



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



issued to

Connecticut Resources Recovery Authority
100 Constitution Plaza, 6th Floor
Hartford, CT 06103

Location Address:

Mid-Connecticut Resource Recovery facility
Reserve Road, Gate 20
Hartford, CT 06114

Facility ID: 064-177

Permit ID: SP0000850

Permit Expires: April 26, 2016

SECTION 1: GENERAL PROVISIONS

- (A) This permit is reissued 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) Connecticut Resources Recovery Authority, ("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 subsection (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

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www.ct.gov/dep

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Permit No. SP0000850

- (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 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.

"Batch" means discharge where the wastewater is discharged after treatment in a reactor(s) in which flow is neither entering nor leaving the reactor(s) during the treatment or discharge phase.

"Composite Sample" means a sample consisting of aliquot samples collected during each batch discharge, taken over a full operating day, proportionally combined (i.e. in the case of 3 batch discharges on any given day, a composite sample shall consist of 3 aliquot samples proportionally combined). If only one batch is

discharged over a full operating day, a composite sample shall consist of two proportionally combined aliquot samples taken at the beginning and end of the batch discharge.

"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".

"NR" as a Monitoring Table abbreviation means "not required".

"Quarterly", in the context of a sampling frequency, means sampling is required in the months of January, April, July, and October.

"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.

"Range During Month" or "RDM", as a sample type, means the lowest and the highest values of all of the monitoring data for the reporting month.

"Sub-discharge" means a discharge described under Tables A and B (those representing for example DSN 002-B and 002-C) of this permit.

"Twice per Month" when used as a sample frequency shall mean two samples per calendar month collected no less than 7 days apart.

SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner has made a final determination and found that modification of the existing system or installation of a new system will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 200903997 for permit reissuance received on December 22, 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.
- (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.

Table A

Discharge Serial Number: 002-B		Monitoring Location: 1						
Wastewater Description: Demineralizer regeneration wastewater, boiler blowdown and boiler drain ³ wastewaters, chemical storage area wash-down wastewaters (Power Block Facility), and process Quality Control laboratory wastewaters.								
Monitoring Location Description: After the neutralization basin (Batch discharge)								
Discharge is to: The Metropolitan District Commission Water Pollution Control Facility in the City of Hartford								
PARAMETER	UNITS	FLOW/TIME BASED MONITORING			INSTANTANEOUS MONITORING			
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported
Arsenic, Total	mg/l	NA	---	Quarterly	Composite	NA	NR	NA
Cadmium, Total	mg/l	0.1	0.2	Quarterly	Composite	0.3	NR	NA
Chromium, Total	mg/l	0.23	0.7	Quarterly	Composite	1.05	NR	NA
Copper, Total	mg/l	0.26	0.9	Twice per month	Composite	1.35	NR	NA
Cyanide, Total	mg/l	0.23	0.7	Quarterly	Grab Sample Average	1.05	NR	NA
Flow rate, (Average Daily) ¹	gpd	80,000	NA	Continuous	Total Daily Flow	NA	NR	NA
Flow, Maximum during a 24 hour period ¹	gpd	NA	160,000	Continuous	Total Daily Flow	NA	NR	NA
Flow, (Total - Day of Sampling)	gpd	NA	160,000	Twice per month	Total Daily Flow	NA	NR	NA
Lead, Total	mg/l	0.1	0.2	Quarterly	Composite	0.3	NR	NA
Mercury, Total	mg/l	0.01	0.02	Quarterly	Composite	0.03	NR	NA
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0 - 9.0	Twice per month	RDS
pH, Minimum	S.U.	NA	NA	NR	NA	6.0	Continuous	Continuous
pH, Maximum	S.U.	NA	NA	NR	NA	9.0	Continuous	Continuous
Silver, Total	mg/l	0.23	0.70	Quarterly	Composite	1.05	NR	NA
Total Suspended Solids	mg/l	---	---	Twice per month	Composite	NA	NR	NA
Zinc, Total	mg/l	0.23	0.70	Twice per month	Composite	1.05	NR	NA

Table Footnotes and Remarks:

Footnotes:

¹ For this parameter, the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each sampling month.

² 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'.

³ Boiler drains will be conducted on an infrequent basis when boilers are under start up or shut down conditions. These discharges shall not include any wastewaters generated from the chemical cleaning of boilers.

Remarks:

a) See Section 2(B) for composite sample definition.

Table B

Discharge Serial Number: 002-C Monitoring Location: 1
Wastewater Description: Equipment leakage wastewater, floor and equipment washdown wastewater, condenser drainage wastewater from cleaning, fire protection system wastewater, air compressor and steam piping condensate, and in emergency situations, Power Block Facility (PBF) roof drains.
Monitoring Location Description: After the oil/water separator
Discharge is to: The Metropolitan District Commission Water Pollution Control Facility in the City of Hartford

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported	
Flow, Rate (Average Daily)	gpd	110,000	NA	Continuous	Total Daily Flow	NA	NR	NA	
Flow, Maximum during a 24 hour period ¹	gpd	NA	160,000	Continuous	Total Daily Flow	NA	NR	NA	
Flow, Total (Day of Sampling)	gpd	NA	160,000	Twice per month	Total Daily Flow	NA	NR	NA	
Lead, Total (See remark "a")	mg/l	NA	0.2	Monthly	Daily Composite	0.3	NR	NA	
Oil petroleum, total recoverable	mg/l	50	100	Twice per month	Grab Sample Average	150	NR	NA	
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0-9.0	Twice per month	RDS	
pH, Minimum	S.U.	NA	NA	NR	NA	6.0	Daily	Grab	
pH, Maximum	S.U.	NA	NA	NR	NA	9.0	Daily	Grab	
Total Suspended Solids	mg/l	----	----	Twice per month	Daily Composite	NA	NR	NA	

Table Footnotes and Remarks:

Footnotes:

¹ For this parameter, the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each sampling month.
² 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'.

Remarks:

- a) Lead monitoring requirement becomes effective the day this permit is issued but the lead limits become effective six months after permit issuance.

- (B) All samples shall be comprised of only those wastewaters described in this schedule; 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 Environmental Protection personnel, the Permittee, or other parties.
- (D) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedance of permit limits will be considered non-compliance.

The monitoring requirements of this permit begin on the date of issuance of this permit if the issuance date is on or before the 12th day of a month. For permits issued on or after the 13th day of a month, monitoring requirements begin the 1st day of the following month.

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 employ 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.
- (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. 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 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) 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 6: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

- (A) If any sample analysis indicates that an effluent limitation specified in Section 4 of this permit has been exceeded, a second sample of the effluent shall be collected and analyzed for the parameter(s) in question and the results reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) within 30 days of the exceedance.
- (B) The Permittee shall immediately notify the Bureau of Materials Management and Compliance Assurance and the local WPCA of all discharges that could cause problems to the Publicly Owned Treatment Works

("POTW"), including but not limited to slug loadings of pollutants which may cause a violation of the POTW's NPDES permit, or which may inhibit or disrupt the POTW, its treatment processes or operations, or its sludge processes, use or disposal.

- (C) In addition to the notification requirements specified in Section 1(B) of this permit, if any sampling and analysis of the discharge performed by the Permittee indicates a violation of limits specified in Section 4 of this permit, the Permittee shall notify the Bureau of Materials Management and Compliance Assurance within 24 hours of becoming aware of the violation.

SECTION 7: COMPLIANCE SCHEDULE

- (A) On or before 60 days after the date of issuance of this permit, the Permittee shall submit for the Commissioner's review and written approval a comprehensive and thorough report which describes and evaluates alternative actions which may be taken by the Permittee to achieve compliance with the lead limitations in Section 4, Table B of this permit. Such report shall:
- (a) evaluate alternative actions to achieve compliance with Section 4 limits including, but not limited to, pollutant source reduction, process changes/innovations, chemical substitutions, recycle and zero discharge systems, water conservation measures, and other internal and/or end-of-pipe treatment technologies;
 - (b) state in detail the most expeditious schedule for performing each alternative;
 - (c) list all permits and approvals required for each alternative, including but not limited to any permits required under sections 22a-32, 22a-42a, 22a-342, 22a-361, 22a-368, 22a-430, or 22a-430b of the Connecticut General Statutes;
 - (d) propose a preferred alternative or combination of alternatives with supporting justification; and
 - (e) propose a detailed program and schedule to perform all actions required by the preferred alternative including but not limited to a schedule for submission of; engineering plans and specifications on any internal and/or end of pipe treatment facilities, start and completion of any construction activities related to any treatment facilities, applying for and obtaining all permits and approvals required for such actions.
- (B) The Permittee shall submit to the Commissioner quarterly status reports beginning sixty days after the date of approval of the report referenced in Section 7(A) above. Status reports shall include, but not be limited to, a summary of all effluent monitoring data collected by the Permittee during the previous 90 day period and a detailed description of progress made by the Permittee in performing actions required by this section of the permit in accordance with the approved schedule including, but not limited to, development of engineering plans and specifications, construction activity, contract bidding, operational changes, preparation and submittal of permit applications, and any other actions specified in the program approved pursuant to paragraph (A) of this section.
- (C) The Permittee shall use best efforts to submit to the Commissioner all documents required by this section of the permit in a complete and approvable form. If the Commissioner notifies the Permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the Permittee shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty days of the Commissioner's notice of deficiencies. In approving any document or other action under this Compliance Schedule, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this section of the permit. Nothing in this paragraph shall excuse noncompliance or delay.
- (D) Dates. The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it

is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this section of the permit means calendar day. Any document or action which is required by this section of the permit to be submitted, or performed, by a date which falls on, Saturday, Sunday, or a Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or Connecticut or federal holiday.

- (E) Notice to Commissioner of changes. Within fifteen days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this section of the permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the correct or omitted information to the Commissioner.
- (F) Submission of documents. Any document, other than a discharge monitoring report, required to be submitted to the Commissioner under this section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Oluwatoyin Fakilede
Department of Environmental Protection
Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division
79 Elm Street
Hartford, CT 06106-5127

SECTION 8: 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 percent or more of all measurements taken during a six-month period exceed the Average Monthly or Maximum Daily Limit(s) for the same pollutant parameter.
- **Technical Review Criteria violations:** Those in which 33% or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the average or maximum daily limits multiplied by (1.4 for BOD, TSS, oil petroleum, total recoverable) or (1.2 for all other pollutants except pH).
- **Compliance Schedule:** Failure to meet within 90 days after the schedule date, a compliance schedule milestone contained in or linked to a respective permit.
- **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 pollutant(s) that has caused imminent endangerment to human health, welfare or to the environment.

This permit is hereby issued on April 27, 2011.



Amey W. Marrella

Deputy Commissioner

CERTIFIED TO BE A TRUE COPY

**Connecticut Department of
Environmental Protection**

cc: The Metropolitan District Commission (MDC) in the City of Hartford

Permit No. SP0000850

8

NAME: Theresa Tacone
TITLE: Processing Tech

WASTEWATER DISCHARGE PERMIT: DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Connecticut Resources Recovery Authority

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: SP0000850

APPLICATION #: 200903997

FACILITY ID. 064-177

<u>Mailing Address:</u>					<u>Location Address:</u>						
Street:	100 Constitution Plaza, 6 th Floor				Street:	Reserve Road, Gate 20					
City:	Hartford	ST:	CT	Zip:	06103	City:	Hartford	ST:	CT	Zip:	06114
Contact Name:	Peter Egan				DMR Contact	Christopher R. Shepard					
Phone No.:	(860) 757-7700				Phone No.:	(860) 757-7706					

PERMIT INFORMATION

DURATION 5 YEAR X 10 YEAR ___ 30 YEAR ___

TYPE New ___ Reissuance X Modification ___

CATEGORIZATION POINT (X) NON-POINT () GIS #

NPDES () PRETREAT (X) GROUND WATER (UIC) () GROUND WATER (OTHER) ()

NPDES MAJOR (MA) ___
 NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) X ___
 NPDES or PRETREATMENT MINOR (MI) ___

PRETREAT SIGNIFICANT INDUS USER (SIU) X ___
 PRETREAT CATEGORICAL (CIU) ___

POLLUTION PREVENTION MANDATE ___ ENVIRONMENTAL EQUITY ISSUE ___

COMPLIANCE SCHEDULE YES X NO ___

POLLUTION PREVENTION X TREATMENT REQUIREMENT ___ WATER CONSERVATION ___

WATER QUALITY REQUIREMENT ___ REMEDIATION ___ OTHER ___

RECENT ENFORCEMENT HISTORY

IS THE PERMITTEE SUBJECT TO A PENDING ENFORCEMENT ACTION? YES ___ NO X

OWNERSHIP CODE

Private ___ Federal ___ State ___ Municipal (town only) ___ Other public X (Quasi-state)

DEP STAFF ENGINEER Oluwatoyin Fakilede

PERMIT FEES

<i>Discharge Code</i>	<i>DSN Number</i>	<i>Annual Fee</i>
519000C	002C	\$4330.00
5060000	002B	\$ 660.00
5170000	002B	\$4337.50
5230000	002B & 002C	\$0.00
5080000	002C	\$2184.38

FOR SEWER DISCHARGES

Discharge to The Metropolitan District Commission Water Pollution Control Facility of the City of Hartford via its collection system. The facility ID. of the POTW is 064-001.

NATURE OF BUSINESS GENERATING DISCHARGE

Connecticut Resources Recovery Authority, a waste to energy facility, generates electricity from three refuse derived fuel (RDF) fired municipal waste combustors.

PROCESS AND TREATMENT DESCRIPTION (by DSN)

DSN 002B: This discharge comprises a maximum daily flow of 160,000 gallons per day demineralizer regeneration wastewater, boiler blowdown, boiler drain wastewaters, chemical storage area wash down wastewater and process Quality Control laboratory wastewaters. These wastewaters undergo neutralization in a 26,000 gallon neutralization basin prior to discharge.

DSN 002C: This discharge comprises a maximum daily flow of 160,000 gallons per day equipment leakage wastewater, floor and equipment washdown wastewater, condenser drainage wastewater from cleaning, fire protection system wastewater, air compressor and steam piping condensate and in emergency situation, Power Block Facility (PBF) roof drains. These wastewaters undergo equalization in an 80,000 gallon tank and oil/water separation prior to discharge and when necessary, these wastewaters undergo manual pH adjustment prior to discharge.

RESOURCES USED TO DRAFT PERMIT

- Federal Effluent Limitation Guideline 40CFR _____
name of category
- Performance Standards
- Federal Development Document _____
name of category
- Treatability Manual
- Department File Information
- Connecticut Water Quality Standards
- Anti-degradation Policy
- Coastal Management Consistency Review Form
- Other - Explain

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

— *Case by Case Determination and Best Professional Judgment (See Other Comments)*

DSN 002B: Cadmium (AML, MDL, MIL), chromium (AML, MDL, MIL), copper (AML, MDL, MIL), cyanide (AML, MDL, MIL), lead (AML, MDL, MIL), mercury (AML, MDL, MIL), pH (MIL), silver (AML, MDL, MIL), and zinc (AML, MDL, MIL).

DSN 002C: Lead (MDL, MIL), oil petroleum, total recoverable (AML, MDL, MIL), pH (MIL)

AML: - Average Monthly Limit, MDL: - Maximum Daily Limit, MIL: - Maximum Instantaneous Limit

GENERAL COMMENTS

The provisions of steam electric power generating point source category are applicable to discharges resulting from the operation of a generating unit by an establishment primarily engaged in the generation of electricity for distribution and sale which results primarily from a process utilizing fossil-type fuel (coal, oil, or gas) or nuclear fuel in conjunction with a thermal cycle employing a water system as the thermodynamic medium. The discharges in this permit are not subject to Federal effluent limitations although the Permittee stated in their submitted Operation & Maintenance manual, that each municipal waste combustor is capable of firing coal as a secondary fuel. This is because during the previous permit renewal processing, USEPA stated in a letter dated April 5, 2004 that Federal effluent limits for steam electric power generating point source category (40 CFR 423) do not apply to these discharges because refuse derived fuel (RDF) is the primary source of fuel for steam generation and the facility's primary function is the disposal of refuse and not the generation of electricity for distribution and sale.

The previous permit fees were for Steam Electric Power Plant and water production wastewater. However, since EPA has determined that the discharges do not fall under Steam Electric Power Plant, the applicant was billed for the individual wastestreams, in this permit. The processes included in the fees are minor tumbling and cleaning (which includes chemical storage washdown, condenser drainage wastewaters from cleaning, floor washdown and equipment washdown), water production wastewater, stormwater, and blowdown from heating and cooling.

In emergency situations, stormwater is directed to the 80,000 gallon equalization tank prior to discharge to the Metropolitan District Commission WPCF at a rate of 36,000 gallons per inch of rain. This discharge has only occurred once or twice in the past eight years. Since the stormwater is rarely discharged, the original fee amounts are excessive in relation to the cost of this permitted activity. Therefore, it is recommended that the application processing and annual permit fees assigned to stormwater in RCSA Sections 22a-430-6(Schedule A) and 22a-430-7(Schedule B) be given a reduction from \$ 6550.00 to \$ 4912.50 and from \$ 2912.50 to \$ 2184.38 respectively in accordance with sections 22a-430-6(g) and 7(g) of RCSA.

Although, the Permittee uses both city water and Connecticut River water to generate some of their wastewaters, the Department will be addressing the impingement and entrainment issues in the NPDES permit, since that permit is in the process of being renewed.

In a letter dated July 29, 2010 that was attached to the Permittee's July Discharge Monitoring Report (DMR), the Permittee explained that wastewater meant to be discharged via DSN 002C was discharged to DSN 002B for neutralization prior to discharge, because the pH of the wastewater was outside of the permitted limits. In order to prevent future occurrences of discharging unauthorized wastewaters via DSN 002B, and enable the Permittee to adjust the pH of DSN 002C wastewaters when necessary, the Permittee requested for authorization to manually adjust the pH of DSN 002C wastewaters when necessary. The ability to manually adjust the pH of DSN 002C wastewaters when necessary is being addressed in this permit renewal.

OTHER COMMENTS

Oil petroleum, total recoverable will be the permit parameter used in this permit, replacing total oil and grease used in the previous permit.

Based on a Case by Case Determination using the criteria of Best Professional Judgment, limitations for chromium, copper, lead, mercury, nickel, pH, oil petroleum, total recoverable, silver and zinc are included in this permit. These proposed limits, except for the maximum instantaneous limit for copper, are consistent with the limits in the previous permit in accordance with the anti-backsliding rule. A review of January 2007 - June 2010 DMRs showed that the Permittee should not have any problems meeting the limits. The limits, which have been carried forward from the initial permit of 1987, are based on performance, as indicated in the submitted forms, during the processing of the permit at that time. Typically, maximum instantaneous limits are calculated by multiplying maximum daily limit by a factor of 1.5, so DEP staff believes that the maximum instantaneous limit for copper was inadvertently set as 1.05 mg/l in the previous permits. Therefore, maximum instantaneous limit for copper was set as 1.35 mg/l, since the maximum daily limit is 0.9 mg/l. This change does not contradict the anti-backsliding rule in accordance with section 22a-430-4(l)(4)(A)(xxiii) because the previous permit limit was based on a case-by-case determination.

Although there was an exceedance of zinc limit in June 2009, the Permittee explained in a letter attached to the June 2009 DMR that the exceedance was likely caused by the galvanized flashing used by the facility personnel to temporarily divert an acid leak to the neutralization basin for neutralization prior to discharge. The leak was repaired soon after discovery and the galvanized flashing was removed. A supplemental sampling for zinc on July 11, 2009 showed a concentration of 0.021 mg/l, which is well below the permit limits.

A review of Attachment O for DSN 002C showed a high concentration of lead (0.771 mg/l) in the wastewater. DEP staff requested that the applicant repeat the sampling for lead and the result was 0.052 mg/l. Due to the variance in the above results; further sampling was requested by DEP. The result for the grab sample taken on October 6, 2010 was 0.312 mg/l and the results of daily composite samples taken on October 7, 2010 and October 20, 2010 were 0.118 mg/l and 0.026 mg/l respectively. Since lead is a pollutant of concern, a monthly monitoring requirement, a maximum daily lead limit of 0.2 mg/l, a maximum instantaneous lead limit of 0.3 mg/l, and a compliance schedule to achieve compliance with these limits were included in the permit.

DSN 002A is not included in this permit because the wastewater is composed of domestic sewage. The maximum daily flow at DSN 002A is 5,000 gpd and this is covered under the domestic sewage general permit.