripping of paint, other than graffiti removal, including the pressure washing of boat bottom hulls or other surfaces that are painted with an anti-fouling paint. Dischargers must ensure that all discharges do not impact any drinking water wells.

9.12. Water Treatment Wastewater Discharges to Surface Water

The 2026 General Permit defines "water treatment wastewater" as wastewaters generated by a well or water treatment facility used to produce water supplies for potable or industrial process use, including but not limited to wastewaters from the following:

- clarifier tank sludge blowdown;
- clarifier tank supernatant;
- facility and equipment cleaning rinsewaters, excluding rinsewaters generated by the rinse out of containers used to store any chemical for which an effluent limit is not specified in this general permit;
- activated carbon and filter media backwash, including filter to waste, and regeneration wastewaters;
- raw or treated water from equipment leakage and bleed-off;
- mechanical and non-mechanical sludge dewatering wastewaters;
- infiltration bed and settling lagoon wastewaters;
- raw or treated water from process sampling points and on-line process analytical instrumentation;
- designed overflows from storage tanks and other WTW facilities resulting from emergency conditions and routine maintenance;
- potable water system maintenance or sampling wastewaters;
- start-up wastewaters for water treatment plants, facilities or equipment which commenced operation after the date of issuance of this general permit;
- ion exchange regeneration wastewaters;
- reverse osmosis reject water;
- laboratory wastewaters, and
- Low flow water treatment wastewater.

The general permit contains conditions for water treatment plant wastewater discharges to surface water. The conditions common to most categories in the general permit that discharge to surface water include requirements related to aesthetic concerns, toxicity, temperature, and floor drains. The maximum daily discharge limit for water treatment plant wastewater to surface water has been expanded to 2,000,000 gallons per day along with protective effluent limits. The permit requires solids removal before discharge for certain types of water treatment plant wastewater to achieve the 20.0 mg/L effluent limit.

9.12.1 Numeric Effluent Limits

Water treatment plant wastewater may be discharged to surface water if the discharge complies with the following permit conditions and limits in Tables 11.1.3.1 and 11.1.3.2 of the 2026 General Permit and provided below.

Table 11.1.3.1. Instantaneous Maximum Effluent Limit or Range for Discharges of Water Treatment Plant Wastewater to Surface Water

Parameter	Limit	Unit	Permit Limit Development
Flow	2,000,000	gpd	NA
pH[1]	6.0 – 9.0	S.U.	WQBEL Carried forward from current permit
Acute Aquatic Toxicity, *Daphnia* pulex (freshwater)[2,3]	≥90[2,3]	percent	WQBEL Carried forward from current permit
Acute Aquatic Toxicity, *Pimephales promelas* (freshwater)[2,3]	≥90[2,3]	percent	WQBEL Carried forward from current permit
Acute Aquatic Toxicity, *Mysidopsis bahia* (marine & estuarine)[2,3]	≥90[2,3]	percent	WQBEL Carried forward from current permit
Acute Aquatic Toxicity, *Menidia beryllina* (marine & estuarine)[2,3]	≥90[2,3]	percent	WQBEL Carried forward from current permit
Iron, total	3.0	mg/L	TBEL Carried forward from current permit
PFAS Analytes[4]	Monitor	Ng/L	NA
Total Suspended Solids	20 mg/L	mg/L	TBEL Carried forward from current permit
Total Dissolved Solids	Monitor	mg/L	NA

Footnotes:

[1] The pH of the discharge shall not be less than 6.0 or more than 9.0 S.U.

[2] The results of the aquatic toxicity tests should be reported as percent survival in an undiluted sample of the effluent. See Appendix B for Whole Effluent Toxicity (WET) guidance and table.

[3] For aquatic toxicity, discharges to marine and estuarine waters shall perform the aquatic toxicity test using *Mysidopsis bahia* and *Menidia beryllina* and discharges to freshwater water shall use *Daphnia pulex* and *Pimephales promelas* species.

[4] Analysis for PFAS shall be performed using the method(s) approved by the EPA pursuant to 40 CFR 136 and by a laboratory certified to conduct such test methods. If no such test method is approved by EPA pursuant to 40 CFR 136, PFAS analyses shall be performed in accordance with EPA Method 1633 or 1633A (see https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas). See Appendix A for PFAS analyte list.

Table 11.1.3.2. Instantaneous Maximum Effluent Limits for Discharges of Water Treatment Wastewater to Surface Water by Instream Waste Concentration

Parameter		Instream Waste Concentration [1]								
	Reservoir & Lake	<1%	1 to 5%	>5% to 20%	>20% to 40%	>40% to 70%	>70% to 100%	Inter-mittent Discharge	Units	Permit Limit Development
Aluminum, total	1.5	1.50	1.41	0.36	0.18	0.10	0.071	1.5	mg/L	WQBEL calculated using RPA
Arsenic, total[2] (Freshwater)	0.84	1.71	0.34	0.085	0.043	0.024	0.017	0.17	ug/L	WQBEL calculated using RPA
Arsenic, total[3] (Estuarine, Marine)	---	3.26	0.65	0.16	0.082	0.047	0.033	0.33	ug/L	WQBEL calculated using RPA
Manganese, total	3.0	3.00	1.53	0.38	0.19	0.11	0.077	3.0	mg/L	WQBEL calculated using RPA
Copper, total[2] (Freshwater)	0.105	0.48	0.095	0.037	0.019	0.011	0.0075	0.12	mg/L	WQBEL calculated using RPA
Copper, total[3] (Estuarine, Marine)	---	0.39	0.079	0.02	0.0098	0.0056	0.0039	0.039	mg/L	WQBEL calculated using RPA
Lead, total	0.048	0.098	0.020	0.0049	0.0025	0.0014	0.00098	0.15	mg/L	WQBEL calculated using RPA
Zinc, total	0.29	2.00	0.64	0.16	0.081	0.046	0.032	0.32	mg/L	WQBEL calculated using RPA
Total Residual Chlorine[2] (Freshwater)	0.085	0.90	0.180	0.045	0.023	0.013	0.009	0.05	mg/L	WQBEL calculated using RPA
Total Residual Chlorine[3] (Estuarine, Marine)	---	0.61	0.12	0.031	0.015	0.0088	0.0061	0.039	mg/L	WQBEL calculated using RPA

Parameter		Instream Waste Concentration (1)								
	Reservoir & Lake	<1%	1 to 5%	>5% to 20%	>20% to 40%	>40% to 70%	>70% to 100%	Inter-mittent Discharge	Units	Permit Limit Development
Footnotes: [1] The Instream Waste Concentration shall be calculated by dividing the maximum gallon/hr flow of the discharge by the sum of the maximum gallon/hr flow of the discharge and the seven-day ten-year low flow (7Q10) of the receiving stream and multiplying the result by 100. [2]If discharge is to freshwater, these limits apply. [3]If discharge is to estuarine or marine water, these limits apply.										

9.13 Water Treatment Plant Wastewater Discharges to Ground Water

The general permit contains prohibitions for water treatment plant facility discharges to ground water containing detergents or surfactants, water treatment plant laboratory wastewaters greater than 500 gpd, activated carbon backwash and regeneration wastewaters for filters which treat for volatile organic compounds, and clarifier tank sludge blowdown to a subsurface disposal system.

The general permit contains conditions for water treatment plant wastewater discharges to ground water including a limit on discharges to a subsurface disposal system of 50,000 gallons per day and a requirement for solids removal for clarifier tank sludge blowdown, greensand filter ion exchange regeneration wastewaters, and filter media backwash and regeneration wastewaters in order to achieve the total suspended solids limit of 20.0 mg/L.

Other conditions require that discharge lagoons be constructed and maintained above the 100-year base flood elevation and a prohibition on stormwater runoff to any wastewater treatment lagoons or beds. Certain design criteria require minimum separating distances between a disposal system and any potable water supply well based on yield from the public well. Other design criteria require minimum depths between the bottom of a lagoon and underlying bedrock or the seasonal high ground water table. Other conditions prevent interference between discharges of water treatment plant wastewater and another subsurface disposal system.

9.13.1 Numeric Effluent Limits

Water treatment plant wastewater may be land applied to the ground, to a subsurface disposal system, or an infiltration basin provided the discharge complies with the limits in Table 11.2.3.1 of the 2026 General Permit and provided below:

Table 11.2.3.1 — Maximum Limits for Discharges of Water Treatment Plant Wastewater to Ground Water

Parameter	Maximum Limit	Unit	Permit Limit Development
Flow	50,000 to subsurface disposal system 500,000 to infiltration basin	gpd	NA
pH	6.0 – 9.0	S.U.	WQBEL Carried forward from current permit
PFAS Analytes[1]	Monitor	ng/L	NA
Lead, total	0.01	mg/L	EPA Drinking Water Action Level
Lead, dissolved	Monitor	mg/L	NA
Aluminum, total	Monitor	mg/L	NA
Aluminum, dissolved	1.5	mg/L	TBEL Carried forward from current permit
Iron, total	Monitor	mg/L	NA
Iron, dissolved	3.0	mg/L	TBEL Carried forward from current permit
Manganese, total	Monitor	mg/L	NA
Manganese, dissolved	3.0	mg/L	WQBEL Carried forward from current permit
Copper, total	1.3	mg/L	EPA Drinking Water Action Level
Copper, dissolved	Monitor	mg/L	NA
Zinc, total	Monitor	mg/L	NA
Zinc, dissolved	Monitor	mg/L	NA
Arsenic, total	Monitor	ug/L	EPA's National Primary Drinking Water Regulations

Parameter	Maximum Limit	Unit	Permit Limit Development
Arsenic, dissolved	10.0	ug/L	EPA's National Primary Drinking Water Regulations
Temperature	Monitor	°F	NA

Footnotes:

[1] Analysis for PFAS shall be performed using the method(s) approved by the EPA pursuant to 40 CFR 136 and by a laboratory certified to conduct such test methods. If no such test method is approved by EPA pursuant to 40 CFR 136, PFAS analyses shall be performed in accordance with EPA Method 1633 or 1633A (see https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas). Report in nanograms per liter (ng/L). See Appendix A for PFAS analyte list.

9.13.3 Monitoring Location

The 2018 General Permit did not specify a clear location of where the grab sample for water treatment plant discharges to ground water should be taken. As a result, monitoring data collected from a request to permittees yielded inconsistent results because the samples were collected at varying locations at each facility. The 2026 General Permit clearly indicates that "The sample shall be collected at the end of the discharge pipe before the discharge enters the infiltration basin, subsurface disposal system, or ground surface."

9.13.4 Sample Type

The 2018 General Permit instructed permittees that "Samples collected shall be prepared by settling of solids and filtration through a 0.45 uM filter prior to analysis." Oral history within the division provided that this filtration method was incorporated to simulate the percolation of the wastewater through the soil matrix. At the time, it was theorized that solids would adsorb to soil particles and just dissolved substances would infiltrate to groundwater. However, this deviation in the methodology is not supported by 40 CFR 136, the EPA Guidelines Establishing Test Procedures for the Analysis of Pollutants. In the 2026 General Permit, permittees monitor for both total and dissolved metals.

9.13.5 Ground Water Monitoring Wells & Compliance Schedule

The 2026 General Permit includes a compliance schedule that requires permittees discharging water treatment wastewater to ground water to submit a plan for the installation of monitoring wells that will be used as the ground water compliance location. Well design and installation must be in accordance with the EPA Guidance Document titled "Design and Installation of Monitoring Wells," document number SESDGUID-101-RO, effective February 18, 2018. The plan should include a potentiometric surface map to determine the location of at least one (1) upgradient monitoring well to determine background concentrations and sufficient downgradient monitoring

wells at the edge of the property boundary based on groundwater hydrology.

The compliance schedule also requires that within 54 months of the effective date of this general permit, the permittees must install the monitoring wells described in the plan they submitted. The monitoring wells will be used to monitor the impact of the ground water discharge(s).

Section 10.0 Analytical Methods

All sample analyses required under 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 analyzed using sufficiently sensitive test methods pursuant to 40 CFR 136 unless an alternative method has been approved in writing by the Commissioner pursuant to 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified by the Commissioner.

Section 11.0 Reporting

The results of chemical analyses for registered discharges and any aquatic toxicity test required by this permit will be submitted electronically using NetDMR as prescribed in the general permit.

Section 12.0 Duty to Correct and Report Violations

12.1 Corrective Actions

A Permittee is required upon learning of a violation of any condition of the general permit to immediately take all reasonable actions to determine the cause of the violation, correct the violation, mitigate the impact of the violation, and prevent its recurrence.

12.2 Notification

In accordance with 22a-430-3(j)(11)(D) of the Regs. Conn. State Agencies, the permittee shall, within two (2) hours of becoming aware of the circumstances, or at the start of the next business day; but no more than 24 hours from when they become aware of the circumstances outside normal business hours, notify the Commissioner of any actual or anticipated noncompliance with permit terms or conditions if (i) the noncompliance is greater than two times the permitted level except for violations of any limitation for a surface water discharge, in which case all violations shall be reported or (ii) the condition may endanger human health, the environment or the operation of a POTW, including sludge handling and disposal

12.3 Five Day Follow Up Report

The Permittee must submit a report within five (5) days of the noncompliance that contains:

- a description of the noncompliance and its cause;
- the period of noncompliance, including exact dates and times;
- if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

- steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Notification of actual or anticipated noncompliance does not stay any permit term or condition. DEEP has developed an online Noncompliance Reporting web-based platform accessible at:

Noncompliance Notification Form and Noncompliance Follow-Up Report Form

12.4 Additional Notification Requirements

In accordance with 22a-430-3(j)(11)(E), the permittee shall notify the Director within seventy-two hours and in writing within 30 days when they know or have reason to believe that the concentration in the discharge of any listed substance or any toxic substance has exceeded or will exceed the highest of the following levels:

- One hundred micrograms per liter;
- Two hundred micrograms per liter for acrolein and acrylonitrile, five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter for antimony;
- An alternative level specified by the Commissioner, provided such level shall not exceed the level which can be achieved by the permittee's treatment system; and
- A level two times the level specified in the permit application.

Section 13.0 State Regulations of Connecticut State Agencies

The permittee shall comply with sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies which are incorporated into the general permit.

Section 14.0 Federal Standard Conditions

The federal and state standard conditions in 40 CFR 122.41, Conditions applicable to all permits, are incorporated into the genal permit.

Section 15.0 Antidegradation

Activities permitted by this general permit must be consistent with the Antidegradation Standards of section 22a-426 of the RCSA.

Section 16.0 Public Participation

As part of the general permit reissuance process, the Department conducted one (1) Public Listening Session to directly solicit feedback during the drafting phase.

- Session Date: June 13, 2023
- Purpose: At this session, the Department sought direct input from the public and stakeholders on

two key areas:

1. Feedback regarding the effectiveness and requirements of the existing permit provisions.
2. Suggestions for improvements and enhancements to the overall permitting process.

This feedback was critical in informing the technical and procedural decisions incorporated into the current draft of the 2026 General Permit.

Public Notice of Tentative Determination

Phase 1: Initial Public Input and Permit Drafting

The Department actively solicited public feedback during the initial stages of the general permit reissuance process:

- Public Listening Session: We held one (1) Public Listening Session on June 13, 2023. This session allowed stakeholders to provide direct feedback on the existing permit's provisions and offer suggestions for improving the overall permitting process.
- Initial Public Notice and Withdrawal: Following the incorporation of this initial feedback, the draft permit was placed on Public Notice. In response, the Department received substantive comments and a formal petition. Consequently, the Department withdrew the initial draft permit and began revising the draft to address the concerns raised.

Phase 2: Current Public Notice

The current Public Notice represents the second public solicitation for comment. This revised draft incorporates the extensive feedback received following the first notice and the June 2023 listening session, reflecting the Department's commitment to developing a comprehensive and effective final permit.

TENTATIVE DETERMINATION

The Commissioner of the Department of Energy and Environmental Protection ("DEEP") hereby gives notice that a tentative determination has been reached to renew with modifications the Comprehensive General Permit for Discharges to Surface and Ground Water ("general permit").

The current general permit was issued on April 1, 2023 and expires on April 1, 2026, having been continued in effect pursuant to section 22a-6aa of the Connecticut General Statutes

COMMISSIONER'S FINDINGS/REGULATORY CONDITIONS

In accordance with applicable federal and state law, the Commissioner has made a tentative determination that renewal of this general permit would not cause pollution of the waters of the state. The proposed general permit, if renewed, will require application (including re-application for existing permittees), contains effluent limits, and requires discharge monitoring and submission of electronic discharge monitoring reports for some of the categories of discharge to ensure that the discharge will not cause pollution.

PROPOSED GENERAL PERMIT

The purpose of the general permit is to protect the waters of the state from discharges of non-contact cooling water, geothermal heat pump water, water treatment wastewater, hydrostatic pressure testing of natural gas, petroleum tanks, and pipeline wastewater, fire suppression system testing water, hydrant flushing wastewater, boiler blowdown water, geothermal heat pump water, and pressure washing wastewater, and water treatment wastewater to surface water and ground water. The DEEP first issued the general permit in 2018 to consolidate many separate general permits and to authorize some common discharges such as hydrant flushing or fire suppression testing that previously did not have permit mechanisms.

Proposed Changes in this Renewal:

- The format and layout has been modernized to better facilitate its use by the regulated community.
- The 15% Instream Waste Concentration threshold for eligibility was removed.
- All discharges requiring application are required to submit electronic Discharge Monitoring Reports through NetDMR.
- The general permit incorporates DEEPs new online noncompliance reporting tools.
- Pressure washing has been added as a new category of discharge.
- Facilities with water treatment discharges to ground water are required to submit and implement a plan for the installation of monitoring wells before the 5-year term of this general permit has expired.

COMMISSIONER'S AUTHORITY

The Commissioner is authorized to issue this general permit pursuant to sections 22a-430 and 22a-430b of the Connecticut General Statutes section 22a-430-3 and 4 of the Regulations of Connecticut State Agencies. The Commissioner is authorized to approve or deny any application under this general permit pursuant to section 22a-430b of the Connecticut General Statutes.

INFORMATION REQUESTS/PUBLIC COMMENT

Interested persons may obtain a copy of this public notice, the proposed general permit and the general permit fact sheet on the DEEP website at portal.ct.gov/DEEP/About/Public-Notices.

Questions may be directed to James Creighton at 860-424-3681 or james.creighton@ct.gov.

Before making a final decision on this proposed general permit, the Commissioner shall consider written comments from interested persons that are received within 30 days from the publication date of this notice. Written comments should be directed to: James Creighton, Water Permitting and Enforcement Division, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127 or may be submitted via electronic mail to: james.creighton@ct.gov.

PETITIONS FOR PUBLIC HEARING

The Commissioner may conduct a public hearing if the Commissioner determines that the public interest will be best served thereby. Upon receipt of a petition, the Commissioner shall take action as required by relevant laws, including Public Act 25-84, which was effective upon passage in June 2025. Petitions should include the name of the general permit noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the proposed general permit and, if resolution is reached, withdraw the petition. Original signed petitions may be scanned and sent electronically to deep.adjudications@ct.gov or may be mailed or delivered to: DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, CT 06106-5127. All petitions must be received within the comment period noted above. If submitted electronically, original signed petitions must also be mailed or delivered to the address above within ten days of electronic submittal. If a hearing is held, timely notice of such hearing will be published in a newspaper of general circulation and posted on the DEEP website at https://portal.ct.gov/DEEP. Additional information can be found at www.ct.gov/deep/adjudications.]

Connecticut
Department of Energy &
Environmental Protection

Notice of Tentative Determination
Intent to Renew the Comprehensive General Permit for Discharges to Surface and Ground Water

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In accordance with applicable federal and state law, the Commissioner has made a tentative determination that renewal of this general permit would not cause pollution of the waters of the state. The proposed general permit, if renewed, will require application (including re-application for existing permittees), contains effluent limits, and requires discharge monitoring and submission of electronic discharge monitoring reports for some of the categories of discharge to ensure that the discharge will not cause pollution.

PROPOSED GENERAL PERMIT

The purpose of the general permit is to protect the waters of the state from discharges of non-contact cooling water, geothermal heat pump water, hydrostatic pressure testing of natural gas, petroleum tanks, and pipeline wastewater, fire suppression system testing water, hydrant flushing wastewater, boiler blowdown water, pressure washing wastewater, and water treatment wastewater to surface water and ground water. The DEEP first issued the general permit in 2018 to consolidate many separate general permits and to authorize some common discharges such as hydrant flushing or fire suppression testing that previously did not have permit mechanisms.

Proposed Changes in this Renewal:

- The format and layout has been modernized to better facilitate its use by the regulated community.
- The 15% Instream Waste Concentration threshold for eligibility was removed.
- All discharges requiring application are required to submit electronic Discharge Monitoring Reports through NetDMR.
- The general permit incorporates DEEPs new online noncompliance reporting tools.
- Pressure washing has been added as a new category of discharge.
- Facilities with water treatment discharges to ground water are required to submit and implement a plan for the installation of monitoring wells before the 5-year term of this general permit has expired.

COMMISSIONER'S AUTHORITY

The Commissioner is authorized to issue this general permit pursuant to sections 22a-430 and 22a-430b of the Connecticut General Statutes section 22a-430-3 and 4 of the Regulations of Connecticut State Agencies. The Commissioner is authorized to approve or deny any application under this general permit pursuant to section 22a-430b of the Connecticut General Statutes.

INFORMATION REQUESTS/PUBLIC COMMENT

Interested persons may obtain a copy of this public notice, the proposed general permit and the general permit fact sheet on the DEEP website at portal.ct.gov/DEEP/About/Public-Notices.

Questions may be directed to James Creighton at 860-424-3681 or james.creighton@ct.gov.

Before making a final decision on this proposed general permit, the Commissioner shall consider written comments from interested persons that are received within 30 days from the publication date of this notice/on or before January 23, 2026.Written comments should be directed to: James Creighton, Water Permitting and Enforcement Division, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127 or may be submitted via electronic mail to: james.creighton@ct.gov.

PETITIONS FOR PUBLIC HEARING

The Commissioner may conduct a public hearing if the Commissioner determines that the public interest will be best served thereby. Upon receipt of a petition, the Commissioner shall take action as required by relevant laws, including Public Act 25-84, which was effective upon passage in June 2025. Petitions should include the name of the general permit noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the proposed general permit and, if resolution is reached, withdraw the petition. Original signed petitions may be scanned and sent electronically to deep.adjudications@ct.gov or may be mailed or delivered to: DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, CT 06106-5127. All petitions must be received within the comment period noted above. If submitted electronically, original signed petitions must also be mailed or delivered to the address above within ten days of electronic submittal. If a hearing is held, timely notice of such hearing will be published in a newspaper of general circulation and posted on the DEEP website at https://portal.ct.gov/DEEP. Additional information can be found at www.ct.gov/deep/adjudications.]

Emma Cimino

Emma Cimino
Deputy Commissioner

Date: December 18, 2025

Draft Permit [provide link]

Draft Fact Sheet [provide link]