CT0003875

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NPDES PERMIT

Resource Recovery Systems of Connecticut, Inc.
Mid-Connecticut Facility
Reserve Road, Gate 40
Hartford, Connecticut 06114

Re: DEP/WPC 064-067
City of Hartford
Connecticut River Watershed

Attention: Paul Sibiga, Facility Manager

This permit is issued in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes, and regulation 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 NPDES permit program.

Your application for permit reissuance, submitted on December 2, 1991, as appended on May 22, 1992, July 20, 1995, June 6, 1996, August 23, 1996, January 6, 1997, March 27, 1997, and May 5, 1997 has been reviewed by the Connecticut Department of Environmental Protection.

Your discharge toxicity evaluation (DTE) submitted December 1988, has been reviewed by the Connecticut Department of Environmental Protection, has been found to be consistent with Section 22a-430-4(c)(21) of the Regulations of Conneticut State Agencies and is hereby approved in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes.

The Commissioner of Environmental Protection (hereinafter "the Commissioner") has found that the discharge will not cause pollution of the waters of the state.

The Commissioner has determined that the location, design, construction and capacity of the cooling water intake structure represents the best available technology for minimizing adverse environmental impact from impingement and entrainment pursuant to Section 316(b) of the Federal Act.

The Commissioner has determined that the thermal component of the discharge will not result in a violation of the Water Quality Standards adopted pursuant to Section 22a-426 of the

Connecticut General Statutes as amended and approved by the U.S. Environmental Protection Agency on May 15, 1992.

This determination is made on the basis of measured and predicted thermal plume configurations in the receiving water in accordance with the reports, "South Meadow Thermal Plume Studies", Lawler, Matusky, and Skelly Engineers, December, 1975 and "Temperature Preductions for South Meadow Station", Adams and Stolzenback, November, 1984 and "Thermal Plume Modeling for South Meadow Cooling Water Discharges", E.Eric Adams, June, 1989, as further studied in RMC Environmental Services "South Meadow Station Thermal Studies",September 1990 and "Field Investigations of the Effects of South Meadow Station Thermal Discharge on Connecticut River Fishes", May-December 1990.

The Commissioner, acting under Section 22a-430, hereby permits Resource Recovery Systems of Connecticut, Inc. to discharge non-contact cooling water ("NCCW"), intake screen washwater and screenhouse sump discharges to the Connecticut River in accordance with the following conditions:

1. The wastewater shall be discharged in accordance with the above referenced application and all approvals issued by the Commissioner or his authorized agent for the discharges and/or activities authorized by or associated with this permit.

2. Except as specified in this paragraph and in paragraphs 1 and 3, the permittee is not authorized to discharge to the Connecticut River a final effluent to which it has added any pollutants.

   The discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharges shall be monitored and results reported to the Water Management Bureau (Attn: DMR Processing) by the end of the month after the month in which samples are taken according to the following schedule:

A. Discharge Serial No. 001

   Monitoring Location: 1
   Wastewater Description: Once through NCCW from Resource Recovery Facility (Code: 102000d)
   Receiving Stream: Connecticut River (Basin Code 4000)
   Present/Future Water Quality Standard: C/B
   Average Daily Flow: 90,000,000 gallons per day
   Maximum Daily Flow: 110,420,000 gallons per day
   Maximum Temperature: 118°F

   (1) The pH of the discharge shall not be less than 6.0 su

or greater than 9.0 su (Code 609-012) at any time except when the pH of the incoming river water is outside of these limits, in which case the pH of the discharge shall not deviate from the pH of the incoming river water by more than 0.5 su.

(2) The discharge shall not contain or cause in the receiving stream a visible oil sheen or floating solids.

(3) The discharge shall not cause visible discoloration or foaming in the receiving waters beyond any zone of influence as provided in the "Connecticut Water Quality Standards & Criteria" as amended.

(4) The thermal plume allowed within the permissible mixing zone as defined by these conditions shall not block zones of fish passage.

(5) When the temperature of the incoming river water is less than or equal to 81°F, the temperature of the discharge shall not increase the temperature of the receiving stream above 85°F or raise the normal temperature of the receiving stream more than 4°F beyond any zone of influence as provided in the "Connecticut Water Quality Standards & Criteria" as amended. When the temperature of the incoming river water is greater than 81°F, the temperature of the discharge shall not raise the normal temperature of the receiving stream more than 4°F beyond any zone of influence as provided in the "Connecticut Water Quality Standards & Criteria" as amended.

(6) The discharge and operation of all facilities shall not alter significantly the color, turbidity, taste, odor, or levels of coliform bacteria from ambient levels in the receiving waters; nor shall levels of dissolved oxygen in the receiving waters fall below 5.0 mg/l as a result of the discharge.

B. Discharge Serial No. 001A

Monitoring Location: 1

Monitoring Location Description: Effluent samples are taken from the discharge pipe in the turbine basement hall. Temperature and pH probes are downstream of the effluent sample point.

Wastewater Description: Once through NCCW from Unit 5 Condenser Code: 102000n
Receiving Stream: Connecticut River (Basin Code 4000)
Present/Future Water Quality Standard: C/B
Average Daily Flow: 43,200,000 gallons per day
Maximum Daily Flow: 51,840,000 gallons per day
Maximum Temperature: 118°F
Maximum Design Temperature Increase: 32°F
Maximum Instantaneous Temperature Increase: 35°F

(1) The pH of the discharge shall not be less than 6.0 su or greater than 9.0 su (Code 609-012) at any time except when the pH of the incoming river water is outside of these limits, in which case the pH of the discharge shall not deviate from the pH of the incoming river water by more than 0.5 su.

(2) The maximum temperature increase at the discharge canal outlet above the intake water temperature shall be 32°F. In the event the average temperature differential exceeds 32°F for a period exceeding 24 hours or exceeds 35°F at any time, the DEP shall be immediately notified and a written report of the incident filed.

(3) Total residual oxidant (chlorine and/or bromine) shall be analyzed during periods of oxidant addition and shall not be discharged from any unit for a period of more than two hours per day unless otherwise approved by the Commissioner. Sampling for total residual oxidant need only be conducted during weeks when oxidant is added to this discharge.

(4) Compliance with aquatic toxicity limitations shall be established in accordance with Sections 22a-430-3(j)(7)(A)(ii) and (B)(ii) for acute and chronic toxicity, respectively.

(5) Sampling for the parameters identified by an asterisk (*) in the table below shall be conducted concurrently at both the influent monitoring location 01H and effluent at the frequency stated and in accordance with Paragraphs 4.and 5. below.

Parameter	Average Monthly Limits	Maximum Instantaneous Limits	Minimum Frequency of Sampling	Sample Type
Total Copper*	Monitor Only		Semi-Annual**	Daily Composite
Total Lead*	Monitor Only		Semi-Annual**	Daily Composite
Total Nickel*	Monitor Only		Semi-Annual**	Daily Composite
Total Zinc*	Monitor Only		Semi-Annual**	Daily Composite
Total Suspended Solids*	Monitor Only		Semi-Annual**	Daily Composite
Ammonia - N*	Monitor Only		Semi-Annual**	Daily Composite
Total Residual Oxidant*	------	0.2 mg/l	Weekly	Grab (See Paragraph 2)B.(3) above)
Oil & Grease, Total	15 mg/l	20 mg/l	Semi-Annual**	Grab
Temperature oF	------	------	Hourly	Instantaneous (See Paragraph 2)A.(5) and 2)B(2) above)
Aquatic Toxicity, Acute	------	------	Semi-Annual**	Daily Composite (See Paragraph 2)B.(4) and 2)B.(6) and (7)
Aquatic Toxicity, Chronic	------	------	Semi-Annual**	Daily Composite (See Paragraph 2)B.(4) and 2)B.(6) and (7))
pH	See 2.B.(1) above and note (d) below		Continuous	Instantaneous
Flow	See 2.B. above and note (d) below		Continuous	Instantaneous

** Semi-Annual sampling shall be performed during the months of January and July.

(a) The permittee shall record the total flow (Code 626-007) and the number of hours of discharge (Code 629-079) continuously during discharge.

(b) The report shall include a detailed explanation of any

violations of the limitations specified above.

(c) Total Residual Oxidant is defined as the arithmetic sum of total residual chlorine and bromine.

(d) Record and report*** the following data:

1) Daily range of pH
2) Daily average flow
3) Daily range of flow
4) Daily maximum temperature
5) Daily minimum temperature
6) Daily average temperature
7) Daily maximum temperature increase
8) Daily minimum temperature increase
9) Monthly standard deviation of temperature
10) Daily average temperature increase
11) Monthly standard deviation of temperature increase
12) Monthly maximum heat load (BTU/hr)
13) Monthly minimum heat load
14) Monthly average heat load
15) Monthly maximum rate of change of heat load
16) Monthly standard deviation of heat load

*** Report items 1) through 8) only. Retain items 9) thru 16) or the raw data for calculating items 9) thru 16) for a period of at least five years from the month during which the data was collected.

(6) Effective upon issuance and thereafter a daily composite sample of the effluent shall not exhibit acute or chronic toxicity in the receiving waterbody.

(a) Samples collected during each chlorination/oxidation event shall be included as part of the daily composite sample for toxicity testing.

(b) Dilution equivalent to 0 gallons per hour (gph) is allocated to a zone of influence for assimilation of toxicity. Therefore the instream waste concentration (IWC) for this discharge is 100%.

(c) Compliance with this permit condition shall be achieved when there is no significant mortality

in a daily composite sample of the effluent at a concentration equal to or greater than the calculated NOAEL (NOAEL = 100%) as determined by the pass/fail methodology in Section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies.

(d) Monitoring to determine compliance with this limit shall be performed following the toxicity testing protocol for static acute toxicity tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA 600/4-90/027F) with the following specifications:

(i) Pimephales promelas (1-14 days old with less than 24 hours range in age) and Daphnia pulex (less than 24 hours old) shall be used as test organisms.

(ii) Synthetic freshwater prepared as described in EPA 600/4-90/027F and adjusted to a hardness of 50 mg/l +/- 5 mg/l as $CaCO_3$ shall be used as control water and control media.

(iii) Test duration shall be 48 hours for Pimephales promelas and 48 hours for Daphnia pulex.

(7) (a) Any test in which the survival of test organisms is less than ninety (90) percent in each replicate control test chamber or failure to achieve test conditions as specified in Section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies, such as maintenance of appropriate environmental controls, shall constitute an invalid test and will require immediate retesting. Failure to submit valid test results constitutes a permit violation.

(b) Results of the toxicity tests required as part of this permit condition shall be entered on the Discharge Monitoring Report (DMR) for the month in which it was performed, using the appropriate parameter code. Additionally, complete and accurate test data, including all supporting chemical/physical measurements performed in association with the

toxicity tests, as well as dose/response data shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR). The ATMR shall be sent to the following address:

Aquatic Toxicity
Connecticut Department of Environmental Protection
Water Management Bureau
79 Elm Street
Hartford, CT 06106-5127

(c) If any test result indicates that the maximum daily toxicity limit for the effluent has been exceeded, a second sample of the effluent shall be collected and tested as described above and the results reported to the Commissioner within 30 days of the receipt of the first set of test results.

(d) If any two consecutive test results or any three test results in a single year indicate that the maximum daily toxicity limit has been exceeded, the permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report for the review and approval of the Commissioner in accordance with Section 22a-430-3(j)(10)(c) of the Regulations of Connecticut State Agencies describing proposed steps to eliminate the toxic impact of the discharge on the receiving waterbody. Such a report shall include a proposed time schedule to accomplish toxicity reduction.

C. Discharge Serial No. 001B

Monitoring Location: 1

Monitoring Location Description: Effluent samples are taken from the discharge pipe in the turbine basement hall. Temperature and pH probes are downstream of the effluent sample point.

Wastewater Description: Once through NCCW from Unit 6 Condenser and Plant Service Loads (Code: 102000n)

Receiving Stream: Connecticut River (Basin Code 4000)

Present/Future Water Quality Standard: C/B

Average Daily Flow: 43,920,000 gallons per day

Maximum Daily Flow: 53,180,000 gallons per day

Maximum Temperature: 118°F

Maximum Design Temperature Increase: 32°F

Maximum Instantaneous Temperature Increase: 35°F

(1) The pH of the discharge shall not be less than 6.0 su or greater than 9.0 su (Code 609-012) at any time except when the pH of the incoming river water is outside of these limits, in which case the pH of the discharge shall not deviate from the pH of the incoming river water by more than 0.5 su.

(2) The maximum temperature increase at the discharge canal outlet above the intake water temperature shall be 32°F. In the event the average temperature differential exceeds 32°F for a period exceeding 24 hours or exceeds 35°F at any time, the DEP shall be immediately notified and a written report of the incident filed.

(3) Total residual oxidant (chlorine and/or bromine) shall be analyzed during periods of oxidant addition and shall not be discharged from any unit for a period of more than two hours per day unless otherwise approved by the Commissioner. Sampling for total residual oxidant need only be conducted during weeks when oxidant is added to this discharge.

(4) Compliance with aquatic toxicity limitations shall be established in accordance with Sections 22a-430-3(j)(7)(A)(ii) and (B)(ii) for acute and chronic toxicity, respectively.

(5) Sampling for the parameters identified by an asterisk (*) in the table below shall be conducted concurrently at both the influent monitoring location 01H and effluent at the frequency stated and in accordance with Paragraphs 4.and 5. below.

Parameter	Average Monthly Limits	Maximum Instantaneous Limits	Minimum Frequency of Sampling	Sample Type
Total Copper*	Monitor Only		Semi-Annual**	Daily Composite
Total Lead*	Monitor Only		Semi-Annual**	Daily Composite
Total Nickel*	Monitor Only		Semi-Annual**	Daily Composite
Total Zinc*	Monitor Only		Semi-Annual**	Daily Composite
Total Suspended Solids*	Monitor Only		Semi-Annual**	Daily Composite
Ammonia - N*	Monitor Only		Semi-Annual**	Daily Composite
Total Residual Oxidant*	------	0.2 mg/l	Weekly	Grab

				(See Paragraph 2)C.(3)above)
Oil & Grease, Total	15 mg/l	20 mg/l	Semi-Annual**	Grab
Temperature oF	------	------	Hourly	Instantaneous (See Paragraph 2)A.(5) and 2)C.(2) above
Aquatic Toxicity, Acute	------	------	Semi-Annual**	Daily Composite (See Paragraph 2)C.(4) and 2)B.(6)and (7)
Aquatic Toxicity, Chronic	------	------	Semi-Annual**	Daily Composite (See Paragraph 2)B.(4) and 2)B.(6) and (7)
pH	See 2.C.(1) above and note (d) below		Continuous	Instantaneous
Flow	See 2.C. above and note (d) below		Continuous	Instantaneous

** Semi-Annual sampling shall be performed during the months of April and October.

(a) The permittee shall record the total flow (Code 626-007) and the number of hours of discharge (Code 629-079) continuously during discharge.

(b) The report shall include a detailed explanation of any violations of the limitations specified above.

(c) Total Residual Oxidant is defined as the arithmetic sum of total residual chlorine and bromine.

(d) Record and report*** the following data:

1) Daily range of pH
2) Daily average flow
3) Daily range of flow
4) Daily maximum temperature
5) Daily minimum temperature

6) Daily average temperature
7) Daily maximum temperature increase
8) Daily minimum temperature increase
9) Monthly standard deviation of temperature
10) Daily average temperature increase
11) Monthly standard deviation of temperature increase
12) Monthly maximum heat load (BTU/hr)
13) Monthly minimum heat load
14) Monthly average heat load
15) Monthly maximum rate of change of heat load
16) Monthly standard deviation of heat load

*** Report items 1) through 8) only. Retain items 9) thru 16) or the raw data for calculating items 9) thru 16) for a period of at least five years from the month during which the data was collected.

D. Discharge Serial No. 001C

Monitoring Location: 1

Monitoring Location Description: Effluent samples are taken from the discharge pipe in the turbine basement hall. Temperature and pH probes are downstream of the effluent sample point.

Description: Once through NCCW from Plant Service Loads (Code: 102000n)

Receiving Stream: Connecticut River (Basin Code 4000)

Present/Future Water Quality Standard: C/B

Average Daily Flow: 2,880,000 gallons per day

Maximum Daily Flow: 5,400,000 gallons per day

Maximum Temperature: 101°F

Maximum Instantaneous Temperature Increase: 12°F

(1) The pH of the discharge shall not be less than 6.0 su or greater than 9.0 su (Code 609-012) at any time except when the pH of the incoming river water is outside of these limits, in which case the pH of the discharge shall not deviate from the pH of the incoming river water by more than 0.5 su.

(2) The maximum temperature increase at the discharge canal outlet above the intake water temperature shall be 32°F. In the event the average temperature differential exceeds 32°F for a period exceeding 24 hours or exceeds 35°F at any time, the DEP shall be immediately notified and a written report of the incident filed.

(3) Total residual oxidant (chlorine and/or bromine) shall be analyzed during periods of oxidant addition and shall not be discharged from any unit for a period of more than two hours per day unless otherwise approved by the Commissioner. Sampling for total residual oxidant need only be conducted during weeks when oxidant is added to this discharge.

(4) Compliance with aquatic toxicity limitations shall be established in accordance with Sections 22a-430-3(j)(7)(A)(ii) and (B)(ii) for acute and chronic toxicity, respectively.

(5) Sampling for the parameters identified by an asterisk (*) in the table below shall be conducted concurrently at both the influent monitoring location 01H and effluent at the frequency stated and in accordance with Paragraphs 4.and 5. below.

Parameter	Average Monthly Limits	Maximum Instantaneous Limits	Minimum Frequency of Sampling	Sample Type
Total Copper*	Monitor Only		Annually**	Daily Composite
Total Lead*	Monitor Only		Annually**	Daily Composite
Total Nickel*	Monitor Only		Annually**	Daily Composite
Total Zinc*	Monitor Only		Annually**	Daily Composite
Total Suspended Solids*	Monitor Only		Annually**	Daily Composite
Ammonia - N*	Monitor Only		Annually**	Daily Composite
Total Residual Oxidant*	------	0.2 mg/l	Weekly	Grab (See Paragraph 2)D.(3) above)
Oil & Grease, Total	15 mg/l	20 mg/l	Annually**	Grab
Temperature oF	------	------	Hourly	Instantaneous (See Paragraph 2)A.(5) and 2)D.(2) above)
Aquatic Toxicity Acute,	------	------	Annually**	Daily Composite (See Paragraph 2)D.(4) and 2)B.(6) and (7)

Aquatic Toxicity Chronic,	------	------	Annually**	Daily Composite (See Paragraph 2)D.(4) and 2)B.(6) and (7)
pH	See 2.D.(1) above and note (d) below		Continuous	Instantaneous
Flow	See 2.D. above and note (d) below		Continuous	Instantaneous

** Annual sampling shall be performed in July.

(a) The permittee shall record the total flow (Code 626-007) and the number of hours of discharge (Code 629-079) continuously during discharge and/or the instantaneous flow (Code 627-078) at the time of grab sample collection.

(b) The report shall include a detailed explanation of any violations of the limitations specified above.

(c) Total Residual Oxidant is defined as the arithmetic sum of total residual chlorine and bromine.

(d) Record and report*** the following data:

1) Daily range of pH
2) Daily average flow
3) Daily range of flow
4) Daily maximum temperature
5) Daily minimum temperature
6) Daily average temperature
7) Daily maximum temperature increase
8) Daily minimum temperature increase
9) Monthly standard deviation of temperature
10) Daily average temperature increase
11) Monthly standard deviation of temperature increase
12) Monthly maximum heat load (BTU/hr)
13) Monthly minimum heat load
14) Monthly average heat load
15) Monthly maximum rate of change of heat load
16) Monthly standard deviation of heat load

*** Report items 1) through 8) only. Retain items 9) thru 16) or the raw data for calculating items 9) thru 16) for a period of at least five years from the month

during which the data was collected.

E. Discharge Serial No. 002
Monitoring Location 1
Monitoring Location Description: Screenwash discharge basin located in Bldg. No. 1
Wastewater Description: Intake Screen Washwater and Sump Pump Discharge (Code: 1060000)
Receiving Stream: Connecticut River (Basin Code 4000)
Present/Future Water Quality Standard: SB
Average Daily Flow: 360,000 gallons per day
Maximum Daily Flow: 691,200 gallons per day

Parameter	Average Monthly Limits	Maximum *Daily* Limits	Minimum Frequency of Sampling	Sample Type
Total Suspended Solids	Monitor Only		Annually (July)	Grab
Total Residual Oxidant	Monitor Only		Weekly	Grab
			See Note (3) below	
Flow	See 2.E. above and Note (1) and (2) below.			

(1) The permittee shall record the total flow (Code 626-007) and the number of hours of discharge (Code 629-079) for each day of sample collection.

(2) The permittee shall record and report the average daily flow and the maximum daily flow for each calender month.

(3) Total residual oxidant (chlorine and/or bromine) shall be analyzed during periods of oxidant addition and shall not be discharged from any unit for a period of more than two hours per day unless otherwise approved by the Commissioner. Sampling for total residual oxidant need only be conducted during weeks when oxidant is added to this discharge.

F. Discharge Serial No. 003
Monitoring Location 1
Monitoring Location Description: Screenwash discharge basin located in Bldg. No. 3
Wastewater Description: Intake Screen Washwater and Sump Pump Discharge (Code: 1060000n)

Receiving Stream: Connecticut River (Basin Code 4000)
Present/Future Water Quality Standard: SB
Average Daily Flow: 360,000 gallons per day
Maximum Daily Flow: 691,200 gallons per day

Parameter	Average Monthly Limits	Maximum *Daily* Limits	Minimum Frequency of Sampling	Sample Type
Total Suspended Solids	Monitor Only		Annually (January)	Grab
Total Residual Oxidant	Monitor Only		Weekly	Grab
			See Note (3) below	
Flow	See 2.F. above and Note (1) and (2) below			

(1) The permittee shall record the total flow (Code 626-007) and the number of hours of discharge (Code 629-079) for each day of sample collection.

(2) The permittee shall record and report the average daily flow and the maximum daily flow for each calender month.

(3) Total residual oxidant (chlorine and/or bromine) shall be analyzed during periods of oxidant addition and shall not be discharged from any unit for a period of more than two hours per day unless otherwise approved by the Commissioner. Sampling for total residual oxidant need only be conducted during weeks when oxidant is added to this discharge.

G. Intake (Monitoring Site No.01H, Inlet to Screenhouse 1 or 3)
Monitoring Location Description: Service water pump common discharge pressure connection located in Screenhouse #3

(1) Sampling for the parameters identified by an asterisk (*) in the table below shall be conducted concurrently at both the influent monitoring location 01H and effluent at the frequency stated and in accordance with Paragraphs 4.and 5. below.

Parameter	Units	Minimum Frequency of Sampling	Sample Type
Total Flow	gpd	Hourly	Instantaneous
Number of Pumps In Operation		Hourly	Instantaneous

Temperature	oF	Hourly	Instantaneous
Total Copper*	ug/l	Quarterly**	Daily Composite
Total Lead*	ug/l	Quarterly**	Daily Composite
Total Nickel*	ug/l	Quarterly**	Daily Composite
Total Zinc*	ug/l	Quarterly**	Daily Composite
Total Suspended Solids*	mg/l	Quarterly**	Daily Composite
Ammonia - N*	mg/l	Quarterly**	Daily Composite
Total Residual Oxident*	mg/l	Quarterly**	Grab
Oil & Grease, Total	mg/l	Quarterly**	Grab
pH	Standard Units	Quarterly**	Grab

**Quarterly sampling shall be performed during January, April, July and October concurrent with effluent monitoring for these parameters for DSNs 001A,001B, and 001C.

This permit shall be subject to the following special conditions:

3. On or before one year from the issuance of this permit, submit for the review and approval of the Commissioner a final report conducted in accordance with the scope of study approved by the Commissioner on June 30,1997 evaluating the impact of this facility's macrofouling control practices on the Connecticut River.

4. The Minimum Levels specified below represent the concentration at which quantification must be achieved and verified during the chemical analyses for these parameters. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

Parameter	Minimum Level
Total Copper	5.0 ug/l
Total Lead	5.0 ug/l
Total Nickel	5.0 ug/l
Total Zinc	20.0 ug/l

5. A. (1) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of paragraph 4.

(2) Effluent analyses which indicate that a parameter was not detected using the method specified in paragraph 4(B) above shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.

B. Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitation or conditions specified in this permit.

6. On or before 30 days after permit issuance and annually (i.e. within 30 days of the permit anniversary date) thereafter, the permittee shall conduct a complete piping survey and examination of the non-contact cooling water systems DSNs 001A, 001B, and 001C to determine compliance with the conditions set forth in paragraph 7. below and shall submit for the review and approval of the Commissioner a report describing the results of this survey and examination and a written certification that DSNs 001A, 001B and 001C conform to the requirements stated in paragraph 7. below. Such survey shall at a minimum consist of a visual inspection (walk-through) of the piping system and a review of maintenance records to verify that the system has not had any modifications, such as cross-connections to other piping systems, which could result in contamination of the non-contact cooling water discharges.

7. The discharges shall conform to the following conditions:

A. The discharges through DSN 001 shall be comprised solely of non-contact cooling water and the only source of water shall be the Connecticut River except during periods of emergency operation of the service water system during which time, in addition to river water, a maximum flow of 3,500 gallons per minute of potable water from the Metropolitan District Commission may be discharged through DSN 001.

B. No chemicals of any type with the exception of residual chlorine and a suitable dechlorination agent such as sodium bisulfite and/or sodium thiosulfate may be added to the discharge.

C. Except as acknowledged in DEP's letter of April 18, 1997 concerning this permit reissuance, the non-contact cooling water system shall be completely segregated from any

possible contaminant sources. Unless otherwise approved by the commissioner, connections to any contaminant sources or water streams other than non-contact cooling water which is consistent with paragraph 7.A. immediately above are prohibited.

8. The discharge shall not interfere with any Class SB use of the Connecticut River and shall not violate applicable water quality standards.

This permit shall be considered as the permit required by Section 402 of the Federal Water Pollution Control Act and Section 22a-430 of the Connecticut General Statutes.

This permit shall expire on October 2, 2002.

This permit shall be subject to the following sections of the Regulations of Connecticut State Agencies which are hereby incorporated into this permit:

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

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

Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(6), (j)(9)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of Section 22a-430-3.

This Permit requires the payment of an annual compliance determination fee as set forth in Section 22a-430-7 of the Regulations of Connecticut State Agencies.

The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the 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 Clean Water Act or Connecticut General Statutes or regulations adopted thereunder which are then applicable.

Entered as a Permit of the Commissioner on the 2nd day of October, 1997.

Sidney J. Holbrook
Commissioner

APPLICATION NO. 91-372
NPDES CT0003875

DATA TRACKING AND TECHNICAL FACT SHEET

DISCHARGER NAME AND ADDRESS DATA

Permittee: Resource Recovery Systems of Connecticut, Inc., CT0003875, 91-372

Mailing Address:			**Location Address:**		
Street: Reserve Road, Gate 40			Street: same		
City: Hartford	ST: CT	Zip: 06114	City: same	St. CT	Zip: 06114
Contact Name:	Paul Sibiga, Manager		**Contact Name:**	same	

DISCHARGE CATEGORIZATION

POINT(x) NON-POINT( ) GIS #_____

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

MAJOR(x) SIGNIFICANT MINOR( ) MINOR( )

EPA SIGNIFICANT INDUS USER( ) EPA CATEGORICAL( ) NON CATEGORICAL( )

POLLUTION PREVENTION MANDATE( ) ENVIRONMENTAL EQUITY ISSUE( )

COMPLIANCE SCHEDULE

SEPARATE ORDER___ORDER IN PERMIT___COMPLIANCE STEPS IN PERMIT _x____ ORDER #____

COMPLIANCE SCHEDULE TYPE

POLLUTION PREVENTION( ) TREATMENT REQUIREMENT( ) WATER CONSERVATION( )

WATER QUALITY REQUIREMENT( ) REMEDIATION( ) OTHER(x)

OWNERSHIP CODE

Private(x) Federal( ) State( ) Municipal(town only)( ) Other public( )

PERMIT FEES

DISCHARGE CODE 102000d REPRESENTING DSN 001 ANNUAL FEE $ 5,800

DISCHARGE CODE 1060000 REPRESENTING DSN 002 & 003 ANNUAL FEE $ NA

DEP STAFF ENGINEER/ANALYST Bryan J. Sousa

PERMIT TYPE

New( ) Reissuance(x) Modification( ) Subsection-e( )

NATURE OF BUSINESS GENERATING DISCHARGE

Resource Recovery Facility (Trash to Energy)

PROCESS AND TREATMENT DESCRIPTION (by DSN)

DSN 001 - Non-contact cooling water
DSN 002 and 003 - Screenwash and sump discharges

RESOURCES USED TO DRAFT PERMIT

x Federal Effluent Limitation Guideline 40CFR423 Steam & Electric Power Generating (See Other Comments below)

x Department File Information

x Connecticut Water Quality Standards

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

x Best Professional Judgement (See Other Comments)

x Case by Case Determination (See Other Comments)

OTHER COMMENTS

Although technically not applicable to this facility, the Federal Pont Source Category 40CFR (Steam and Electric) was used in establishing permit limits on total residual oxidant (chlorine). The permit also requires a study to evaluate the impact of the facility's macrofouling control practices on the Connecticut River and metals monitoring of the non-contact cooling water discharges.