



National Pollutant Discharge Elimination System Permit

Issued to

FirstLight CT Hydro LLC
143 West Street, Suite E
New Milford, CT 06776

Location Address:

Old Creamery Road
Colebrook, CT 06021
Robertsville Generating Station

Permit Number: CT0030812

Issuance Date: [date of signature]

Receiving Water Body: Still River

Effective Date: [1st of the month]

Receiving Water Body ID: CT4303-00_02

Permit Expires: [5 years after effective]

SECTION 1: GENERAL PROVISIONS

- (A) This permit is issued in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes (“CGS”), and Regulations of Connecticut State Agencies (“RCSA”) 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.
- (B) **FirstLight CT Hydro LLC** (“Permittee”) shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to Section 22a-430 of the CGS 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
- (l) Conditions Applicable to POTWs
- (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
- (C) 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 CGS and RCSA.
- (D) 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 CGS or in accordance with Section 22a-6, under Section 53a-157b of the CGS.
- (E) 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 CGS and RCSA.
- (F) 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.
- (G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- (H) An annual fee shall be paid for each year this permit is in effect as set forth in Section 22a-430-7 of the RCSA.

SECTION 2: DEFINITIONS

- (A) The definitions of the terms used in this permit shall be the same as the definitions contained in Section 22a-423 of the CGS and Section 22a-430-3(a) and 22a-430-6 of the RCSA.
- (B) In addition to the above, the following definitions shall apply to this permit:

“40 CFR” means Title 40 of the Code of Federal Regulations.

“Average Monthly Limit” means the maximum allowable “Average Monthly Concentration” as defined in Section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g., mg/l). Otherwise, it means “Average Monthly Discharge Limitation” as defined in Section 22a-430-3(a) of the RCSA.

Connecticut Water Quality Standards means the regulations adopted under RCSA 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.

“In-stream Waste Concentration” (“IWC%”) means the concentration (as a percent) of the effluent in the receiving water.

“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 RCSA.

“Range During Sampling” (“RDS”), as a sample type, means the maximum and minimum of all values recorded as a result of analyzing each grab sample of: 1) a Composite Sample or, 2) a Grab Sample Average. For those permittees with continuous monitoring and recording pH meters, Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

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

“Semiannual” when used as a sampling frequency in this permit, means that sampling is required to be conducted at least once during the period from April 1 to September 30 and at least once during the period from October 1 to March 31.

SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner has issued a final determination and found that the discharge will not cause pollution of the waters of the state. The Commissioner's decision is based on Application No. 202206300 for permit issuance received on May 18, 2022, and the administrative record established in the processing of that application.
- (B) Beginning on this permit's effective date 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. 202206300 received by the Department of Energy and Environmental Protection ("DEEP") on May 18, 2022, 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.
- (D) 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 CGS 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 CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL EFFLUENT LIMITATIONS

- (A) The Permittee shall assure that the surface water affected by the subject discharge shall conform to the *Connecticut Water Quality Standards*.
- (B) 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.
- (C) 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.
- (D) 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.
- (E) There shall be no discharge of polychlorinated biphenyl (PCB) compounds.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- (A) 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.
- (B) 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 discharge during standard operating conditions. 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.
- (C) 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 DEEP personnel, the Permittee, or other parties.

Table A

Discharge Serial Number: DSN 101	Monitoring Location: 1
Wastewater Description: Turbine Leakage from Turbine Unit #1	
Monitoring Location Description: Turbine unit #1 leakage collection channel	
Discharge is to: Still River	Dilution Factor: None
Outfall Location: Latitude (41.966613°N) and Longitude (73.043254°W)	

PARAMETER	NETDMR CODE	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
			Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency	Sample Type or measurement to be reported
Flow, Maximum during 24-hr period ¹	50047	gpd	NA	3,000	Daily/Semi-annually	Total Daily Flow ²	NA	NR	NA
Oil & Grease, Total	00556	mg/L	NA	NA	NR	NA	---	Semi-annually	Grab
pH, Day of Sampling	00400	SU	NA	NA	NR	NA	6.5 - 8.0	Semi-annually	Grab

TABLE A FOOTNOTES AND REMARKS

Footnotes:

1. For this parameter, the Permittee shall maintain a record of the Total Daily Flow for each operating day. The Permittee shall report on its DMR “Maximum Daily Flow” for each semi-annual period as defined in Remark 4.
2. Total Daily Flow shall be an estimation of flow discharged over 24 hours.

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(C) 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. 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 6(E).
4. Semi-annual monitoring shall be conducted at least once between April 1 and September 30 and at least once between October 1 and March 31. April through September data shall be reported on the September DMR. October through March data shall be reported on the March DMR.

Table B									
Discharge Serial Number: DSN 102							Monitoring Location: 1		
Wastewater Description: Turbine Leakage from Turbine Unit #2									
Monitoring Location Description: Turbine unit #2 leakage collection channel									
Discharge is to: Still River				Dilution Factor: None			Outfall Location: Latitude (41.966585°N) and Longitude (73.043299°W)		
PARAMETER	NETDMR CODE	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
			Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency	Sample Type or measurement to be reported
Flow, Maximum during 24-hr period ¹	50047	gpd	NA	3,000	Daily/Semi-annually	Total Daily Flow ²	NA	NR	NA
Oil & Grease, Total	00556	mg/L	NA	NA	NR	NA	---	Semi-annually	Grab
pH, Day of Sampling	00400	SU	NA	NA	NR	NA	6.5 - 8.0	Semi-annually	Grab

TABLE A FOOTNOTES AND REMARKS

Footnotes:

- For this parameter, the Permittee shall maintain a record of the Total Daily Flow for each operating day. The Permittee shall report on its DMR “Maximum Daily Flow” for each semi-annual period as defined in Remark 4.
- Total Daily Flow shall be an estimation of flow discharged over 24 hours.

Remarks:

- 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(C) of this permit).
- 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.
- 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 6(E).
- Semi-annual monitoring shall be conducted at least once between April 1 and September 30 and at least once between October 1 and March 31. April through September data shall be reported on the September DMR. October through March data shall be reported on the March DMR.

SECTION 6: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

- (A) 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.
- (B) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136, unless otherwise specified.
- (C) 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.
- (D) 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.
- (E) Analyses for which quantification was verified to be at or below an ML, and which indicate that a parameter was not detected, shall be reported as “less than non-detect” where ‘non-detect’ is the numerical value equivalent to the ML for that analysis. Detected concentrations less than the noted ML shall be reported on the Discharge Monitoring Reports (“DMRs”) as the concentration reported by the laboratory.
- (F) Results of analyses which indicate 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 for purposes of determining compliance with effluent limitations or conditions specified in this permit.
- (G) 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.
- (H) Analyses required under this permit shall be performed in accordance with CGS 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

- (A) The results of chemical analyses and any aquatic toxicity test required by this permit shall be submitted electronically using NetDMR.
- (B) 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 Director in the permit. All aquatic toxicity reports shall also be included as an attachment to the DMR. 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.
- (C) 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 NODI Code C “NO DISCHARGE”. 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.
- (D) *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. Specific requirements regarding NetDMR, submittal of reports using NetDMR, and submittal of reports in hard copy form, are described below:
- (1) *Submittal of NetDMR Subscriber Agreement:* The Permittee will electronically submit the signed *Connecticut DEEP NetDMR Subscriber Agreement* to DEEP at deep.netdmr@ct.gov prior to using NetDMR.
 - (2) *Submittal of Reports Using NetDMR:* The Permittee and/or the signatory authority will electronically submit DMRs and applicable reports required under this permit to DEEP using NetDMR. DMRs will be submitted electronically no later than the last day of the months following the completed reporting period. The permittee will also electronically file any written report of noncompliance as an attachment in NetDMR. NetDMR is accessed from: <https://npdes-ereporting.epa.gov/net-netdmr>

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

- (A) 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.
- (B) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division, within 72 hours and in writing within thirty days of the discharge of any substance listed in the application if the concentration or quantity of that substance exceeds two times the level listed in the application.

This permit is hereby issued on [insert signature date here].

Emma Cimino
Deputy Commissioner
Department of Energy and Environmental Protection

EC/JG

National Pollution Discharge Elimination System Factsheet

SECTION 1 FACILITY SUMMARY

APPLICANT	FirstLight CT Hydro LLC
PERMIT NO.	CT0030812
APPLICATION NO.	202206300
DATE APPLICATION RECEIVED	05/18/2022
LOCATION ADDRESS	Old Creamery Road, Colebrook, CT 06021
FACILITY CONTACT	Kevin Gerardi, Sr. HSE Specialist Office Phone: 860-915-1154 Email: Kevin.Gerardi@firstlight.energy
MAILING ADDRESS	143 West Street, Suite E, New Milford, CT 06776
DMR CONTACT	Kevin Gerardi, Sr. HSE Specialist Office Phone: 860-915-1154 Email: Kevin.Gerardi@firstlight.energy
SECRETARY OF STATE BUSINESS ID	1304725
PERMIT TERM	5 Years
PERMIT CATEGORY	Minor NPDES
SIC & NAICS CODE(S)	4911, 221111
APPLICABLE EFFLUENT GUIDELINES	N/A
PERMIT TYPE	New Issuance
OWNERSHIP	Private
RECEIVING WATER	Still River
WATERBODY SEGMENT ID'S	CT4303-00_02
WATERBODY CLASSIFICATION	B
DISCHARGE LOCATIONS	DSN 101: Latitude 41.966613° Longitude -73.043254° DSN 102: Latitude 41.966585° Longitude -73.043299°
COMPLIANCE ACTIONS	Permit Required under Consent Order Number: WC5435
DEEP STAFF ENGINEER	Joseph Grandelski, Environmental Engineer 1 860-424-3608, joseph.grandelski@ct.gov

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DRAFT

1.1 PERMIT FEES

Application Fee:

Filing Fee	Invoice No.: DEP390390	Amount: \$1300	Date Paid: 05/18/2022
Processing Fee	Invoice No.: N/A	Amount:	Date Paid:

Annual Fee:

	WASTEWATER CATEGORY (per RCSA sec. 22a-430-7)	FLOW CATEGORY	DSN	ANNUAL FEE (per RCSA Sec. 22a-430-7 and CGS Sec. 22a-6f)
	<i>Building Floor Drain Wastewater</i>	3000 gpd	101-102	\$0
TOTAL				\$0

1.2 OTHER PERMITS

FirstLight CT Hydro LLC (“Permittee”, “Applicant”) has no other wastewater discharges at this site that are covered under different permitting mechanisms.

The Applicant has a diversion permit (4303-002-HYD-RI).

1.3 APPLICATION SUBMITTAL INFORMATION

On May 18, 2022, the Department of Energy and Environmental Protection (“DEEP”) received an application (Application 202206300) from FirstLight CT Hydro LLC for the Robertsville Station facility (“the facility”) in the town of Colebrook for the issuance of a National Pollutant Discharge Elimination System (“NPDES”) permit. Consistent with the requirements of Section 22a-6g of the Connecticut General Statutes (“CGS”), the Applicant caused a Notice of Permit Application to be published in the Hartford Courant on April 22, 2022. On February 1, 2023, the application was determined to be timely and administratively sufficient.

The Permittee seeks authorization for the following in Application 202206300:

DSN	PROPOSED AVERAGE DAILY FLOW (gpd)	PROPOSED MAXIMUM DAILY FLOW (gpd)	PROPOSED WASTESTREAMS	TREATMENT TYPE	DISCHARGE TO
101	1500	3000	Turbine Leakage	N/A	Still River
102	1500	3000	Turbine Leakage	N/A	Still River

1.4 DESCRIPTION OF FACILITY

FirstLight CT Hydro LLC is a business that performs hydroelectric generation. The Robertsville Generating Station is a run-of-river hydroelectric generating facility with a combined output capacity of 920 kilowatts. The facility dam was constructed in 1887, and the station was placed into operation in 1914. The station operates at a frequency determined by water levels and flow from its intake water body (Still River). River water is directed into the facility through a canal to individual unit penstocks where it is directed to the two vertical, water powered turbine units. While the turbines are active, a small portion of river water escapes the turbines via packing around the turbine shaft. The turbine leakage from the unit drips into a dedicated trough on the floor of the powerhouse and discharges through a hole in the floor to the facility tailrace. The leakage rate provided on the application from the turbine packing is an estimation, as the station has not been in operation in over 15 years. Wastewater is discharged to the Still River by way of DSNs 101 (Turbine

Unit #1) and 102 (Turbine Unit #2) under this proposed permit. The source water of the turbine leakage is the same water that runs through the turbine and discharges via the turbine draft tube for power generation. The station does not utilize any cooling water.

1.5 FACILITY CHANGES

This is a new permit, so there were no requested changes to the facility for this permit issuance. The facility was placed into operation in 1914, and since then no major structural upgrades have been performed on the units themselves, however supplemental modernization improvements have occurred. The station continues to function as originally designed.

1.6 TREATMENT SYSTEM DESCRIPTION

Robertsville Station is a run-of-river hydroelectric generating facility that does not maintain an on-site wastewater collection system, treatment system, or any treatment chemistry for any of the effluent water flows. Best management practices are used to manage the quality of the wastewater discharge.

1.7 COMPLIANCE HISTORY

Is the Permittee subject to an ongoing enforcement action? Yes No

Consent Order Number WC5435 (“the order”), issued November 9, 2006, required FirstLight to investigate all discharges from hydroelectric facilities, including Robertsville Station, and submit discharge permit applications for all facilities with unpermitted wastewater discharges. DEEP received the report “Investigation and Remediation of Discharges at Ten Hydroelectric Stations” on June 6, 2008, and an addendum “Investigation and Remediation of Discharges at Ten Hydroelectric Stations Addendum” required by Paragraph B.2.d of the order on November 2, 2009, and a subsequent report with an updated monitoring plan on March 29, 2024. DEEP issued an approval on May 2, 2024, indicating that FirstLight was in compliance with Paragraph B.2.d. of the order. The reports identified the discharges of turbine and building leakage from this facility. The reports also stated that a discharge of still well ice preventor, cited in Appendix A of the order, was terminated as of 2000 when the ice preventer was removed and replaced with heaters.

1.8 GENERAL ISSUES RELATED TO THE APPLICATION

- 1.8.1 Federally Recognized Indian Land
As provided in the permit application, the site is not located on federally-recognized Indian land.
- 1.8.2 Coastal Area/Coastal Boundary
The activity is not located within a coastal boundary as defined in CGS 22a-94(b).
- 1.8.3 Endangered Species
As provided in the permit application, the site is located within an area identified as a habitat for Eastern pearlshell (*Margaritifera margaritifera*) and Slimy sculpin (*Cottus cognatus*), which are Species of Special Concern according to the December 2019 “State and Federal Listed Species and Natural Communities Map”. DEEP does not anticipate impacts to state listed species.

Best practices to avoid impacts on freshwater mussels include strict adherence to water quality standards at the project site and paying special attention and addressing specific monitoring targets for sediment, water temperature, copper, and total ammonia nitrogen (“TAN”), according to the DEEP Wildlife Biologist that reviewed the application. The facility does not

add these pollutants to its process or wastewater and the facility's discharge is characteristically similar to the river water.

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

The site is not located within a public supply watershed.

SECTION 2 RECEIVING WATER BODY INFORMATION

The receiving waterbody, the Still River, is identified as CT4303-00_02. This segment of the Still River is classified as a Class B freshwater river, with designated uses of habitat for fish and other aquatic life and wildlife, recreation, and industrial and agricultural water supply. The segment is fully supporting aquatic life, according to the [Final 2022 Connecticut Integrated Water Quality Report \(IWQR\)](#).

The Still River is listed on the State's 305(b) list of impaired waters for its designated use of recreation ([FINAL-2022-IWQR-Appendix-A-1-Connecticut-305b-Assessment-Results-for-Rivers-and-Streams.pdf](#)). The cause of impairment being *Escherichia coli* ([FINAL-2022-IWQR-Appendix-B-2-Waterbodies-with-Adopted-TMDLs-EPA-Category-4a.pdf \(ct.gov\)](#)). This river segment is subject to the CT Statewide Bacteria TMDL ([CT Statewide Bacteria TMDL](#)) and A *Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound*, December 2000 ([Tmdl.pdf \(longislandsoundstudy.net\)](#)), which is based on control of Total Nitrogen. A review of Attachment O in the permit application revealed fecal coliform is not believed to be present, hence it is not a pollutant of concern and monitoring requirements for fecal coliform are not included in this permit. Nitrogen is also not a pollutant of concern at this site.

TMDLs can be found on the DEEP webpage: The Connecticut Total Maximum Daily Load Program ([Total Maximum Daily Load \(ct.gov\)](#)).

Figure 1. Image of discharge location



Figure 2. 2022 Connecticut Integrated Water Quality Report: Appendix A-1. Connecticut 305b Assessment Results for Rivers and Streams

Waterbody Segment ID	Waterbody Name	Location	Miles	Aquatic Life	Recreation
CT4303-00_02	Still River (Colebrook/Winsted)-02	Confluence Sandy Brook, Colebrook, US to Winchester (Winsted) POTW (east side Route 8), Winsted.	2.67	Fully Supporting	Not Supporting

Figure 3. 2022 Connecticut Integrated Water Quality Report: Appendix B-2. Waterbodies with Adopted TMDLs (EPA Category 4a, includes CTDEEP Sub-Categories)

Waterbody Segment ID	TMDL	Basin Number	Waterbody Name	Impaired Designated Use	Cause	EPA Approved	Category/sub category
CT4303-00_02	CT Statewide Bacteria TMDL	4303	Still River_02	Recreation	<i>Escherichia coli</i>	2012	4a

SECTION 3 PERMIT CONDITIONS AND EFFLUENT LIMITATIONS

3.1 EFFLUENT GUIDELINES

The following federal Effluent Limit Guidelines were reviewed to determine their applicability to the facility's discharge, DSNs 101 and 102: 40 CFR § 423 Steam Electric Power Generating Point Source Category. This category applies to electricity generated from fossil-type fuels or nuclear fuel. The Robertsville facility generates electricity through the use of water turbines and therefore is exempt from these federal effluent limit guidelines.

3.2 POLLUTANTS OF CONCERN

The following pollutants are included as monitoring pollutants 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
Oil & grease			X	
pH			X	

3.3 BASIS FOR LIMITS

Technology and water-quality based requirements are considered when developing permit limits. Technology-based limits represent the minimum level of control imposed under the Clean Water Act ("CWA"). Industry-specific technology-based limits are set forth in 40 CFR 405 – 471 (EPA's Effluent Limitation Guidelines) and in RCSA 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 RCSA Section 22a-429-9 of the *Connecticut Water Quality Standards* ("WQS").

3.4 MIXING ZONE

A mixing zone has not been allocated in this permit.

3.5 REASONABLE POTENTIAL ANALYSIS

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.” 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 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).

The facility does not discharge non-contact cooling water, so temperature is not a pollutant of concern. No chemicals or substances are added to the process or wastewater. Monitoring for oil and grease and limits for pH have been incorporated based on best professional judgement and are in-line with other permitted discharges for hydroelectric facilities in Connecticut.

3.6 WHOLE EFFLUENT TOXICITY

The Permittee shall comply with effluent standards or prohibitions established by CWA § 307(a) and RCSA Section 22a-430-4(1) 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. Toxicity is not expected in the effluent due to the characteristics of the discharged wastewater. The wastewater is comprised of turbine leakage, and no chemicals or other substances are added to the water while in the turbine. Therefore, the wastewater is characteristically similar to the Still River upstream of the discharge and toxicity monitoring is not required.

3.7 WATER QUALITY BASED EFFLUENT LIMITATIONS

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 § 301(b)(1)(C) and 40 CFR §§ 122.44(d)(1), 122.44(d)(5), 125.84(e) and 125.94(i).

The Water Quality Criteria for pH in a Class B surface water is 6.5-8.0 S.U. This range has been incorporated into the permit as an end-of-pipe limit.

3.8 TECHNOLOGY BASED EFFLUENT LIMITATIONS

TBELs 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(1)(4)(A).

Subpart A of 40 CFR Part 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 TBELs, 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”).

There are no federal TBELs for hydroelectric generation wastewater.

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 require monitoring without limits are not included in the below table.

PARAMETER	UNITS	LIMITS	
		WATER QUALITY <i>Water Quality Standards</i>	
		AVERAGE MONTHLY LIMIT OR pH Minimum	MAXIMUM DAILY LIMIT OR pH Maximum
pH	SU	6.5	8.0

3.10 SAMPLING FREQUENCY, TYPE, AND REPORTING

The facility shall collect a grab sample (as defined in RCSA 22a-430-3(a)(3)) for oil and grease and pH from DSNs 101 and 102. There is no treatment of the wastewater, and the wastewater is characteristically similar to the source water with little expected variability, so a grab sample will be sufficient to characterize the effluent during standard operating conditions. Based on best professional judgement, semi-annual monitoring will be required for oil and grease and pH, which is consistent with similarly permitted discharges in the state. The facility will record daily flow and report the maximum daily flow semi-annually.

3.11 COMPLIANCE SCHEDULE

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 131.12) and consistent with the Connecticut Antidegradation Policy included in the Connecticut Water Quality Standards (Section 22a-426-8(b-f) of the RCSA). 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 at RCSA Section 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 has operated since 1914, with no major structural upgrades, but supplemental modernization improvements have occurred. Robertsville Station continues to function as originally designed. The facility generates only turbine leakage wastewater that is characteristically similar to the run-of-river water that passes through the facility.

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

3.13 ANTI-BACKSLIDING

This is a new permit for this wastewater discharge; therefore, anti-backsliding is not applicable.

3.14 CATEGORICAL DISCHARGE CONDITIONS

There are no applicable federal or state categorical discharge regulations.

3.15 VARIANCES AND WAIVERS

The facility did not request a variance or a waiver.

3.16 E-REPORTING

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

SECTION 4 PUBLIC PARTICIPATION PROCEDURES

4.1 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. 202206300

PERMIT ID NO. CT0030812

Interested persons may obtain copies of the application from Kevin Gerardi, FirstLight CT Hydro LLC, 143 West Street, Suite E, New Milford, CT 06776, 860-354-8840 or Kevin.Gerardi@firstlight.energy.

The application is available for inspection by contacting Joseph Grandelski at joseph.grandelski@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 8:30 - 4:30, 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.

4.2 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 thirty (30) days of this public notice. Written comments should be directed to Joseph Grandelski, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127 or joseph.grandelski@ct.gov. 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 hereby gives notice of a tentative determination to issue a permit based on an application and administrative record submitted by FirstLight CT Hydro LLC ("the applicant") under Section 22a-430 of the Connecticut General Statutes ("CGS") 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 the discharge to the Still River will not cause pollution of the waters of the state.

2.0 APPLICANT'S PROPOSAL

FirstLight CT Hydro LLC proposes to discharge a maximum daily flow of 3,000 gallons per day of turbine leakage wastewaters to the Still River from power generating operations at a hydroelectric generation plant in Colebrook.

The name and mailing address of the permit applicant are:

FirstLight CT Hydro LLC
143 West Street, Suite E
New Milford, CT 06776.

The activity takes place at:

Old Creamery Road
Colebrook, CT 06021

3.0 REGULATORY CONDITIONS

3.1 Type of Treatment

DSN 101 and DSN 102: No treatment

3.2 Effluent Limitations

This permit contains effluent limitations for pH consistent with a case-by-case determination using the criteria of Best Professional Judgement and which will protect the Water Quality Standards when the permittee complies with all permit requirements.

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

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 CGS and the Water Discharge Permit Regulations (Section 22a-430-3 and 4 of the RCSA).

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. 202206300

Permit No. CT0030812

Interested persons may obtain copies of the application from:

Kevin Gerardi
FirstLight CT Hydro LLC
143 West Street, Suite E
New Milford, CT 06776
(860) 915-1154
Kevin.Gerardi@firstlight.energy

The application is available for inspection by contacting Joseph Grandelski at 860-424-3608 or joseph.grandelski@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 8:30 - 4:30, Monday through Friday.

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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 thirty (30) days of this public notice. Written comments should be directed to Joseph Grandelski, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127 or joseph.grandelski@ct.gov. 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 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 or may be mailed or delivered to DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, 06106-5127. 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.

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

Dated: June 11, 2024