



**National Pollutant Discharge Elimination System Permit
issued to**

Permittee:

McCallum Enterprises I Limited Partnership
2874 Main St
Stratford, Connecticut 06614

Location Address:

Derby Hydroelectric Project
305 Canal Street East
Shelton, Connecticut 06484

Permit ID: CT0030732

Issuance Date: Date of Signature

Receiving Water Body: Housatonic River

Effective Date: 1st of the month after
Issuance date

Receiving Water Body ID: CT6000-00_02

Permit Expires: 5 years from effective date

SECTION 1: GENERAL PROVISIONS

- 1.1 This permit is reissued 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 National Pollutant Discharge Elimination System ("NPDES") permit program.
- 1.2 **McCallum Enterprises I Limited Partnership** ("Permittee") 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. Your attention is especially drawn to the notification requirements of subsections (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of Section 22a-430-3.

Section 22a-430-3: General Conditions

- (a) Definitions
- (b) General
- (c) Inspection and Entry
- (d) Effect of a Permit
- (e) Duty to Comply
- (f) Proper Operation and Maintenance
- (g) Sludge Disposal
- (h) Duty to Mitigate
- (i) Facility Modifications; Notification
- (j) Monitoring, Records and Reporting Requirements
- (k) Bypass
- (m) Effluent Limitation Violations (Upsets)
- (n) Enforcement
- (o) Resource Conservation
- (p) Spill Prevention and Control
- (q) Instrumentation, Alarms, Flow Recorders
- (r) Equalization

Section 22a-430-4: Procedures and Criteria

- (a) Duty to Apply
 - (b) Duty to Reapply
 - (c) Application Requirements
 - (d) Preliminary Review
 - (e) Tentative Determination
 - (f) Draft Permits, Fact Sheets
 - (g) Public Notice, Notice of Hearing
 - (h) Public Comments
 - (i) Final Determination
 - (j) Public Hearings
 - (k) Submission of Plans and Specifications, Approval
 - (l) Establishing Effluent Limitations and Conditions
 - (m) Case by Case Determinations
 - (n) Permit Issuance or Renewal
 - (o) Permit Transfer
 - (p) Permit Revocation, Denial or Modification
 - (q) Variances
 - (s) Treatment Requirements
- 1.3 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 Regs. Conn. State Agencies.
- 1.4 Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under Section 22a-438 or 22a-131a of the Conn. Gen. Stat. or in accordance with Section 22a-6, under Section 53a-157b of the Conn. Gen. Stat..
- 1.5 The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Energy and Environmental Protection ("Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner, at least thirty days prior to the transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure, by the transferee, to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the Conn. Gen. Stat. and Regs. Conn. State Agencies.
- 1.6 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.
- 1.7 Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- 1.8 An annual fee shall be paid for each year this permit is in effect as set forth in Section 22a-430-7 of the Regs. Conn. State Agencies.
- 1.9 The Permittee shall operate and maintain its collection and treatment system in accordance with its Operation and Maintenance Plan and with any approvals issued in accordance with Regs. Conn. State Agencies Section 22a-430-3(i)(3). The Permittee shall revise and maintain the Operation and Maintenance Plan upon the Commissioner's request or to address equipment or operational changes in accordance with Regs. Conn. State Agencies Section 22a-430-3(f)(2).

- 1.10 The Permittee shall implement its Spill Prevention and Control Plan in accordance with Regs. Conn. State Agencies Section 22a-430-3(p) and 22a-430-4(c)(10). The plan shall include 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 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. The Permittee shall revise and maintain the Spill Prevention and Control Plan upon the Commissioner's request or to address equipment or operational changes.

SECTION 2: DEFINITIONS

- 2.1 The definitions of the terms used in this permit shall be the same as the definitions contained in Section 22a-423 of the Conn. Gen. Stat. and Section 22a-430-3(a) and 22a-430-6 of the Regs. Conn. State Agencies.
- 2.2 In addition to the above, the following definitions shall apply to this permit:

"40 CFR" means Title 40 of the Code of Federal Regulations.

Connecticut Water Quality Standards means the regulations adopted under Regs. Conn. State Agencies Sections 22a-426-1 through 22a-426-9, as amended.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste discharged during an operating day.

"Dilution Factor" means the inverse of the "Instream Waste Concentration".

"DMR" means Discharge Monitoring Report.

"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.

"Maximum Daily Limit" means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g., mg/l). Otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity, it means "Maximum Daily Flow" as defined in Section 22a-430-3(a) of the Regs. Conn. State Agencies.

"Quarter" means the calendar quarter beginning at 12:00 AM on the first day of March, June, September, and December and ending at 12:00 AM on the first day of June, September, December, and March, respectively.

"Reporting Frequency" means the frequency at which monitoring results must be provided.

"Semi-annual" when used as a sampling frequency in this permit, means that sampling is once during the months of January – June and once during the months of July – December.

SECTION 3: COMMISSIONER'S DECISION

- 3.1 The Commissioner has issued a final determination and found that the proposed system to treat such discharge will protect the waters of the state from pollution. The Commissioner's decision is based on Application 201909321 for permit reissuance received on August 19, 2019, and the administrative record established in the processing of that application.

- 3.2 Upon the effective date of this permit and continuing until this permit expires or is modified or revoked, the

Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of this permit, the information provided in Application No. 201909321, received by the Commissioner on August 19, 2019, and all modifications and approvals issued by the Commissioner or the Commissioner's authorized agent, for the discharge and/or activities authorized by, or associated with this Permit.

- 3.3 The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Federal Clean Water Act or the Conn. Gen. Stat. or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or the Conn. Gen. Stat. or regulations adopted thereunder which are then applicable.
- 3.4 This permit also contains a determination under Section 316(b) of the Federal Water Pollution Control Act, 33 U.S.C. § 1326(b) regarding cooling water intake structures and Conn. Gen. Stat. § 22a-430(a), and compliance with this permit is sufficient to assure the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife in and on the receiving waters. Based on the evaluation detailed in the fact sheet, DEEP has determined that the facility employs BTA pursuant to 40 CFR § 125.90(b).
- 3.5 Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

SECTION 4: GENERAL EFFLUENT LIMITATIONS

- 4.1 The Permittee shall assure that the surface water affected by the subject discharge shall conform to the *Connecticut Water Quality Standards*.
- 4.2 No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids, or cause visible discoloration or foaming in the receiving stream.
- 4.3 No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.
- 4.4 The temperature of any discharge shall not increase the temperature of the receiving stream above 85 °F, or in any case, raise the temperature of the receiving stream by more than 4 °F.
- 4.5 There shall be no discharge of polychlorinated biphenyl ("PCB") compounds.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- 5.1 The discharge is restricted by and shall be monitored in accordance with the following tables in this section. The wastewater discharge shall not exceed the effluent limitations in these tables and shall otherwise conform to the specific terms and conditions listed in the tables. The Permittee shall comply with the "Remarks" and "Footnotes" noted in the tables that follow. Such remarks and footnotes are enforceable like any other term or condition of this permit.
- 5.2 The wastewaters authorized/approved by this permit shall be collected, treated, and discharged in accordance with this permit and with any approvals issued by the Commissioner or his/her authorized agent for the discharges and activities authorized by or associated with this permit. Any wastewater discharges not expressly identified in these tables or otherwise approved to be discharged by this permit shall not be authorized by this permit.
- 5.3 All samples shall be comprised of only the wastewater described in these tables. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Collection of permit-required effluent samples in any location other than the authorized location noted in this permit shall be a violation of this permit.
- 5.4 In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Energy and Environmental Protection ("DEEP") personnel, the Permittee, or other parties.

Table A

Discharge Serial Number: DSN 101-1							Monitoring Location: 1			
Wastewater Description: Turbine Wicket Gate Water Seal Leakage, Turbine Shaft Water Seal Leakage, Non-Contact Cooling Water, Mechanical Seal Leakage, and river water drained from turbines during maintenance.										
Monitoring Location Description: In the oil water separator, adjacent to the outlet pump										
Discharge is to: Housatonic River			Dilution Factor: NA				Outfall Location: Latitude (41.324337) and Longitude (-73.102080)			
PARAMETER	NET DMR CODE	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level ²
			Average Monthly Limit	Maximum Daily Limit	Sample/ Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantan- eous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported	
Copper, Total	01042	mg/L	NA	NA	NR	NA	---	Semi-Annually	Grab	0.003
Flow	74076	gpd	NA	34,000	Daily/Monthly	Continuous ³	NA	NR	NA	
Lead, Total	01051	mg/L	NA	NA	NR	NA	---	Semi-Annually	Grab	0.001
Oil and Grease, Total	00556	mg/L	NA	10	Monthly	Grab Sample Average	15	Monthly	Grab	
pH, Minimum ⁴	61942	SU	NA	NA	NR	NA	6.5	Monthly	Grab	
pH, Maximum ⁴	61941	SU	NA	NA	NR	NA	8.0	Monthly	Grab	
Temperature ⁵	00011	°F	NA	NA	NR	NA	---	Weekly	Grab	
Zinc, Total	01092	mg/L	NA	NA	NR	NA	---	Semi-Annually	Grab	0.02

TABLE A FOOTNOTES AND REMARKS

Footnotes:

¹ The first entry in this column is the "Sample Frequency". If a "Reporting Frequency" does not follow this entry, then the "Reporting Frequency" is monthly.

² The minimum levels ("MLs") identified in this table represent the highest acceptable MLs that shall be achieved by the Permittee's analytical methods. Actual MLs reported by the laboratory must be reported as a comment on the DMR. Detected concentrations less than the laboratory ML shall be reported on the DMR in accordance with Section 6.5.

³ Flow measured continuously using an inline flow meter.

⁴ The discharge pH shall be in the range of 6.5 – 8.0 S.U. unless the ambient receiving water is outside of this range and is not altered by the facility's permitted discharge or activities under this permit. If the Permittee's discharge pH is lower than 6.5 S.U., the Permittee may demonstrate compliance by showing that the discharge pH is either higher than, or no more than 0.5 S.U. lower than the pH of the intake water. If the Permittee's discharge is higher than 8.0 S.U., the Permittee may demonstrate compliance by showing that the discharge pH is either lower than, or no more than 0.5 S.U. higher than the intake water.

For this demonstration, the intake water shall be collected within one hour of the effluent sample. If the discharge satisfies this condition, the Permittee shall report no data indicator ("NODI") code – "3" (special report attached) and submit the intake and discharge pH data used in the analysis as an attachment to the DMR. If the discharge does not satisfy this provision, then the Permittee is in violation of the effluent limit and shall respond to the noncompliance consistent with Section 8 of the permit. The Permittee shall keep a record of the dates and results of all intake and discharge events on site.

⁵ Temperature samples shall be collected when there is a discharge of non-contact cooling water.

Remarks:

1. Abbreviations used for units are as follows: gpd means gallons per day; mg/L means milligrams per liter SU means Standard Units. 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).

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. In calculating average concentrations, use zeros for values reported as less than the ML.

SECTION 6: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

- 6.1 All samples shall be collected, handled, and analyzed in accordance with the methods approved under 40 CFR 136, unless another method is required under 40 CFR subchapter N or unless an alternative method has been approved in writing pursuant to 40 CFR 136.5. To determine compliance with limits and conditions established in this permit, monitoring must be performed using sufficiently-sensitive methods approved pursuant to 40 CFR 136 for the analysis of pollutants having approved methods under that part, unless a method is required under 40 CFR subchapter N or unless an alternative method has been approved in writing pursuant to 40 CFR 136.5.
- 6.2 All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136, unless otherwise specified.
- 6.3 The term Minimum Level ("ML") refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit ("MDL"). MLs may be obtained in several ways: they may be published in a method; they may be sample concentrations equivalent to the lowest acceptable calibration point used by the laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a lab, by a factor. The MLs specified in Section 5 represent the minimum concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 5. Analyses for these parameters must include check standards within ten percent of the specified ML or calibration points equal to or less than the specified ML.
- 6.4 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.
- 6.5 Analyses for which quantification was verified to be below a ML, including non-detect, shall be reported as "less than the [ML]" where "[ML]" is the numerical value equivalent to the ML for that analysis on the DMR. Analytical results indicating that a parameter was not present at a concentration equal to or greater than 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. The Permittee shall attach documentation demonstrating the ML of the analysis as an attachment to the DMR.
- 6.6 It is a violation of this permit for a Permittee or his/her designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed.
- 6.7 Analyses required under this permit shall be performed in accordance with 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.

SECTION 7: REPORTING REQUIREMENTS

- 7.1 The results of chemical analyses required by this permit shall be submitted electronically using NetDMR. Monitoring results shall be reported at the monitoring frequency specified in this permit. Any monitoring required more frequently than monthly shall be reported on an attachment to the DMR, and any additional monitoring conducted in accordance with 40 CFR 136, or another method required for an industry-specific waste stream under 40 CFR subchapter N, or other methods approved by the Commissioner, shall also be included on the DMR, or as an attachment, if necessary, and the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Commissioner in the permit. A report shall also be included with the DMR which includes a detailed explanation of any violations of the limitations specified. DMRs, attachments, and reports, shall continue to be submitted electronically in accordance with Section 7.3 below. However, if the DMRs, attachments, and reports are required to be submitted in hard copy form, they shall be received at this address by the last day of the month following the month in which samples are collected:

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

- 7.2 If this permit requires monitoring of a discharge on a calendar basis (e.g., monthly, quarterly, etc.), but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR, as scheduled, indicating no discharge has occurred using NODI code "C". For those permittees whose required monitoring is discharge dependent (e.g., per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.

7.3 NetDMR Reporting Requirements:

The Permittee shall report electronically using NetDMR, a web-based tool that allows permittees to electronically submit DMRs and other required reports through a secure internet connection. The Permittee and/or the signatory authority shall electronically submit DMRs required under this permit to the Commissioner using NetDMR in satisfaction of the DMR submission requirements of Sections 5, 6, and 8 of this permit. All sampling and monitoring records required under the permit, including any monitoring conducted more frequently than monthly or any additional monitoring conducted in accordance with 40 CFR 136, shall be submitted to the Commissioner as an electronic attachment to the DMR in NetDMR. The Permittee shall also electronically file any written report of noncompliance described in Section 8 of this permit as an attachment in NetDMR. DMRs shall be submitted electronically to the Commissioner no later than the last day of the month following the completed reporting period. NetDMR is accessed from: <http://www.epa.gov/netdmr>.

SECTION 8: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

8.1 *Noncompliance Notifications:*

- 8.1.1 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 RSCA, the Permittee shall notify the Commissioner of the following actual or anticipated noncompliance with the terms or conditions of this permit within two hours of becoming aware of the circumstances. All other actual or anticipated violations of the permit shall be reported to the Commissioner within 24 hours of becoming aware of the circumstances:

- 8.1.1.1 A noncompliance that is greater than two times an effluent limitation;
- 8.1.1.2 A noncompliance of any minimum or maximum daily limitation or excursion beyond a minimum or maximum daily range;
- 8.1.1.3 Any condition that may endanger human health or the environment, including but not limited to noncompliance with whole effluent toxicity WET limitations;
- 8.1.1.4 Any condition that may endanger the operation of a POTW, including sludge handling and disposal;
- 8.1.1.5 A failure or malfunction of monitoring equipment used to comply with the monitoring requirements of this permit;
- 8.1.1.6 Any actual or potential bypass of the Permittee's collection system or treatment facilities;
or
- 8.1.1.7 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.

- 8.1.2 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>.
- 8.1.3 Within five days of any notification of noncompliance in accordance with Sections 8.1.1.1 through 8.1.1.6 of this permit, 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: (i) A description of the noncompliance and its cause; (ii) the period of noncompliance, including exact dates and times; (iii) if the noncompliance has not been corrected, the anticipated time it is expected to continue; and (iv) steps taken or planned to correct the noncompliance and reduce, eliminate and prevent recurrence of the noncompliance.
- 8.1.4 Within 30 days of any notification of facility modifications reported in accordance with Section 8.1.1.7 of this permit, the Permittee shall submit a written follow-up report by submitting a "Facility and Wastewater Treatment System Modification Request for Determination" for the review and approval of the Commissioner. The report shall fully describe the changes made to the facility and reasons therefor.
- 8.1.5 Notification of an actual or anticipated noncompliance or facility modification does not stay any term or condition of this permit.
- 8.2 In accordance with Section 22a-430-3(j)(11)(E) of the Regs. Conn. State Agencies, the Permittee shall notify the Commissioner within 72 hours and in writing within 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 Regs. Conn. State Agencies Section 22a-430-4, has exceeded or will exceed the highest of the following levels: (1) One hundred micrograms per liter; (2) 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; (3) 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) A level two times the level specified in the Permittee's application.
- 72 hour initial notifications shall be submitted via the Commissioner's online Noncompliance Notification Form. 30 day follow-up reports shall be submitted via the Commissioner's online Noncompliance Follow-up Report Form. The Forms are available at the Commissioner's website, here: <https://portal.ct.gov/deep/water-regulating-and-discharges/industrial-wastewater/compliance-assistance/notification-requirements>.
- 8.3 In addition to any other written reporting requirements, the Permittee shall report any instances of noncompliance with this permit with its DMR. Such reporting shall be due no later than the last day of the month following the reporting period in which the noncompliant event occurred. The information provided in the DMR shall include, at a minimum: the type of violation, the duration of the violation, the cause of the violation, and any corrective action(s) or preventative measure(s) taken to address the violation.

This permit is hereby issued on: XXXXXX

EMMA CIMINO
Deputy Commissioner

EC/RM



National Pollutant Discharge Elimination System Permit Factsheet

NPDES Permit Summary	
Applicant/Permittee	McCallum Enterprises I Limited Partnership
Permit No.	CT0030732
Application No.	201909321
Date Application Received	8/19/2019
Location Address	305 Canal Street East, Shelton, Connecticut 06484
Facility Contact	Joseph Szarmach, President Phone: (203) 913-2940 Email: joseph.szarmach@gmail.com
Mailing Address	2874 Main St, Stratford, CT 06614
DMR Contact	Kristin Taylor, Operations Manager Phone: (203) 386-1745 Email: melphydro@gmail.com
Secretary of State Business ID	0529488
Permit Term	5 Years
Permit Category	Minor NPDES
SIC & NAICS Code(S)	4911
Applicable Effluent Limit Guidelines	NA
Permit Type	New Issuance
Ownership	Privately Owned Facility
Receiving Water	DSN 101-1: Housatonic River
Waterbody Segment Id's	CT6000-00_02
Waterbody Classification	B
Discharge Location	Latitude: 41.324337, Longitude: -73.102080
Compliance Actions	NOVWRIN 19 007
Staff Engineer	Rehnuma Maisha, Environmental Analyst 1 Phone: 860-424-3291 E-mail: rehnuma.maisha@ct.gov

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Section 1.0 Facility Summary

1.1 Permit Fees

Application Fee:

Filing Fee	Invoice No.: DEP333278	Amount: \$1,300	Date Paid: 8/19/2019
Processing Fee	Invoice No.: DEP439734	Amount: \$1,300	Date Paid: 8/18/2025

Annual Fee:

	WASTEWATER CATEGORY (per Regs. Conn. State Agencies Sec. 22a-430-7)	FLOW CATEGORY	DSN	ANNUAL FEE (per Regs. Conn. State Agencies Sec. 22a-430-7 and Conn. Gen. Stat. Sec. 22a-6f)
	<i>Non-Contact Cooling Water</i>	5,000 – 100,000 gpd	101-1	\$660
	<i>Floor Drain Wastewater – Including: river water drained from turbines during maintenance periods and turbine leakage.</i>	All flows	101-1	\$0
TOTAL				\$660

1.2 Application Submittal Information

On August 19, 2019, the Department of Energy and Environmental Protection (“DEEP”) received an application (Application 201909321) from McCallum Enterprises I Limited Partnership (“the Permittee”, “the Applicant”) in Shelton, for the issuance of its NPDES Permit No. CT0030732.

Consistent with the requirements of Section 22a-6g of the Connecticut General Statutes (“Conn. Gen. Stat.”), the Permittee published a Notice of Permit Application in the Connecticut Post on June 8, 2019. On November 7, 2025, the application was determined to be timely and administratively sufficient.

The Permittee seeks authorization for the following in Application 201909321:

DSN	PROPOSED MAXIMUM DAILY FLOW	PROPOSED WASTESTREAMS	TREATMENT TYPE	DISCHARGE TO
101-1	34,000 gpd	Turbine Wicket Gate Water Seal Leakage; Turbine Shaft Water Seal Leakage; Non-Contact Cooling Water; Mechanical Seal Leakage; and river water drained from turbines during annual maintenance.	Oil/Water Separator	Housatonic River

1.4 Facility Description

The Permittee's facility is a Federal Energy Regulatory Commission ("FERC") licensed hydroelectric generation plant, located on Lake Housatonic and the Housatonic River, in the cities of Shelton and Derby, CT. The facility is a run-of-river-station, operating based on the water level and flow of its intake stream (Housatonic River). The facility is equipped with twin horizontal double regulated axial turbines. The facility was constructed in 1988 and started operation at the same time.

The twin horizontal turbines have a hydraulic range of 900 cubic feet per second ("cfs") to 2300 cfs per turbine. The turbines are directly connected to a synchronous generator. The wicket gate arms and turbine blades are actuated with hydraulic cylinders. The generator and turbine bearing consist of both oil sumps and water cooling. The turbines and associated systems are within a secured and alarmed concrete powerhouse.

The facility generates wastewater consisting of turbine wicket gate water seal leakage, turbine shaft water seal leakage, mechanical seal leakage, non-contact cooling water from the heat exchanger, and river water drained from the turbines during annual maintenance activities. Routine wastewater, including the seal leakage and non-contact cooling water, is generated at a maximum daily flow of 20,000 gpd. During maintenance periods, the turbines are shut down and river water contained within the turbine casings is drained at a maximum daily flow of 34,000 gpd. All wastewater streams are collected through a network of trench drains and conveyed to an oil/water separator. The treated wastewater then combines with the turbine flow-through water in the turbine tailrace before being discharged through DSN 101-1 to the Housatonic River.

The turbine flow-through water is not regulated under this permit because it is diverted river water used for hydroelectric generation and does not constitute a wastewater discharge.

1.5 Facility Changes

The Regulations of the Connecticut State Agencies ("Regs. Conn. State Agencies") require that permittees notify DEEP and obtain written approval of any facility expansion or process change that may result in an increased or new discharge or constitute a new source, and of any expansion or significant changes made to a wastewater collection system, treatment system, or its method of operation in accordance with Regs. Conn. State Agencies Section 22a-430-3(i). These regulatory provisions are commonly referred to as "3(i) determinations". DEEP will review the notification and determine if the change can be implemented under the current permit or if the requested change requires a permit modification to protect waters of the State in accordance with Regs. Conn. State Agencies Section 22a-430-4(p).

This is a new permit, hence there were no requested changes to the facility for this permit issuance.

1.6 Treatment System Description

This facility uses an oil/water separator system which captures oil leakage from the hydroelectric turbines before it is discharged into the receiving water.

1.7 Compliance History

Is the Permittee subject to an ongoing enforcement action?

☒ Yes

☐ No

Notice of violation (“NOV”) NOVWRIN19 007 was issued for discharging unknown volume of oil into the Housatonic River on December 20, 2018 and discharging floor drain wastewater to the Housatonic River without a permit under Section 22a-430 of the Conn. Gen. Stat. The NOV required the Permittee to implement best management practices to prevent release of hydraulic oil to the Housatonic River. The NOV also required the Permittee to submit an application to obtain a permit to discharge non-contact cooling water and building floor drain wastewater from the oil/water separator to the Housatonic River. The Permittee responded to the NOV by removing oil from the separator tank, repairing the water seal, increasing surveillance of the oil/water separator, and submitting a NPDES application on August 19, 2019. The NOV remains active and will be re-evaluated upon issuance of the permit.

1.8 General Issues Related to the Application

1.8.1 Federally Recognized Indian Land

The facility is not located on federally recognized Indian land.

1.8.2 Coastal Area/Coastal Boundary

The facility is not located within a coastal boundary as defined in Conn. Gen. Stat. 22a-94(b).

1.8.3 Endangered Species

As provided in the permit application, the facility is located within an area identified as a habitat for endangered, threatened or special concern species according to the June 2025 [*State and Federal Listed Species and Natural Communities Map*](#). A National Diversity Data Base (“NDDB”) request was made during the application process.

Based on May 6, 2019, letter provided to the Permittee from the NDDB Program for the discharges covered under Permit No. CT0030732, it was determined that the area for the wastewater discharge from the Derby Hydroelectric facility to the Housatonic River in Shelton and Derby, is a federally designated Critical Habitat for Federal and State Endangered Atlantic sturgeon and also State Special Concern blueback herring.

A Fisheries Consultation Form has been submitted to the DEEP Fisheries Program for review. *The endangered species conditions are subject to change contingent upon DEEP Fisheries Program’s review.*

1.8.4 Aquifer Protection Areas

As provided in the permit application, the site is not located within a protected area identified on a Level A or B map.

1.8.5 Conservation or Preservation Restriction

As provided in the permit application, the property is not subject to a conservation or preservation restriction.

1.8.6 Public Water Supply Watershed

As provided in the permit application, the site is located within a public water supply watershed.

Section 2 Receiving Water Body Information

The upstream water classification of section CT6000-005+L4_01 of the Housatonic River is B. Class B waters are designated for: habitat for fish and other aquatic life and wildlife; recreation; and industrial and agricultural water supply. This waterbody segment is listed on the State's 305(b) list of impaired waters for its designated uses of fish consumption and recreation. The cause of impairment is the presence of chlorophyll-A, algae, and nutrients.

The downstream river segment, CT6000-00_02 of the Housatonic River, is a class "B" water. This waterbody segment is listed on the State's 305(b) list of impaired waters. The cause of impairment is the presence of *Escherichia coli* (*E. coli*). The 2024 results of assessed and impaired waters are listed on the Connecticut Integrated Water Quality Report ("IWQR"): <https://portal.ct.gov/DEEP/Water/Water-Quality/Water-Quality-305b-Report-to-Congress>.

This permit applies the Connecticut Water Quality Standards for Class B surface waters associated with the downstream river segment, CT6000-00_02. The salinity regime for the receiving water is freshwater; therefore, the most stringent freshwater criteria have been evaluated.

Waterbody Segment ID	Waterbody Name	Location	Miles	Aquatic Life	Recreation
CT6000-00_02	Housatonic River (Shelton/Derby)-02	Confluence with Naugatuck River, US to Lake Housatonic outlet dam (Derby Dam), Shelton/Derby town border (Between segment 02 and 03, are Lake Housatonic, Lake Zoar, and Lake Lillinonah, all independent waterbodies).	1.5	Insufficient Information	Not Supporting

2.1 Designated Uses

The designated uses for Class B waters as defined in the Regulations of Connecticut State Agencies [Regs. Conn. State Agencies Section 22a-426-4\(h\)](#) are: 1) habitat for fish other aquatic life and wildlife; 2) recreation; 3) harvesting; and 4) industrial and agricultural water supply.

2.2 Applicable Total Maximum Daily Load ("TMDL")

This river segment is subject to the statewide Long Island Sound ("LIS") Total Maximum Daily Load ("TMDL") titled A Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound (https://portal.ct.gov/-/media/deep/water/lis_water_quality/nitrogen_control_program/tmdlpdf.pdf). This TMDL was developed to address low dissolved oxygen levels in LIS. The LIS TMDL focuses on excess nitrogen loading as the primary cause of hypoxia, rather than low dissolved oxygen resulting

directly from end-of-pipe discharges. Elevated nitrogen inputs stimulate algal growth, and the subsequent decomposition of organic matter depletes oxygen in bottom waters, leading to dissolved oxygen impairment.

The Permittee's discharge has not been assigned a waste load allocation for nitrogen as part of this TMDL. Nitrogen was not identified as a pollutant of concern and is not associated with the facility's operation or discharge; therefore, nitrogen monitoring requirements have not been included in this permit.

DRAFT

Figure 1. Image of discharge location with waterbody segment ID



Section 3 Permit Conditions and Effluent Limitations

3.1 Basis for Limits

Technology and water-quality based requirements are considered when developing permit limits. Technology-based effluent limits (“TBELs”) represent the minimum level of control imposed under the Clean Water Act (“CWA”). Industry-specific technology-based limits are set forth in 40 CFR Sections 405 – 471 (EPA’s Effluent Limitation Guidelines) and in Regs. Conn. State Agencies Section 22a-430-4(s)(2). Water quality-based limits are designed to protect water quality and are determined using the procedures set forth in EPA’s *Technical Support Document for Water Quality-Based Toxics Control*, 1991 (“TSD”). When both technology and water quality-based limits apply to a particular pollutant, the more stringent limit would apply. In addition, water quality-based limits are required when any pollutant or pollutant parameter (conventional, non-conventional, toxic, and whole effluent toxicity) is or may be discharged at a level that causes, has reasonable potential to cause, or contributes to an excursion above any water quality criteria. Numeric water quality criteria are found in Regs. Conn. State Agencies Section 22a-429-9 of the *Connecticut Water Quality Standards* (“WQS”).

3.2 Pollutants of Concern

The following constituents have been identified as pollutants of concern in the permit for the reasons noted below:

POLLUTANT	REASON FOR INCLUSION			
	POLLUTANT WITH AN APPLICABLE TECHNOLOGY-BASED LIMIT	POLLUTANT WITH A WASTE LOAD ALLOCATION FROM A TMDL	POLLUTANT IDENTIFIED AS PRESENT IN THE EFFLUENT THROUGH SAMPLING	POLLUTANT OTHERWISE EXPECTED TO BE PRESENT IN THE EFFLUENT
Copper, Total				X
Lead, Total				X
Oil and Grease, Total				X
Temperature			X	
Zinc, Total			X	

pH monitoring is also included in the permit consistent with Section 22a-426-9(a)(1).

3.3 Technology Based Effluent Limitations

Technology-based treatment requirements represent the minimum level of control that must be imposed under CWA Section 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 Section 125 Subpart A and Regs. Conn. State Agencies Section 22a-430-4(l)(4)(A).

Subpart A of 40 CFR Section 125 establishes criteria and standards for the imposition of technology-based treatment requirements in permits under Section 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 Section 402(a)(1). EPA promulgates New Source Performance Standards (“NSPS”) under CWA Section 306 and 40 CFR Section 401.12. See also 40 CFR Section 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 Section 402(a)(1)(B) and Regs. Conn. State Agencies Section 22a-430-4(m) to establish effluent limitations on a case-by-case basis using best professional judgment (“BPJ”).

The Steam Electric Power Generating Point Source Category at 40 CFR Part 423 was reviewed. According to 40 CFR 423.10, this category is applicable to facilities that produce electricity primarily from a process utilizing fossil-type fuel (coal, oil, or gas) and fuel derived from fossil fuel (e.g., petroleum coke, synthesis gas). Since the Permittee’s facility produces electricity utilizing water from the Housatonic River, the federal effluent limit guideline does not apply.

No other categories found under 40 CFR Chapter 1 Subchapter N match the description of wastewater discharged by DSN 101. Given there are no federal TBELs applicable to this operation, the following BPJ limits were developed:

Oil and Grease: The facility has an oil water separator to remove oil and grease from wastewater associated with the oil cooled bearings. Oil and grease limitations of 10 mg/L, maximum daily limit, and 15 mg/L, instantaneous maximum limit, have been established based on BPJ, pursuant to Regs. Conn. State Agencies Section 22a-430-4(m) and 40 CFR Part 125.3(a). This limit is based on the State’s technology-based treatment requirements for certain industrial discharges published at Regs. Conn. State Agencies 22a-430-4(s).

3.4 Waterbody Ambient Condition

PARAMETER	VALUE
7Q10	170 cfs

3.5 Zone of Influence

A zone of influence has not been allocated in this permit.

3.6 Reasonable Potential Analysis

Pursuant to CWA Section 301(b)(1)(C) and 40 CFR Section 122.44(d)(1), NPDES permits must contain any requirements in addition to TBELs that are necessary to achieve water quality standards established under Section 303 of the CWA. See also 33 United States Code (“USC”) Section 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 Section 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 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 Section 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 WQBELs or require additional monitoring if there is insufficient data to develop a WQBEL, for that pollutant. See 40 CFR Section 122.44(d)(1)(i).

A single data point for temperature, copper, lead, and zinc was provided in the Permittee's application. This is insufficient data to perform a reasonable potential analysis; therefore, DEEP is requiring additional monitoring for these pollutants of concern.

Temperature: The facility discharges non-contact cooling water associated with the cooling of bearings used in the turbines; therefore, temperature is a pollutant of concern. A weekly monitoring frequency of temperature has been included in the permit to assess the variability of temperature in the discharge.

Copper, Lead, and Zinc: Similar to other hydroelectric facilities that capture wastewater throughout the facility in a dedicated sump and utilize oil and water-cooled bearings, copper, lead, and zinc are suspected to be present in the discharge. Consequently, these parameters have been incorporated into the monitoring requirements. This monitoring will be used for future reasonable potential analyses once sufficient data is collected. The minimum levels for copper, lead, and zinc are 0.003 mg/L, 0.001 mg/L, and 0.02 mg/L respectively, to ensure that the testing methodologies are sufficiently sensitive to assess compliance with the WQS.

3.7 Water Quality Based Effluent Limitations ("WQBELs")

The CWA and federal regulations require that effluent limitations based on water quality considerations be established for point source discharges when such limitations are necessary to meet state or federal water quality standards that are applicable to the designated receiving water. This is necessary when less stringent TBELs would interfere with the attainment or maintenance of water quality criteria in the receiving water. See CWA Section 301(b)(1)(C) and 40 CFR Section 122.44(d)(1), 122.44(d)(5), 125.84(e) and 125.94(i).

Temperature, Copper, Lead, and Zinc: As described above, a single data point for temperature, copper, lead, and zinc was provided in the Permittee's application. This is insufficient data to perform a reasonable potential analysis and calculate WQBELs; therefore, DEEP is requiring additional monitoring for these pollutants of concern. This monitoring will be used for future reasonable potential analyses once sufficient data is collected.

pH: A pH limit of 6.5 to 8.0 was established consistent with the Class B criteria of the WQS.

The following provision was added to the pH monitoring requirements to account for circumstances when the intake water is not in compliance with WQS, prior to entering the oil/water separator: "The discharge pH shall be in the range of 6.5 – 8.0 S.U. unless the ambient receiving water is outside of this range and is not altered by the facility's permitted discharge or activities under this permit. If the Permittee's discharge pH is lower than 6.5 S.U., the Permittee may demonstrate compliance by showing that the discharge pH is either higher than, or no more than 0.5 S.U. lower than the pH of the intake water. If the Permittee's discharge is higher than 8.0 S.U.,

the Permittee may demonstrate compliance by showing that the discharge pH is either lower than, or no more than 0.5 S.U. higher than the intake water.

For this demonstration, the intake water shall be collected within one hour of the effluent sample. If the discharge satisfies this condition, the Permittee shall report no data indicator ("NODI") code – "3" (special report attached) and submit the intake and discharge pH data used in the analysis as an attachment to the DMR. If the discharge does not satisfy this provision, then the Permittee is in violation of the effluent limit and shall respond to the noncompliance consistent with Section 8 of the permit. The Permittee shall keep a record of the dates and results of all intake and discharge events on site."

3.8 Whole Effluent Toxicity

The Permittee shall comply with effluent standards or prohibitions established by CWA Section 307(a) and Regs. Conn. State Agencies Section 22a-430-4(l) and may not discharge toxic pollutants in concentrations or combinations that are harmful to humans, animals, or aquatic life. If toxicity is suspected in the effluent, DEEP may require the Permittee to perform acute or chronic whole effluent toxicity testing.

The wastewater is comprised of turbine leakage and non-contact cooling water. The source of the wastewater is intake water from Lake Housatonic, located upstream of the discharge. No chemicals or other substances are added to the water while in the turbine or when used for cooling. Therefore, the water discharged from the turbines and the non-contact cooling water are characteristically similar to the Housatonic River. Toxicity is not expected in the effluent due to the characteristics of the discharge.

3.9 Comparison of Limits

After preparing and evaluating applicable TBELs and WQBELs, the most stringent limits are applied in the permit. Pollutants of concern that only require monitoring without limits with are not included in the table below.

PARAMETER	UNITS	LIMITS			
		TBELs		WQBELs	
		<i>Water Quality Standards</i>		AVERAGE MONTHLY LIMIT	MAXIMUM DAILY LIMIT
		AVERAGE MONTHLY LIMIT	MAXIMUM DAILY LIMIT/INSTANTANEOUS MAX		
Flow	gpd		34,000		
Oil and Grease	mg/L	NA	10 / 15		
				MIN	MAX
pH	SU			6.5	8.0

3.10 Effluent limitations, Sampling Frequency, and Type

Pollutants	Limit	Basis For Limit	Monitoring/ Reporting Frequency	Sample Type
DSN 101-1:				
Copper, Total	Monitoring only requirement for pollutants of concern		Semi-Annually	Grab
Flow	34,000 gpd	Permitted discharge flow per application	Daily	NA
Lead, Total	Monitoring only requirement for pollutants of concern		Semi-Annually	Grab
Oil & Grease, Total	MDL = 10 mg/L MIL = 15 mg/L	TBELs	Monthly	Grab Sample Average
pH, Minimum	6.5 SU	WQBELs	Monthly	Grab
pH, Maximum	8.0 SU	WQBELs	Monthly	Grab
Temperature	Monitoring only requirement for pollutants of concern		Weekly	Grab
Zinc, Total	Monitoring only requirement for pollutants of concern		Semi-Annually	Grab
MDL: Maximum Daily Limit		WQC: Water Quality Criteria		
MIL: Maximum Instantaneous Limit		WQBELs: Water Quality Based Effluent Limit		

3.10.1 Sufficiently Sensitive Methods:

EPA at [40 CFR 122.21\(e\)\(3\)](#) and [40 CFR 122.44\(i\)](#) requires sufficiently sensitive test methods to be utilized for all parameters in a NPDES permit. A method approved under 40 CFR 136 or required through other regulations is sufficiently sensitive when:

- The method minimum level (“ML”) is at or below the level of the applicable water quality criterion or effluent limitation (if below the water quality criterion), whichever is more stringent, for the measured pollutant or pollutant parameter; or
- The method ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N (effluent limit guidelines) or O (sewage sludge) for the measured pollutant or pollutant parameter. Note some effluent limit guidelines (“ELGs”) will specify a required ML for certain analyses.

DEEP has specified ML requirements in the permit to ensure compliance with the sufficiently sensitive test method regulations. The MLs listed in the NPDES permit are the minimum concentration at which quantification must be achieved and verified during the laboratory analysis of the parameter. These values are not necessarily equivalent to the MLs that would be formally established by a lab under the ML definition at 40 CFR 136. In other words, at a minimum, the permittee's analytical method must achieve the ML listed in the permit. This may vary from the actual ML established by the lab for the analysis, using the MDL, lowest calibration point, or other acceptable method under 40 CFR 136.

3.11 Compliance Schedule

The permit has a compliance schedule that follows the requirements found under 40 CFR Section 122.47 and RSCA Section 22a-430-4(l)(3).

Does the Permit contain a compliance schedule? Yes ☐ No ☒

3.12 Antidegradation

Implementation of the Antidegradation Policy follows a tiered approach pursuant to the federal regulations (40 CFR Section 131.12) and consistent with the Connecticut Antidegradation Policy included in the Connecticut Water Quality Standards (Section 22a-426-8(b-f) of the Regulations of Connecticut State Agencies). Tier 1 Antidegradation review applies to all existing permitted discharge activities to all waters of the state. Tiers 1 and 2 Antidegradation reviews apply to new or increased discharges to high quality waters and wetlands, while Tiers 1 and 3 Antidegradation reviews apply to new or increased discharges to outstanding national resource waters.

This discharge is an existing discharge, and the Permittee does not propose an increase in volume or concentration of constituents. Therefore, only the Tier 1 Antidegradation Evaluation and Implementation Review was conducted to ensure that existing and designated uses of surface waters and the water quality necessary for their protection are maintained and preserved, consistent with Connecticut Water Quality Standards, Regs. Conn. State Agencies Sec.22a-426-8(a)(1). This review involved:

- An evaluation of narrative and numeric water quality standards, criteria and associated policies;
- The discharge activity both independently and in the context of other dischargers in the affected waterbodies; and
- Consideration of any impairment listed pursuant to Section 303d of the federal Clean Water Act or any TMDL established for the waterbody.

The facility and its discharges have existed since 1988. The source water for the facility is the Housatonic River and the facility does not intentionally add chemicals nor alter the water prior to it flowing back to the Housatonic River. DEEP has determined the discharges will not have a negative impact on the water quality of the Housatonic River.

DEEP has determined that the discharges and activities are consistent with the maintenance, restoration, and protection of existing and designated used assigned to the receiving water body by considering all relevant available data.

3.13 Anti-Backsliding

This is the first permit for the facility and its wastewater discharges; hence an anti-backsliding evaluation is not required to be performed.

3.14 Categorical Discharge Conditions

There are no applicable federal or state categorical discharge regulations for these discharges.

3.15 Cooling Water Intake Structure Section 316(B)

Section 316(b) of the Federal Water Pollution Control Act, U.S.C. Section 1326(b) states that “any standard established pursuant to Section 301 or 306 of this Act and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures (“CWIS”) reflect the best technology available (“BTA”) for minimizing adverse environmental impact”.

The federal regulations establish requirements under Section 316(b) of the CWA for existing power generating facilities and existing manufacturing and industrial facilities with a cooling water intake structure having a design intake flow greater than 2 million gallons per day of water from waters of the United States and use at least 25 percent of the water they withdraw exclusively for cooling purposes. Section 125.92 defines “Cooling water intake structure” as “the total physical structure and any associated constructed waterways used to withdraw cooling water from waters of the United States. The cooling water intake structure extends from the point at which water is first withdrawn from waters of the United States up to and including the intake pumps.”

Section 125.90(b), states “Cooling water intake structures not subject to requirements under Section 125.94 through 125.99 or subparts I or N of this part must meet requirements under Section 316(b) of the CWA established by the Director on a case-by-case, best professional judgment (BPJ) basis.”

The August 15, 2014, 316(b) final rule applies to existing facilities that withdraw more than 2 MGD of water and uses at least 25% of the actual intake flow exclusively for cooling purposes. In July 2022, EPA published guidance for regions and states in the following memorandum: *Transmittal of the Revised Framework for Best Professional Judgment for Cooling Water Intake Structures at Hydroelectric Facilities*. This document maintains EPA’s interpretation that the 2014 rule’s substantive provisions were not intended to apply to hydroelectric facilities; instead, CWIS at hydroelectric facilities are subject to site-specific requirements set on a BPJ basis pursuant to 40 CFR Section 125.90(b). The following factors are considered in establishing BTA on a BPJ basis in accordance with EPA’s memo:

1. *Volume of cooling water used relative to other power generation facilities and relative to total water use at the facility.* The amount of cooling water used at this facility is comparable to the other hydroelectric facilities in Connecticut. The maximum water that runs through the facility is 2,973,057,662 gpd. The maximum flow of NCCW is 900 gallons per day. The percentage of cooling water used at the facility during maximum flow is 0.000030%;
2. *Cooling water withdrawn relative to waterbody flow.* The percentage of cooling water utilized would be approximately 0.00082% of the river’s 7Q10 flow;
3. *Location of the intake structure.* The intake structure is located within the facility’s penstock.
4. *Technologies at the facility.* Cooling water is drawn from a 6-inch pipe located behind the trash racks. These trash racks are designed to limit the passage of organisms and debris

into the system. Impingement and entrainment are further minimized at the cooling water intake through plant design features, including the use of a duplex strainer. The intake pipe is reduced from 6 inches to 4 inches before entering the strainer, and then further reduced to 1.5 inches for distribution to the generating unit's cooling water system. These design characteristics limit the passage of organisms through the system.

Based on this information, DEEP concludes that this facility meets BTA pursuant to 40 CFR Section 125.90(b).

3.16 Variances and Waivers

The facility did not request a variance or a waiver.

3.17 E-Reporting

The Permittee is required to electronically submit documents in accordance with 40 CFR Section 127.

Section 4 Summary of New Permit Conditions and Limits from the Previous Permit

This section is not applicable given this is the first permit for the facility.

Section 5 Public Participation Procedures

5.1 Information Requests

The application has been assigned the following numbers by the Department of Energy and Environmental Protection. Please use these numbers when corresponding with this office regarding this application.

APPLICATION NO. 201909321

PERMIT ID NO. CT0030732

Interested persons may obtain copies of the application from McCallum Enterprises Limited Partnership, Derby Hydroelectric Project, 305 Canal Street East, Shelton, CT 06484.

The application is available for inspection by contacting Rehnuma Maisha (rehnuma.maisha@ct.gov), at the Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, 79 Elm Street, Hartford, CT 06106-5127 from 8:00 - 4:00, Monday through Friday.

Any interested person may request in writing that his or her name be put on a mailing list to receive notice of intent to issue any permit to discharge to the surface waters of the state. Such request may be for the entire state or any geographic area of the state and shall clearly state in writing the name and mailing address of the interested person and the area for which notices are requested.

5.2 Public Comment

Prior to making a final decision to approve or deny any application, the Commissioner shall consider written comments on the application from interested persons that are received within 30 days of this public notice. Written comments should be directed to Rehnuma Maisha, Environmental Analyst, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127 or

DEEP.IndustrialNPDESPublicComments@ct.gov and should indicate the Permit ID No. CT0030732 in the subject line. The Commissioner may hold a public hearing prior to approving or denying an application if in the Commissioner's discretion the public interest will be best served thereby, and shall hold a hearing upon receipt of a petition signed by at least twenty five (25) persons. Notice of any public hearing shall be published at least thirty (30) days prior to the hearing.

Petitions for a hearing shall be submitted within thirty (30) days from the date of publication of this public notice and should include the application number 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 application and, if resolution is reached, withdraw the petition. The Office of Adjudications will accept electronically-filed petitions for hearing in addition to those submitted by mail or hand-delivered. Petitions with required signatures may be sent to deep.adjudications@ct.gov; those mailed or delivered should go to the DEEP Office of Adjudications, 79 Elm Street, Hartford, CT 06106. If the signed original petition is only in an electronic format, the petition must be submitted with a statement signed by the petitioner that the petition exists only in that form. Original petitions that were filed electronically must also be mailed or delivered to the Office of Adjudications within thirty (30) days of electronic submittal. Additional information can be found at www.ct.gov/deep/adjudications.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). If you are seeking a communication aid or service, have limited proficiency in English, wish to file an ADA or Title VI discrimination complaint, or require some other accommodation, including equipment to facilitate virtual participation, please contact the DEEP Office of Diversity and Equity at 860-418-5910 or by email at deep.accommodations@ct.gov. Any person needing an accommodation for hearing impairment may call the State of Connecticut relay number - 711. In order to facilitate efforts to provide accommodation, please request all accommodations as soon as possible following notice of any agency hearing, meeting, program, or event.



**NOTICE OF TENTATIVE DETERMINATION
INTENT TO ISSUE A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR
THE FOLLOWING DISCHARGES INTO THE WATERS OF THE STATE OF CONNECTICUT**

1.0 TENTATIVE DECISION

The Commissioner of the Department of Energy and Environmental Protection (“the Commissioner”) hereby gives notice of a tentative determination to issue a permit based on an application and administrative record submitted by **McCallum Enterprises I Limited Partnership** (“the Applicant”) under Section 22a-430 of the Connecticut General Statutes (“Conn. Gen. Stat.”) for a permit to discharge into the waters of the state.

In accordance with applicable federal and state law, the Commissioner has made a tentative determination that continuance of the existing discharge would not cause pollution of the waters of the state from pollution.

The Commissioner proposes to issue a permit for the discharge to the Housatonic River.

The proposed permit, if issued by the Commissioner, will require that all wastewater be treated to meet the applicable effluent limitations.

2.0 APPLICANT'S PROPOSAL

McCallum Enterprises I Limited Partnership proposes to discharge 34,000 gallons per day of turbine wicket gate water seal leakage, turbine shaft water seal leakage, non-contact cooling water, mechanical seal leakage, and river water drained from turbines during maintenance to the Housatonic River from hydroelectric generation operations at a hydroelectric generation plant.

The name and mailing address of the permit Applicant are:
McCallum Enterprises I Limited Partnership
2874 Main St, Stratford, CT 06614.

The activity takes place at:
305 Canal Street East
Shelton, CT 06484
(Located on the west side of the Housatonic River, approximately 0.2 miles southeast of the Bridge Street / Route 110 intersection).

3.0 REGULATORY CONDITIONS

3.1 Type of Treatment

DSN 101-1: oil/water separator.

3.2 Effluent Limitations

This permit contains effluent limitations consistent with a Case-by-Case Determination using the criteria of Best Professional Judgement and Water Quality Based-Effluent Limits, which will meet Water Quality Standards including the Anti-Degradation Policy.

In accordance with Section 22a-430-4(l) of the Regulations of Connecticut State Agencies, the permit contains effluent limits for oil and grease and pH.

4.0 COMMISSIONER'S AUTHORITY

The Commissioner of the Department of Energy and Environmental Protection is authorized to approve or deny such permits pursuant to Section 402(b) of the Federal Water Pollution Control Act, as amended, 33 USC 1251, et. seq. and Section 22a-430 of the Conn. Gen. Stat. and the Water Discharge Permit Regulations (Section 22a-430-3 and 4 of the Regulations of Connecticut State Agencies).

5.0 INFORMATION REQUESTS

The application has been assigned the following numbers by the Department of Energy and Environmental Protection. Please use these numbers when corresponding with this office regarding this application.

APPLICATION NO. 201909321

PERMIT NO. CT0030732

Interested persons may obtain copies of the application from:
Joseph Szarmach, McCallum Enterprises I Limited Partnership
2874 Main St, Stratford, CT 06614
Email: joseph.szarmach@gmail.com
Phone No.: (203) 913-2940.

The application is available for inspection by contacting Rehnuma Maisha, Environmental Analyst 1, at 860-424-3291 or rehnuma.maisha@ct.gov, at the Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, 79 Elm Street, Hartford, CT 061065127 from 7:30-3:30, Monday through Friday.

Any interested person may request in writing that his or her name be put on a mailing list to receive notice of intent to issue any permit to discharge to the surface waters of the state. Such request may be for the entire state or any geographic area of the state and shall clearly state in writing the name and mailing address of the interested person and the area for which notices are requested.

6.0 PUBLIC COMMENT

Prior to making a final decision to approve or deny any application, the Commissioner shall consider written comments on the application from interested persons that are received within 30 days of this public notice. Written comments should be directed to Rehnuma Maisha, Environmental Analyst 1, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 061065127 or DEEP.IndustrialNPDESPublicComments@ct.gov and should indicate the Permit ID No. CT0030732 in the subject line. The Commissioner may hold a public hearing prior to approving or denying an application if in the Commissioner's discretion the public interest will be best served thereby, and shall hold a hearing upon receipt of a petition signed by at least twenty -five persons. Notice of any public hearing shall be published at least thirty (30) days prior to the hearing.

7.0 PETITIONS FOR HEARING

Petitions shall be submitted within thirty (30) days from the date of publication of this public notice and should include the application number 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 application and, if resolution is reached, withdraw the petition. 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. The Office of Adjudications will accept electronically-filed petitions for hearing in addition to those submitted by mail or hand-delivered. Petitions with required signatures may be sent to deep.adjudications@ct.gov; those mailed or delivered should go to the DEEP Office of Adjudications, 79 Elm Street, Hartford, CT 06106. If the signed original petition is only in an electronic format, the petition must be submitted with a statement signed by the petitioner that the petition exists only in that form. Original petitions that were filed electronically must also be mailed or delivered to the Office of Adjudications within 30 days of electronic submittal. Additional information can be found at www.ct.gov/deep/adjudications.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). If you are seeking a communication aid or service, have limited proficiency in English, wish to file an ADA or Title VI discrimination complaint, or require some other accommodation, including equipment to facilitate virtual participation, please contact the DEEP Office of Diversity and Equity at 860-418-5910 or by email at deep.accommodations@ct.gov. Any person needing an accommodation for hearing impairment may call the State of Connecticut relay number - 711. In order to facilitate efforts to provide accommodation, please request all accommodations as soon as possible following notice of any agency hearing, meeting, program, or event.



Audra Godfrey, Director
Water Permitting and Enforcement Division
Bureau of Materials Management and Compliance Assurance
Department of Energy and Environmental Protection

Dated: September 30, 2026