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#### NPDES PERMIT MODIFICATION

#### issued to

**Permittee:** Town of Stonington **Location Address:** Stonington Borough, WPCF

152 Elm Street 2 High Street

Stonington, CT 06378 Stonington CT, 06378

**Attention:** Thomas Gilligan, P.E.

**Facility ID:** 137-001 **Permit ID:** CT0101281

This permit modification is issued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), section 22a-430-4(p)(5) of the Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and Section 402(b) of the Clean Water Act, 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 N.P.D.E.S. permit program.

The Commissioner of Environmental Protection ("the Commissioner") has made a final determination on this permit modification and found that continuance of the existing system and upgrades described in the design plans and specifications by CDM Smith, Inc., dated July 9, 2012 and approved by the Commissioner on August 6, 2012 to treat the discharge, will protect the waters of the state from pollution. The Commissioner's decision is based on application # 201401504 for permit modification received on February 24, 2014 and the administrative record established in the processing of that application.

The Town of Stonington, ("Permittee"), shall comply with all conditions of Permit No. CT0101281 issued on October 23, 2013 with the following modification:

1) The start-up date for the ultra violet disinfection system currently listed in Table A (Footnote # 5) of the above-referenced permit is modified from March 31, 2014 to December 31, 2014.

The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit modification, permit No. CT0101281, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

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 that may be authorized under the Clean Water Act or the Connecticut General Statutes or regulations adopted thereunder, as amended. The permit as modified under this paragraph may also contain any other requirements of the Clean Water Act or Connecticut General Statutes or regulations adopted thereunder which are then applicable.

# **DRAFT**

All other terms and conditions of Permit No. CT0101281 issued on October 23, 2013 shall continue in full force and effect.

This modification is hereby issued on .......

Betsey Wingfield

Bureau Chief Bureau of Water Protection and Land Reuse

# TABLE A

Discharge Serial Number (DSN): **001-1** Monitoring Location: **1** 

Wastewater Description: Sanitary Sewage

Monitoring Location Description: Final Effluent

Allocated Zone of Influence (ZOI): **100:1 cfs**In-stream Waste Concentration (IWC): **1 %** 

Anocated Zone of Influence (Zon). 100:1 cts							1			
DADAMETED		FLOW/TIME BASED MONITORING					NTANEOU NTORING	REPORT FORM	Minimum	
PARAMETER	Units	Average Monthly Limit	Maximum Daily Limit	Sample Freq.	Sample type	Instantaneous Limit or Required Range 3	Sample Freq.	Sample Type		Level Analysis See Section 6
Alkalinity	mg/l	NA	NA	NR	NA		Monthly	Grab	MOR	
Carbonaceous Biochemical Oxygen Demand <sup>1</sup> (5 day). See remark (E) below	mg/l	25	45	Weekly	Daily Composite	NA	NR	NA	DMR/MOR	
Chlorine, Total Residual (Year round) <sup>4</sup>	mg/l	NA	NA	NR	NA	0.2 - 1.5	4/ Work Day	Grab	DMR/MOR	
Fecal coliform <sup>4</sup> (Year Round)	Colonies per100 ml	NA	NA	NR	NA	see remarks (A) and (B) below	weekly	Grab	DMR/MOR	
Fecal coliform (Year Round) <sup>5</sup> . See remark (C) below	Colonies per100 ml	NA	NA	NR	NA	260	weekly	Grab	DMR/MOR	
Enterococci <sup>5</sup> . (Year Round). See remark (D) below	Colonies per100 ml	NA	NA	NR	NA	500	weekly	Grab	DMR/MOR	
Flow (Average daily)	MGD			Continuous <sup>2</sup>	Daily Flow	NA	NR	NA	DMR/MOR	
Nitrogen, Ammonia (total as N)	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Nitrate (total as N)	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Nitrite (total as N)	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total Kjeldahl	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Nitrogen, Total	lbs/day	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Oxygen, Dissolved	mg/l	NA	NA	NR	NA		Work Day	Grab	MOR	
рН	S.U.	NA	NA	NR	NA	6 - 9	Work Day	Grab	DMR/MOR	

#### **DRAFT**

Phosphate, Ortho	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	MOR	
Phosphorus, Total	mg/l	NA		Monthly	Daily Composite	NA	NR	NA	DMR/MOR	
Solids, Settleable	ml/l	NA	NA	NR	NA		Work Day	Grab	MOR	
Solids, Total Suspended <sup>1</sup> . See remark (E) below.	mg/l	30	50	Weekly	Daily Composite	NA	NA	NA	DMR/MOR	
Temperature	°F	NA	NA	NR	NA		Work Day	Grab	MOR	
Turbidity	NTU	NA	NA	NR	NA		Work Day	Grab	MOR	
UV Dose (Year round) <sup>5</sup>	mW,s/cm	NA	NA	NR	NA	≥30.0	4/Work Day	Grab	DMR /MOR	
UV Transmittance (Year Round) <sup>5</sup>	%	NA	NA	NR	NA		4/Work Day	Grab	MOR	

#### TABLE A – CONDITIONS

#### Footnotes:

- <sup>1</sup> The discharge shall meet the more stringent of 25 mg/l for CBOD5 and 30 mg/l for TSS or 15% of the average monthly influent CBOD<sub>5</sub> and suspended solids (Table E, Monitoring Location G)
- <sup>2</sup> The permittee shall record and report on the monthly operating report the minimum, maximum and total flow for each day of discharge and the average daily flow for each sampling month. The permittee shall report, on the discharge monitoring report, the average daily flow and maximum daily flow for each sampling month.
- <sup>3</sup> The instantaneous limits in this column are maximum limits except for UV Dose which is a minimum limit.
- <sup>4</sup> During the period beginning at the date of issuance of this permit and lasting until the initiation of ultraviolet disinfection and decommissioning of chlorine disinfection at the Water Pollution Control Facility, the discharge shall not exceed and shall otherwise conform to specific terms and conditions listed.
- <sup>5</sup> During the period beginning after the initiation of ultraviolet disinfection at the Water Pollution Control Facility but no later than **December 31, 2014**, lasting until expiration, the discharge shall also not exceed and shall otherwise conform to the specific terms and conditions listed.

#### Remarks

- (A) The geometric mean of the Fecal coliform bacteria values for the effluent samples collected in a period of a calendar month shall not exceed 200 per 100 milliliters.
- (B) The geometric mean of the Fecal coliform bacteria values for the effluent samples collected in a period of a calendar week shall not exceed 400 per 100 milliliters.
- (C) The geometric mean of the Fecal coliform bacteria values for the effluent samples collected in a period of a calendar month shall not exceed 88 per 100 milliliters.
- (D) The geometric mean of the Enterococci bacteria values for the effluent samples collected in a period of a calendar month shall not exceed 35 per 100 milliliters.
- (E) The Average Weekly discharge Limitation for CBOD<sub>5</sub> and Total Suspended Solids shall be 1.5 times the Average Monthly Limit listed above.

# DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Town of Stonington (Borough POTW)—

## **PERMIT MODIFICATION**

**Location Address:** 

Stonington (Borough POTW)

# PERMIT, ADDRESS, AND FACILITY DATA

Street: Town of Stonington (Town Hall)

Mailing Address:

**PERMIT #:** CT0101281 **APPLICATION #:** 201401504 **FACILITY ID.** 137-001

City: 152 Eli	m Street, S1:C1	Zip: 063/8	2 High St, Stonington C1 063/8					
Contact Name: Thomas Gilligan, WPCA Director			Contact Name:					
			William Waterhouse, (Chief Operator) United Water					
Phone No.: 860-535-5065.			Phone No.: 860-599-4548					
	tgilligan@stonington-ct	.gov	DMR Contact email address: Bill.Waterhouse@UnitedWater.com					
PERMIT INFOR	MATION N 5 YEAR X	10 YEAR	30 YEAR					
TYPE	New _ Reissuance	Modifica	tion <u>X</u>					
CATEGOR	AIZATION POINT (X)	NON-POINT	() GIS#					
NPDES (X) PRETREAT () GROUND WATER(UIC) ( ) GROUND WATER (OTHER) ( )								
NPDES NPDES NPDES POLLUTION PRE	S MAJOR(MA) S SIGNIFICANT MINOI S <u>or</u> PRETREATMENT SCHEDULE YES_ EVENTION TREA Y REQUIREMENT	MINOR ( <b>MI</b> ) : NO_ ATMENT REQ	X <u>X</u> DUIREMENT					
OWNEDSHID CO	)DE							
OWNERSHIP CO Private Feder	al State Mu	ınicipal (town o	only) X Other public					
DEEP STAFF ENGINEER Carlos Esguerra								
PERMIT FEES								
Discharge Code	DSN Number	Annual Fee(\$	5)					
111000 <b>c</b>	001	1,722.50						
Drainage Basin Co Stonington Harbor	de:2000 Water (	Quality Classific	cation Goal: <b>SB</b>					

#### NATURE OF BUSINESS GENERATING DISCHARGE

Municipal Sanitary Sewage Treatment

#### PROCESS AND TREATMENT DESCRIPTION (by DSN)

Municipal Wastewater Treatment plant with secondary treatment, denitrification and year round chlorine disinfection. Facility will replace the chlorine disinfection system with an Ultraviolet Light disinfection system. This work is expected to be completed by the 4<sup>th</sup> quarter of 2014.

# 

#### **GENERAL COMMENTS**

The Town of Stonington operates the "Borough" municipal water pollution control facility located at 2 High Street in Stonington. The facility is designed to treat and discharge up to 0.66 million gallons a day of effluent into Stonington Harbor/Long Island Sound. The facility currently uses secondary treatment with denitrification and year round chlorine disinfection to treat effluent before being discharged. Facility is expected to implement UV disinfection by the 4<sup>th</sup> quarter of 2014. Pursuant to Conn. Gen. Stat. § 22a-430, the Department of Energy and Environmental Protection has issued a NPDES permit for the discharge from this facility.

*In order to meet in-stream water quality (See General Comments)* 

The town of Stonington (Borough) has submitted an application to modify its permit. The Department has made a tentative determination to approve the referenced application and has prepared a draft permit modification consistent with that determination.

#### MODIFICATION OF EXISTING PERMIT

Anti-degradation policy

The applicant submitted a permit modification request on February 24, 2014, requesting the extension of the UV start date from March 31, 2014 to December 31, 2014. The flow diverted from Mystic to the Borough in combination with a potential wet weather event can result in instantaneous wet weather flows at the Borough plant that would significantly reduce minimum chlorine contact times necessary to ensure adequate disinfection. In light of this and as a prudent measure, the Stonington WPCA ("WPCA") has requested that the start-up deadline for the new UV disinfection system at the Borough plant be postponed until December 31, 2014. The new date will give the WPCA the necessary time to complete the work at the Mystic plant prior to the initiation of the UV upgrade work at the Borough plant.

### SPECIFIC REQUIREMENTS OR REVISIONS

The start-up date for the ultra violet disinfection system currently listed in Table A (Footnote # 5) of the above-referenced permit is modified from March 31, 2014 to December 31, 2014. All other terms and conditions of Permit No. CT0101281 issued on October 23, 2013 shall remain in full force and effect.

#### WATER QUALITY LIMIT CALCULATIONS

See permit file

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Notice of Tentative Determination to Approve NPDES Permit Modification Applicant: Town of Stonington Application No. 201401504 Town: Stonington

The Commissioner of the Department of Energy and Environmental Protection ("DEEP") hereby gives notice that a tentative determination has been reached to approve the following application.

Applicant's Name and Address: Town of Stonington, Water Pollution control Authority

152 Elm Street

Stonington, CT 06378

Contact Name and Phone No.: Thomas Gilligan, 860-535-5065

Type of Permit and #: NPDES –CT0101281

Type of Facility: Domestic wastewater treatment

Facility Location: Stonington Borough, Water Pollution Control Facility

2 High Street

Stonington, CT 06378

Facility design capacity: 660,000 gallons per day

#### COMMISSIONER'S FINDINGS/REGULATORY CONDITIONS

The applicant has previously received a permit from the Department of Energy and Environmental Protection ("Department") authorizing the discharge of up to an annual average daily design flow of 0.66 million gallons a day of secondary treated municipal wastewaters into Stonington Harbor. The applicant has submitted an application to modify its existing permit. This modification of the existing permit is the subject of this notice.

#### THE DRAFT PERMIT MODIFICATION

The Department has prepared a draft of the permit modification consistent with the tentative determination to approve the Town of Stonington's application to modify its existing permit. This draft is available on the public participation section of the Department's website. This permit modification is issued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), section 22a-430-4(p)(5) of the Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and Section 402(b) of the Clean Water Act, 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 N.P.D.E.S. permit program.

The permit is hereby modified as follows: the start-up date for the ultra violet disinfection system currently listed in Table A (Footnote # 5) of the above-referenced permit is modified from March 31, 2014 to December 31, 2014.

Pursuant to sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies (RCSA), all other terms and conditions of Permit No. CT0101281 issued on October 23, 2013 shall remain in full force and effect.

#### INFORMATION REQUESTS/PUBLIC COMMENT

This application has been assigned No. 201401504; please use this number when corresponding with DEEP regarding this application. Interested persons may obtain copies of the application from the applicant at the above address. The application and supporting documentation are available for inspection at the Department of Energy and Environmental Protection, Water Protection and Land Reuse, 79 Elm Street, Hartford, CT from 8:00 am to 4:30 pm, from Monday through Friday and at other times by appointment. Questions may be directed to Carlos Esguerra of the Municipal Facilities Section at 860-424-3756 or carlos.esguerra@ct.gov.

Before making a final decision on this application, the Commissioner shall consider written comments on the application from interested persons. Written comments on the application should be directed to Carlos Esguerra, Planning and Standards Division, Water Protection and Land Reuse Bureau, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127, or may be submitted via electronic mail to: <a href="mailto:carlos.esguerra@ct.gov">carlos.esguerra@ct.gov</a> no later than thirty (30) days from the publication date of this notice.

#### PETITIONS FOR HEARING

The Commissioner may conduct a public hearing if the Commissioner determines that the public interest will best be served thereby, or shall hold a hearing upon receipt of a petition signed by at least twenty-five persons. Petitions 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. Original signed petitions may be scanned and sent electronically to deep.adjudications@ct.gov or may be mailed or delivered to: DEEP Office of Adjudications, 79 Elm Street, 3<sup>rd</sup> floor, Hartford, CT 06106-5127. All petitions must be received within the comment period noted above. If submitted electronically, original signed petitions must also be mailed or delivered to the address above within ten days of electronic submittal. If a hearing is held, timely notice of such hearing will be published in a newspaper of general circulation.

Dated: 02/28/2014

<u>/s/Denise Ruzicka, Director</u> Planning and Standards Division Bureau of Water Protection and Land Reuse

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