

## PRETREATMENT PERMIT

issued to

Culligan Water Company of Connecticut, Inc.  
5 Second Lane  
Bethel, Connecticut 06801

**Location Address:**

5 Second Lane  
Bethel, Connecticut 06801

Facility ID: **009-044**

Permit ID: **SP0000993**

Permit Expires: **January 14, 2018**

### SECTION 1: GENERAL PROVISIONS

- (A) This permit is re-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 a modified Memorandum of Agreement (“MOA”) dated June 3, 1981, by the Administrator of the United States Environmental Protection Agency which authorizes the State of Connecticut to administer a Pretreatment Program pursuant to 40 CFR Part 403.
- (B) **CULLIGAN WATER COMPANY OF CONNECTICUT, INC.** (“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)(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
- (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
  - (r) Secondary Treatment Requirements
  - (s) Treatment Requirements for Metals and Cyanide
  - (t) Discharges to POTWs - Prohibitions
- (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. Specifically, civil penalties of up to twenty-five thousand dollars may be assessed per violation per day.
- (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 (“the Commissioner”). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner at least 30 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) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- (G) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the Regulations of Connecticut State Agencies.

## **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:
- “---” in the limits column on the monitoring table means a limit is not specified but a value must be reported on the DMR.
- “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.
- “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 generated during an operating day.
- “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 RCSA.
- “NA” as a Monitoring Table abbreviation means “Not Applicable”.

“Range During Sampling” or “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 shall mean the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

“Twice Per Month” when used as a sample frequency shall mean two samples per calendar month collected no less than 12 days apart.

### SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner has made a final determination and found that the continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 200903558 for permit reissuance received on October 19, 2009 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, 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 as follows:
  - (1) From the issuance of this permit through and including **January 31, 2013**, the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. SP0000993, issued by the Commissioner to the Permittee on April 24, 2000, the previous application submitted by the Permittee on April 13, 1999, 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, Permit No. SP0000993, issued by the Commissioner to the Permittee on April 24, 2000.
  - (2) From **February 1, 2013** 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 Permit No. SP0000993, issued by the Commissioner to the Permittee on the issuance date noted on the signature page of this permit, Application No. 200903558 received by the Department on October 19, 2009, 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 Permit No. SP0000993, issued by the Commissioner to the Permittee on the issuance date noted on the signature page of this permit.
- (C) 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 Federal Clean Water Act or the Connecticut General Statutes 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 Connecticut General Statutes or regulations adopted thereunder which are then applicable.

### SECTION 4: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- (A) The discharges shall not exceed and shall otherwise conform to specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the tables below.
- (B) All samples shall be comprised of only those wastewaters identified in the tables. Therefore, samples shall be taken prior to combination with wastewaters of any other type and after all approved treatment units, if applicable. All samples taken shall be representative of the discharge during standard operating conditions.
- (C) In cases where limits and sample type are specified but sampling is not required, the limits specified shall apply to all samples which may be collected and analyzed by, the Department of Energy and Environmental Protection personnel, the Permittee, or other parties.

**Table A**

**Discharge Serial Number:** 201-1

**Monitoring Location:** 1

**Wastewater Description:** Treated wastewater generated from the following operations: *Salt Barrel Cleaning; Water Cooler Washing; Hydrostatic Testing of Reverse Osmosis Units & Softeners; Backwashing, Brine Regenerating, and Disinfecting of Water Softeners; Backwashing and Rising Neutralizers and Particulate Filters; Backwashing, Potassium Permanganate Regenerating, and Rinsing of Greensand Filters; Carbon Rinsing; Handwash Waters and Eyewash*

**Monitoring Location Description:** At the discharge pipe located after the collection sump

**Discharge is to:** City of Danbury Water Pollution Control Facility via the Bethel sewer collection system

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
		Average Monthly Limit	Maximum Daily Limit	Sample// Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample// Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be Reported
Chlorine, Total Residual	mg/l	NA	NA	NR	NA	---	Twice per Month	RDS
Copper, Total	mg/l	1.0	2.0	Twice per Month	Daily Composite	3.0	NR	Grab
Flow, Average Daily <sup>1</sup>	gpd	30,000	NA	Continuous	Daily Flow	NA	NR	NA
Flow, Maximum <sup>1</sup>	gpd	NA	60,000	Continuous	Daily Flow	NA	NR	NA
Flow (Day of Sampling)	gpd	---	60,000	Twice per Month	Daily Flow	NA	NR	NA
Iron, Total	mg/l	---	---	Monthly	Daily Composite	NA	NR	NA
Lead, Total	mg/l	0.1	0.5	Monthly	Daily Composite	0.75	NR	Grab
Magnesium, Total	mg/l	---	---	Monthly	Daily Composite	NA	NR	NA
Manganese, Total	mg/l	---	---	Monthly	Daily Composite	NA	NR	NA
Oil & Grease, Total	mg/l	---	100	Monthly	Grab Sample Average	NA	NR	NA
pH, Day of Sampling	SU	NA	NA	NR	NA	6.0 to 10.0	Twice per Month	RDS
pH, Minimum	SU	NA	NA	NR	NA	6.0	Continuous	Continuous
pH, Maximum	SU	NA	NA	NR	NA	10.0	Continuous	Continuous
Total Suspended Solids	mg/l	---	---	Monthly	Daily Composite	NA	NR	NA
Zinc, Total	mg/l	1.0	2.0	Twice per Month	Daily Composite	3.0	NR	Grab

**Table A Footnotes and Remark:**

**Footnotes:**

<sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.

<sup>2</sup> The first entry in this column is the ‘Sample Frequency’. If this entry is not followed by a ‘Reporting Frequency’ and the ‘Sample Frequency’ is more frequent than monthly then the ‘Reporting Frequency’ is monthly. If the ‘Sample Frequency’ is specified as monthly, or less frequent, then the ‘Reporting Frequency’ is the same as the ‘Sample Frequency’.

**Remark:**

Abbreviations used for units are as follows: gpd means gallons per day; mg/l means milligrams/liter; SU means Standard Units. Other abbreviations are as follows: NA means Not Applicable; NR means Not Reportable; RDS means Range During Sampling.

## SECTION 5: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES AND REPORTING REQUIREMENTS

- (A) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved by the Environmental Protection Agency pursuant to 40 CFR 136 unless an alternative method has been approved in writing in accordance with 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit.
- (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 results of chemical analysis required above shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Materials Management and Compliance Assurance at the following address. Except for continuous monitoring, 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 other methods approved by the Commissioner shall also be included on the DMR, or as an attachment, if necessary. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which samples are taken.

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

- (D) 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". 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.
- (E) NetDMR Reporting Requirements
  - 1. Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit discharge monitoring reports (DMRs) and other required reports through a secure internet connection. Unless otherwise approved in writing by the Commissioner, no later than one-hundred and eighty (180) days after the issuance of this permit the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

- a. Submittal of *NetDMR Subscriber Agreement*

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department at [deep.netdmr@ct.gov](mailto:deep.netdmr@ct.gov) and initiate the NetDMR subscription process for electronic submission of Discharge Monitoring Report (DMR) information. Information on NetDMR is available on the Department's website at [www.ct.gov/deep/netdmr](http://www.ct.gov/deep/netdmr). On or before ninety (90) days after issuance of this permit the Permittee shall submit a signed and notarized copy of the **Connecticut DEEP NetDMR Subscriber Agreement** to the Department.

- b. Submittal of Reports Using NetDMR

Unless otherwise approved by the Commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit DMRs and reports required under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of Section 5(C) of this permit.

DMRs shall be submitted electronically to the Department no later than the 30th day of the month following the completed reporting period. All reports 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 Department as an electronic attachment to the DMR in NetDMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to the Department. The Permittee shall also electronically file any written report of non-

compliance described in Section 6 of this permit as an attachment in NetDMR. NetDMR is accessed from: <http://www.epa.gov/netdmr>.

c. Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting DMRs and reports, the Commissioner may approve the submission of DMRs and other required reports in hard copy form ("opt-out request"). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date a Permittee would be required under this permit to begin filing DMRs and other reports using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department's approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at [deep.netdmr@ct.gov](mailto:deep.netdmr@ct.gov):

Attn: NetDMR Coordinator  
Connecticut Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

- (F) Copies of all DMRs shall be submitted concurrently to the local Water Pollution Control Authority(ies) ("WPCA") involved in the treatment and collection of the permitted discharge.

## SECTION 7: COMPLIANCE CONDITIONS

The Commissioner may provide public notification, in a newspaper of general circulation in the area of the respective POTW, of permittees that at any time in the previous twelve months were in significant noncompliance with the provisions of this permit. For the purposes of this provision, a Permittee is in significant noncompliance if its violation(s) meet(s) one or more of the following criteria:

- **Chronic violations:** Those in which sixty-six (66%) percent or more of all measurements taken for the same pollutant parameter during a six-month period exceed (by any magnitude) the Average Monthly, Maximum Daily, or Maximum Instantaneous Limit(s).
- **Technical Review Criteria violations:** Those in which thirty-three (33%) or more of all of the measurements taken for the same pollutant parameter during a six-month period equal or exceed the Average Monthly, Maximum Daily, or Maximum Instantaneous Limit(s) multiplied by 1.4 for BOD, TSS, fats, oil, and grease, or 1.2 for all other pollutants except pH.
- **Monitoring Reports:** Failure to provide, within 45 days after the due date, required reports such as DMRs.
- **Compliance Schedule:** Failure to meet within 90 days after the schedule date, a compliance schedule milestone contained in or linked to a respective permit for starting construction, completing construction, or attaining final compliance.
- **Noncompliance Reporting:** Failure to accurately report noncompliance in accordance with provisions identified in Section 6 of this permit.
- **Discretionary:** Any other violation of an effluent limit that the Department determines has caused, alone or in combination with other discharges, a violation of the POTW's NPDES permit, inhibition or disruption of the POTW, its treatment processes or operations, or its sludge processes, use or disposal.
- **Imminent Endangerment:** Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment, or has resulted in the Department's exercise of its emergency authority under 40 CFR §403.8(f)(1)(vi)(B) to halt or prevent such a discharge.

- **BMPs:** Any other violation or group of violations, which may include a violation of Best Management Practices, which the Department determines will adversely affect the operation or implementation of the pretreatment program.

This permit is hereby issued on **1/15/2013**

MACKY MCCLEARY  
Deputy Commissioner

MM:CMG  
*copy:* Danbury WPCF

**FACT SHEET**  
**SPDES PERMIT RENEWAL**

<b>APPLICANT</b>	<i>CULLIGAN WATER COMPANY OF CONNECTICUT, INC.</i>
<b>SPDES PERMIT NO.</b>	<i>SP0000993</i>
<b>APPLICATION NO.</b>	<i>200903558</i>
<b>DATE APPLICATION RECEIVED</b>	<i>October 19, 2009</i>
<b>FACILITY ID.</b>	<i>009-044</i>
<b>LOCATION ADDRESS</b>	<i>5 Second Lane Bethel, Connecticut 06801</i>
<b>FACILITY CONTACT</b>	<i>James O'Hara, Branch Manager Office Phone: 203-744-0200 Ext 101 Cell Phone: 203-948-1199 FAX: 203-731-5406 <a href="mailto:johara@culliganwaterco.com">johara@culliganwaterco.com</a></i>
<b>MAILING ADDRESS</b>	<i>5 Second Lane Bethel, Connecticut 06810</i>
<b>DMR CONTACT</b>	<i>Jim O'Hara</i>
<b>BILLING CONTACT</b>	<i>Jim O'Hara</i>
<b>PERMIT TERM</b>	<i>5 years (formerly 10 years)</i>
<b>PERMIT CATEGORY</b>	<i>Significant Industrial User:</i>  <input type="checkbox"/> <i>Subject to Categorical Pretreatment Standards</i> OR <input checked="" type="checkbox"/> <i>Discharges an average of 25,000 gpd or more of process wastewater</i> <input type="checkbox"/> <i>Contributes 5% or more of the hydraulic/organic capacity of the POTW</i> <input type="checkbox"/> <i>Designated as SIU on the basis of its operations</i>
<b>SIC CODES</b>	<i>7389 (Business Services, NEC)</i>
<b>PERMIT TYPE</b>	<i>Renewal</i>
<b>OWNERSHIP</b>	<i>Private</i>
<b>POTW THAT RECEIVES THE DISCHARGE</b>	<i>City of Danbury Water Pollution Control Facility [Still River]</i>
<b>DEP STAFF ENGINEER</b>	<i>Christine Gleason (860/424-3278) <a href="mailto:christine.gleason@ct.gov">christine.gleason@ct.gov</a></i>

**PERMIT FEES**

*Application Filing Fee: \$1,300. Paid on October 19, 2009*  
*Application Processing Fee: \$6,300.00 (Invoice 195909). Paid on [INSERT DATE]*

**Annual Fee:**

DISCHARGE CODE	WASTEWATER CATEGORY (per 22a-430-7)	MAXIMUM GPD or CATEGORY	DSN	ANNUAL FEE (per 22a-430-7)
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NONE	<b>Water Filter Regeneration Backwash</b> <i>(Treated wastewater generated from the following operations: Salt barrel cleaning; Water cooler washing, Hydrostatic testing of RO units/softeners, Backwashing, brine regenerating, and disinfecting of water softeners; Backwashing and rinsing neutralizers and particulate filters; Backwashing, potassium permanganate regeneration, and rinsing of greensand filters; Carbon rinsing; Handwash waters and Eyewash)</i>	---	201	4,330.00
<b>TOTAL</b>				<b>\$4,330.00</b>

## I. APPLICANT

Culligan Water Company of Connecticut, Inc. (“Culligan”) is seeking a renewal of its SPDES permit (SP0000993) for authorization of the discharge of treated wastewater from the regeneration of residential water treatment equipment. On October 19, 2009, the Department received Application 200903558 for the subject SPDES permit. This application was noticed in *The News-Times* on November 6, 2009. On May 26, 2010, the application was determined to be timely and administratively sufficient.

The applicant seeks authorization for the following:

DSN	PROPOSED AVERAGE MONTHLY FLOW (gpd)	PROPOSED MAXIMUM DAILY FLOW (gpd)	PROPOSED WASTESTREAMS	TREATMENT TYPE	DISCHARGE TO
201-1	30,000	60,000	Treated wastewater generated from the following operations: Salt barrel cleaning; Water cooler washing, Hydrostatic testing of RO units/softeners, Backwashing, brine regenerating, and disinfecting of water softeners; Backwashing and rinsing neutralizers and particulate filters; Backwashing, potassium permanganate regenerating, and rinsing of greensand filters; Carbon rinsing; Handwash waters and Eyewash	Equalization; Neutralization; Color removal for certain wastestreams	City of Danbury WPCF

## II. BACKGROUND

Culligan is engaged in the regeneration of residential drinking water treatment equipment at its site in Bethel. The wastewater associated with these activities is treated on-site and discharged to the City of Danbury’s Water Pollution Control Facility via the Bethel collection system by way of permit SP0000993, through one sewer connection point, DSN 201-1 (known in the existing permit as DSN 001-1).

Prior to Culligan, the entity known as Winokur Water Systems, Inc. (“Winokur”) operated at the site. In January 2005, Culligan began operating at the site. The existing wastewater discharge permit, SP0000993, was initially issued to Winokur, but later transferred to Culligan in 2005. This permit includes a compliance schedule which requires the Permittee to: 1) Comply with the requirements of Sections 5(b) through 5(d) of Stipulated Judgment CV98-05814635; and 2) Conduct annual environmental audits at the Bethel facility in accordance with the protocol established under Section 5 of the Stipulated Judgment. The Permittee is in compliance with these requirements.

## III. ISSUES RELATED TO THE APPLICATION

### A. FEDERALLY-RECOGNIZED INDIAN LAND

As provided in the permit application, the site is not located on federally-recognized Indian land.

### B. COASTAL AREA/COASTAL BOUNDARY

The subject site is not located in a coastal area/coastal boundary.

### C. ENDANGERED SPECIES

The subject site is located within an area identified as a habitat for endangered, threatened, or special concern species (December 2011 map). However, this activity involves the renewal of a sewer discharge permit and would therefore, not be expected to be an impact.

#### **D. AQUIFER PROTECTION AREAS**

The project site is located within a town required to establish Aquifer Protection Areas, but the site is not within an area identified on a Level A or Level B map.

### **IV. NATURE OF THE BUSINESS GENERATING THE DISCHARGE**

Culligan is in the business of regenerating residential drinking water treatment equipment. The SIC code, as provided by the applicant, is 7389 (Business Services, NEC):

### **V. FACILITY DESCRIPTION**

Culligan is located in a mainly commercial/industrial area in Bethel. It is in the business of supplying and subsequently regenerating point-of-entry drinking water treatment equipment. The facility receives spent treatment equipment primarily from residences located in a four-state region (CT, MA, RI, NY). Culligan currently processes approximately 950-960 of these units per month. These treatment units include: Water Softeners; Neutralizers and Particulate Filters; Greensand Filters; Carbon Filters; Reverse Osmosis Systems. The on-site regeneration activities involve the following: 1) *Water Softeners*: These are backwashed with city water, regenerated with brine, disinfected with sodium hypochlorite, and rinsed with city water; 2) *Neutralizers and Particulate Filters*: These are backwashed and rinsed with city water; 3) *Greensand Filters*: These are backwashed with city water, regenerated with potassium permanganate, and rinsed with water; 4) *Carbon Filters*: These are rinsed with city water and replenished with activated carbon; 5) *Reverse Osmosis Systems*: These are hydrostatically tested with city water. Wastewater is also generated on-site from minor operations related to the regeneration activities (e.g., water cooler washing, salt barrel cleaning, hand sink water, eyewash water). The wastewater generated from the regeneration operations and the miscellaneous minor activities is treated in the on-site wastewater treatment system and the effluent is conveyed through one sewer connection point (DSN 201-1) to the City of Danbury's Water Pollution Control Facility. [See Attachment 1 for the site map and Attachment 2 for the line diagram].

### **VI. THE ON-SITE WASTEWATER TREATMENT SYSTEM**

The wastewater generated from the regeneration of the Greensand Filters is first pre-treated with sodium hydrosulfite for color removal. This wastewater, along with the wastewater generated from the other operations noted above, is collected in a three-compartment settling basin that has a 9,600 gallon capacity. The solids in the wastewater are allowed to settle by gravity in the basin. Following settling, the wastewater is then discharged through a bag filter for additional solids removal, and then conveyed to a transfer sump, where the wastewater is pH adjusted with sodium carbonate and discharged into the sanitary sewer via DSN 201-1. The design flow of the treatment system is 60 gpm. This discharge occurs for 8 hours per day; the average flow from the system is approximately 20,000 gpd to 25,000 gpd. Solids are removed from the basin as necessary; this generally occurs on a quarterly basis for the settling compartment and the transfer sump and annually for the subfloor area. [See Attachments 3 & 4 for a schematic of the wastewater treatment system].

### **VII. EFFLUENT QUALITY DATA**

See Attachment 5 for effluent quality data.

**VIII. EFFLUENT & REPORTING VIOLATIONS**

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
January 2009	201	Zinc, Total	Average Monthly Maximum Daily	1.0 mg/L 2.0 mg/L	1.249 mg/L 2.010 mg/L
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
January 2009	201	pH, Minimum	Minimum	6.0 SU	5.9 SU
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Unknown.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
February 2009	201	Zinc, Total	Average Monthly	1.0 mg/L	1.275 mg/L
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
February 2009	201	pH, Minimum	Minimum	6.0 SU	5.7 SU
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Unknown.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
March 2009	201	pH, Minimum	Minimum	6.0 SU	5.7 SU
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Unknown.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
April 2009	201	Zinc, Total	Average Monthly	1.0 mg/L	1.063 mg/L
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
August 2009	201	Copper, Total	Average Monthly Maximum Daily	1.0 mg/L 2.0 mg/L	1.435 mg/L 2.30 mg/L
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
August 2009	201	Zinc, Total	Average Monthly Maximum Daily	1.0 mg/L 2.0 mg/L	3.2 mg/L 5.1 mg/L
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN
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October 2009	201
<b>PERMIT REQUIREMENT:</b>	Table A of the Permit requires that sampling for several of the parameters be conducted at a frequency of "Twice per Month"
<b>ISSUE:</b>	Only one sample was collected in October 2009

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
May 2010	201	Zinc, Total	Average Monthly	1.0 mg/L	1.65 mg/L
<b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN
October 2010	201
<b>PERMIT REQUIREMENT:</b>	Table A of the Permit requires that sampling for several of the parameters be conducted at a frequency of "Twice per Month"
<b>ISSUE:</b>	Only one sample was collected in October 2010

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
December 2010	201	Copper, Total	Average Monthly	1.0 mg/L	1.60 mg/L
<b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
December 2010	201	Zinc, Total	Average Monthly Maximum Daily	1.0 mg/L 2.0 mg/L	6.5 mg/L 6.5 mg/L
<b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN
December 2010	201
<b>PERMIT REQUIREMENT:</b>	Table A of the Permit requires that sampling for several of the parameters be conducted at a frequency of "Twice per Month"
<b>ISSUE:</b>	Only one sample was collected in December 2010

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
January 2011	201	pH, Minimum	Minimum	6.0 SU	5.9 SU
<b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Unknown.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
February 2011	201	Zinc, Total	Average Monthly	1.0 mg/L	1.21 mg/L
<b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
March 2011	201	pH, Minimum	Minimum	6.0 SU	5.9 SU
<b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input checked="" type="checkbox"/> Other					

REASON: The Permittee indicates that the pH value recorded and noted on the DMR represents pH that is being re-circulated back into the system for adjustment, not the final pH of the effluent being discharged. The system will be modified to monitor/record the pH of the effluent discharged.

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
May 2011	201	Zinc, Total	Average Monthly Maximum Daily	1.0 mg/L 2.0 mg/L	1.83 mg/L 5.70 mg/L
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to a build-up of solids in the settling basin.					

MONTH/YEAR	DSN	PARAMETER	TYPE OF LIMIT	PERMITTED LIMIT	EXCEEDENCE
January 2012	201	Zinc, Total	Average Monthly Maximum Daily	1.0 mg/L 2.0 mg/L	2.42 mg/L 4.60 mg/L
REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other					
REASON: Possibly related to the recent removal of solids from the settling basin.					

**IX. OUTSTANDING ENFORCEMENT (RELATED TO WASTEWATER DISCHARGES):**

- NOV WR IN 11 103 was issued to Culligan on May 19, 2011 for the following: 1) Failure to collect a bi-monthly sample in October 2010 and December 2010; 2) Failure to record the name of the individual that performed the sampling; 3) Failure to use proper sample collection, preservation, handling, and/or analytical methods. NOV WR IN 11 103 was closed on July 29, 2011.
- NOV WR IN 11 014 was issued to Culligan on May 19, 2011 for the following: 1) Violation of the permit's instantaneous zinc effluent limitation for a grab sample collected on March 15, 2011. The Permittee agreed to clean the settling basin out more frequently in order to address the zinc exceedences. NOV WR IN 11 014 was closed on July 29, 2011.

**X. SPILL HISTORY**

No spills in the last five years.

**XI. EFFLUENT GUIDELINES**

Culligan is in the business of regenerating point-of-entry water treatment equipment. The discharge from this activity is not subject to any federal Effluent Limitation Guideline.

**XII. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

RESOURCES USED TO DRAFT PERMIT		DISCHARGE POINT(S)
<input type="checkbox"/>	Federal Effluent Limitation Guideline (ELG)	
<input type="checkbox"/>	Performance Standards	
<input type="checkbox"/>	Federal Development Document	
<input type="checkbox"/>	Treatability Manual	
<input checked="" type="checkbox"/>	Department File Information	DMRs DSN 001 (now DSN 201-1)
<input type="checkbox"/>	Other	

BASIS FOR LIMITS, STANDARDS OR CONDITIONS	REGULATION	DISCHARGE POINT(S)

BASIS FOR LIMITS, STANDARDS OR CONDITIONS		REGULATION	DISCHARGE POINT(S)
<input type="checkbox"/>	Pretreatment Standards for Existing Sources (PSES)		
<input type="checkbox"/>	Pretreatment Standards for New Sources (PSNS)		
<input checked="" type="checkbox"/>	Case-by-Case Determination using Best Professional Judgment (BPJ)	40 CFR 403 RCSA 22a-430-4(m) RCSA 22a-430-4(s)(2)	DSN 201

- A. WASTESTREAMS AUTHORIZED FOR DISCHARGE UNDER DSN 201:** Treated wastewater generated from the following operations: Salt Barrel Cleaning; Water Cooler Washing, Hydrostatic testing of RO units/softeners, Backwashing, Brine Regenerating, and Disinfecting of Water Softeners; Backwashing and Rising Neutralizers and Particulate Filters; Backwashing, Potassium Permanganate Regenerating, and Rinsing of Greensand Filters; Carbon Rinsing; Handwash Waters and Eyewash
- B. MONITORING PARAMETERS & LIMITS:** DSN 201-1 is the treated effluent from the facility. Limits were determined using Best Professional Judgment on a Case-by-Case basis. The basis for the limits is RCSA Section 22a-430-4(s)(2).

**DSN 201-1**

PARAMETER	FEDERAL LIMITATIONS			STATE LIMITATIONS [RCSA 22a-430-4(s)(2)]		
	Average Monthly (mg/L)	Maximum Daily (mg/L)	Instantaneous (mg/L)	Average Monthly (mg/L)	Maximum Daily (mg/L)	Instantaneous (mg/L)
Chlorine, Total Residual	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	1.0	2.0	3.0
Iron, Total	NA	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	0.1	0.5	0.75
Oil & Grease, Total	NA	NA	NA	NA	100	NA
Magnesium, Total	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA
Total Suspended Solids	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	1.0	2.0	3.0

The monitoring parameters and limits are the same as the existing monitoring parameters and limits, except that Total Oil & Grease is now included as a monitoring parameter since it was reported at 23.2 ppm on the Attachment O sampling.

- C. MONITORING FREQUENCY:** The *Monitoring Schedule* set forth in RCSA Section 22a-430-3 prescribes a frequency of monthly for DSN 201 based on a similar category of discharge (“Water Production Wastewaters”). Monthly will be used as the sampling frequency, except that copper and zinc will continue to be monitored twice per month due to historic limit exceedences.