NPDES PERMIT

issued to

Ano-coil Corporation
60 East Main Street
P.O. Box 1318
Rockville, CT 06066

Location Address:

60 East Main Street
Rockville, CT 06066

Facility ID: 146-031

Permit ID: CT0020389

Receiving Stream: Hockanum River

Permit Expires: December 2, 2015

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 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 an N.P.D.E.S. permit program.

(B) Anocoil Corporation, ("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)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of section 22a-430-3.

Section 22a-430-3 General Conditions

(a)Definitions
(b)General
(c)Inspection and Entry
(d)Effect of a Permit
(e)Duty
(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.

(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) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

(G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

(H) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the 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, except for "No observable acute effect level (NOAEL)" which is redefined below.

(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.

"Critical Test Concentration (CTC) " means the specified effluent dilution at which the Permittee is to conduct a single-concentration Aquatic Toxicity test.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or, the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste discharged during an operating day.

"Discharge", in the context of this permit, means the non-contact cooling water discharge, DSN 101-1, Monitoring Location 1.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"In stream Waste Concentration (IWC)" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"Intake", in the context of this permit, means the Hockanum River raw water intake, DSN 101-1, Monitoring Location 7.

"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.

"MGD", means millions of gallons per day.

"NA" as a Monitoring Table abbreviation means "not applicable".

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

"No Observable Acute Effect Level (NOAEL)" means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test conducted pursuant to section 22a-430-3(j)(7)(A)(i) RCSA demonstrating 90% or greater survival of test organisms in the undiluted effluent.

"Quarterly", in the context of a sampling frequency, means sampling is required in the months of March, June, September, and December.

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

"ug/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner has issued a final determination and found that continuance of the existing discharge will not cause pollution of the waters of the state. The Commissioner's decision is based on Application No. 200100816 for permit reissuance received on March 12, 2001, 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 which may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL EFFLUENT LIMITATIONS

(A) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids; or, cause visible discoloration or foaming in the receiving stream.

(B) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.

(C) The temperature of any discharge shall not increase the temperature of the receiving stream above 85^{o}F, or, in any case, raise the normal temperature of the receiving stream more than 4^{o}F.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharge shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharge is restricted by, and shall be monitored in accordance with, the tables below:

Table A

Discharge Serial Number: 101-1 | **Monitoring Location:** 7

Wastewater Description: Hockanum River Water (raw water intake)

Monitoring Location Description: Intake pipe sample port

Allocated Zone of Influence (ZOI): NA | **In stream Waste Concentration (IWC):** NA

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test[2]
		Average Monthly Limit	Maximum Daily Limit	Sample//Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia Pulex [3] NOAEL=100% (NOAEL STAT 48HR ACU D. PULEX)	%	NA	-----	Quarterly	Daily Composite	-----	NR	Grab	
Aquatic Toxicity, Pimephales promelas [3] NOAEL=100% (NOAEL STAT 48HR ACU PIMEPHALES)	%	NA	-----	Quarterly	Daily Composite	-----	NR	Grab	
Aluminum, Total	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*
Chlorine, Total Residual	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	*
Copper, Total	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*
Lead, Total	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*
Nickel, Total	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*
Oil and Grease, Total	mg/l	NA	-----	Quarterly	Grab Sample Average	NA	NR	Grab	
pH (Day of Sampling)	S.U.	NA	NA	NR	NA	-----	Quarterly	RDS	
pH, minimum (During Sampling Month)	S.U.	NA	NA	NR	NA	-----	Continuous// Quarterly	Continuous	
pH, maximum (During Sampling Month)	S.U.	NA	NA	NR	NA	-----	Continuous// Quarterly	Continuous	
Solids, Total Dissolved	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	
Solids, Total Suspended	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	
Temperature [4]	° F	NA	NA	NR	NA	-----	Hourly// Quarterly	Instantaneous	
Zinc, Total	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*

Table A Footnotes and Remarks:

Footnotes:

[1] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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'.

[2] Minimum Level Test refers to Section 6 (A)(3) of this permit.

[3] The results of the Toxicity Tests shall be recorded in % survival on the DMR.

[4] The Permittee shall maintain at the facility a record of hourly temperature data for each day while a discharge exists on that day and shall report the maximum and minimum temperature values recorded for each day of sample collection.

Remarks:

(1) Sampling shall be conducted concurrent with monitoring of the discharge and in accordance with Section 5 of this permit.

(2) "Daily Composite" shall mean a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of up to four (4) hours and combined proportionally to flow, or a composite sample continuously collected over a full operating day proportionally to flow.

(3) All analyses shall be performed on the same sample.

Table B

Discharge Serial Number: 101-1 | **Monitoring Location:** 1

Wastewater Description: Non-contact cooling water, freeze protection bypass water

Monitoring Location Description: At the 6-inch non-contact cooling water discharge pipe

Allocated Zone of Influence (ZOI): 280 gph | **In stream Waste Concentration (IWC):** 99.3%

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test[2]
		Average Monthly Limit	Maximum Daily Limit	Sample//Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia Pulex [3] NOAEL=100% (NOAEL STAT 48HR ACU D. PULEX)	%	NA	See Section 5(A)(4)	Quarterly	Daily Composite	See Section 5(A)(4)	NR	Grab	
Aquatic Toxicity, Pimephales promelas [3] NOAEL=100% (NOAEL STAT 48HR ACU PIMEPHALES)	%	NA	See Section 5(A)(4)	Quarterly	Daily Composite	See Section 5(A)(4)	NR	Grab	
Aluminum, Total	mg/l	NA	See Section 5(A)(5)	Quarterly	Daily Composite	NA	NR	Grab	*
Chlorine, Total Residual [4]	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	*
Copper, Total [4]	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*
Flow (Day of Sampling)	MGD	NA	2.16	Quarterly	Daily Flow	NA	NR	NA	
Flow rate (Average Daily) [5]	MGD	1.0	NA	Continuous// Quarterly	Daily Flow	NA	NR	NA	
Flow, maximum during 24-hr period [5]	MGD	NA	2.16	Continuous// Quarterly	Daily Flow	NA	NR	NA	
Lead, Total [4]	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*
Nickel, Total [4]	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*
Oil and Grease, Total	mg/l	NA	-----	Quarterly	Grab Sample Average	NA	NR	Grab	
pH (Day of Sampling)	S.U.	NA	NA	NR	NA	6.5-8.0 [7]	Quarterly	RDS	
pH, minimum (During Sampling Month)	S.U.	NA	NA	NR	NA	6.5 [7]	Continuous // Quarterly	Continuous	
pH, maximum (During Sampling Month)	S.U.	NA	NA	NR	NA	8.0 [7]	Continuous // Quarterly	Continuous	
Solids, Total Dissolved	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	
Solids, Total Suspended	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	
Temperature [6]	° F	NA	NA	NR	NA	-----	Hourly// Quarterly	Instantaneous	
Zinc, Total [4]	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	Grab	*

Table B Footnotes and Remarks:

Footnotes:

[1] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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'.

[2] Minimum Level Test refers to Section 6(A)(3) of this permit.

[3] The results of the Toxicity Tests shall be recorded in % survival on the DMR.

[4] Refer to the condition described in Section 8(D) of this permit.

[5] 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.

[6] The Permittee shall maintain at the facility a record of hourly temperature readings for each day while a discharge exists on that day and shall report the maximum and minimum temperature values recorded for each day of sample collection.

[7] In the event that the pH of the intake is outside the allowable pH range of 6.5-8.0 S.U., the pH of the discharge shall be within +/- 0.5 S.U of the intake pH.

Remarks:

(1) Sampling shall be conducted concurrent with monitoring of the intake and in accordance with Section 5 of this permit.

(2) "Daily Composite" shall mean a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of up to four (4) hours and combined proportionally to flow, or a composite sample continuously collected over a full operating day proportionally to flow.

(3) All analyses shall be performed on the same sample.

(4) The discharge of freeze protection bypass water shall only occur when there is no discharge of non-contact cooling water. Table B monitoring requirements and effluent limitations apply only to the non-contact cooling water discharge.

(1) All samples shall be comprised of only the wastewater described in these tables. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.

(2) In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Environmental Protection personnel, the Permittee, or other parties.

(3) 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 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.

(4) The discharge shall not contribute to acute or chronic toxicity in the Hockanum River. Compliance with this condition shall be achieved when the average percent survival in the effluent is 90% or greater or the difference between the percent survival for the intake and the percent survival for the discharge is equal to or less than 10.

(5) The concentration of total aluminum reported for the discharge shall not exceed the concentration for total aluminum reported for the intake by greater than one-half the minimum level for total aluminum specified in Section 6(A)(3) of this permit.

(6) The Hockanum River shall be the only source water contributing to the discharge.

(7) No chemicals of any type shall be added to the discharge.

(8) The discharge system shall be completely segregated from any possible contaminant sources.

SECTION 6: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to the Code of Federal Regulations, Part 136 of Title 40 (40 CFR 136) unless an alternative method has been approved in writing pursuant to 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.

(2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.

(3) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 5 Tables A and B. 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
Aluminum	10.0 ug/L
Chlorine, total residual	20.0 ug/L
Copper	5.0 ug/L
Lead	5.0 ug/L
Nickel	5.0 ug/L
Zinc	10.0 ug/L

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

(5) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.

(6) 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 limitations or conditions specified in this permit.

(B) Acute Aquatic Toxicity Test

(1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).

(a) Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 4 degrees Centigrade until Aquatic Toxicity testing is initiated.

(b) Effluent samples shall not be dechlorinated, filtered, or, modified in any way, prior to testing for Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility.

(c) Chemical analyses of the parameters identified in Section 5 Tables A and B shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

(i) At a minimum, pH, specific conductance, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of test solution and in the dilution (control) water at the beginning of the test and at test termination. If Total Residual Chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination.

(d) Tests for Aquatic Toxicity shall be initiated within 36 hours of sample collection.

(2) Monitoring for Aquatic Toxicity to determine compliance with the permit condition on Aquatic

Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Daphnia pulex (less than 24-hours old)

(3) Monitoring for Aquatic Toxicity to determine compliance with the permit condition on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Pimephales promelas (1-14 days old with no more than 24-hours range in age).

(4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.

(a) For Aquatic Toxicity Limits expressed as an NOAEL value, Pass/Fail (single-concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity Limit of 100% as prescribed in section 22A-430-3(j)(7)(A)(i) of the Regulations of Connecticut State Agencies, except that five replicates of undiluted effluent and five replicates of effluent diluted to the CTC shall be included.

(b) Organisms shall not be fed during the tests.

(c) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.

(d) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/L (plus or minus 5 mg/L) as CaCO3 shall be used as dilution water in tests with freshwater organisms.

(5) Compliance with limits on Aquatic Toxicity shall be determined according to Section 5(A)(4) of this permit.

(C) The Permittee shall annually monitor the chronic toxicity of the discharge in accordance with the following specifications.

(1) Chronic toxicity testing of the discharge shall be conducted annually during July, August, or September of each year.

(2) Chronic toxicity testing shall be performed on the discharge in accordance with the test methodology established in “Short term Methods For Estimating The Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms” (EPA-821-R-02-013) as referenced in 40CFR 136 for Ceriodaphnia survival and reproduction and Fathead Minnow larval survival and growth.

(3) Chronic toxicity tests shall utilize a minimum of five effluent dilutions prepared using a dilution factor of 0.5 (100% effluent, 75% effluent, 50% effluent, 25 % effluent, 12.5 % effluent, 0 % effluent).

(4) Hockanum River water collected immediately upstream of the area influenced by the discharge shall be used as site water control (0% effluent) and dilution water in the toxicity tests.

(5) Flow for the Hockanum River at the East Hartford gauge will be reported for days of sample.

(6) A laboratory water control consisting of synthetic freshwater prepared in accordance with EPA-821-R-02-013 at a hardness of 50±5 mg/l shall be included in the test protocol in addition to the site-water control.

(7) Daily composite samples of the discharge and grab samples of the Hockanum River for use as site water control and dilution water shall be collected on: day 0, for test solution renewal on day 1 and day 2 of the test; day 2, for test solution renewal on day 3 and day 4 of the test; and day 4, for test solution renewal on day 5, 6, and 7 of the test. Samples shall not be dechlorinated, pH or hardness adjusted, or chemically altered in any way.

(8) All samples of the discharge and the Hockanum River water used in the chronic toxicity test shall, at a minimum, be analyzed and results reported in accordance with the provisions listed in Section 6(A) of this permit for the following parameters:

pH	Aluminum (Total Recoverable and dissolved)
Hardness	Copper (Total recoverable and dissolved)
Alkalinity	Lead (Total recoverable and dissolved)
Conductivity	Nickel (Total recoverable and dissolved)
Chlorine, (Total residual)	Nitrogen, Ammonia (total as N)
Solids, Total Suspended	Nitrogen, Nitrate (Total as N)
	Zinc, (Total recoverable and dissolved)

SECTION 7: REPORTING REQUIREMENTS

(A) The results of chemical analyses and any aquatic toxicity test 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 (Attn: DMR Processing) 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 collected.

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

(B) Complete and accurate aquatic toxicity test data, including percent survival of test organisms in each replicate test chamber, LC50 values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including flow day of sample, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and reported to the Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity) at the following address. The ATMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity)
Connecticut Department of Environmental Protection
79 Elm St.
Hartford, CT 06106-5127

(C) If this permit requires monitoring of a discharge on a calendar basis (e.g. Monthly, quarterly, etc.), but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR and ATMR, 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.

(D) A comparative analysis, as specifically defined by this permit, comparing the concentration of aquatic toxicity, aluminum, total residual chlorine, copper, lead, nickel, pH, and zinc reported for the discharge with the respective concentration of each of these substances reported for the intake shall be provided with the ATMR and DMR.

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

(A) If any sample analysis indicates that an Aquatic Toxicity effluent limitation in Section 5 of this permit has been exceeded, or that the test was invalid, another sample of the effluent shall be collected and tested for Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing), at the address listed above, within 30 days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.

(B) If any two consecutive test results or any three test results in a twelve month period indicates that an Aquatic Toxicity Limit has been exceeded, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report to Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity) for the review and approval of the Commissioner in accordance with section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the Permittee shall comply with any schedule approved by the Commissioner.

(C) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division, within 72 hours and in writing within thirty days of the discharge of any substance listed in the application but not listed in the permit if the concentration or quantity of that substance exceeds two times the level listed in the application.

(D) If the results of the initial sample analysis, or the results of both the initial and duplicate sample[1] analysis indicates that the concentration of total residual chlorine, copper, lead, nickel, or zinc reported at the discharge exceeds the concentration reported at the intake by greater than one-half the minimum level, the Permittee shall:

(1) perform an investigation of the area adjacent to the discharge to determine if any spills, debris or other potential contaminants are or were present at the time of sampling and take corrective action as needed in response to the results of such investigation,

(2) perform a complete piping survey and examination of the non-contact cooling water system to determine compliance with the conditions set forth in Sections 5(A)(6) through 5(A)(8) of this permit and take corrective action as needed in response to the results of such survey and examination,

(3) submit a copy of the DMR, corresponding analysis, and results of the investigation performed in Sections 8(D)(1) and 8(D)(2) above for the Commissioner's review, and

(4) perform the actions required by Sections 8(E) and 8(F) of this permit.

If the results of a duplicate sample analysis of the intake and discharge do not confirm an exceedence of the above condition, the Permittee is not required to perform the actions specified in Section 8(D) paragraphs (1) through (4).

[1]For the purposes of compliance with Section 8(D), duplicate sample shall mean a separate sample collected at the same time and place and under identical circumstances as the initial sample and treated exactly the same as the initial sample through field and laboratory procedures.

(E) Within thirty (30) days of triggering the condition of Section 8(D) above, a second sample of the influent and 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).

(F) Within sixty (60) days of triggering the condition of Section 8(D) above, the Permittee shall submit, for the Commissioner's review, a report identifying all corrective actions taken to obtain compliance with this permit. All modifications made to the Permittee's non-contact cooling water and piping systems as part of the identified corrective actions shall be certified in compliance with this permit by a Connecticut licensed professional engineer.

(G) If any two consecutive test results or any three test results in a twelve month period triggers the condition in Section 8(D) above for which the Permittee, through its investigations performed under (D)(1) and (D)(2) of this Section, finds no definitive root cause, the Permittee shall: 1) retain the services of a Connecticut licensed professional engineer to perform an investigation into the source of the contamination and oversee any corrective actions, and 2) submit for the Commissioner's review a certified report detailing the results of the investigation and describing corrective actions taken to obtain compliance with the terms and conditions of this permit. Such report shall be submitted within sixty (60) days of the test result that triggers the requirements of this paragraph.

SECTION 9: COMPLIANCE SCHEDULE

(A) Within ninety (90) days of permit issuance, the Permittee shall perform a complete piping survey and examination of the non-contact cooling water system to determine compliance with the conditions set forth in Sections 5(A)(6) through 5(A)(8) of this permit and submit, for the Commissioner's review, a report certified by a Connecticut licensed professional engineer describing the results of such evaluation and identifying all corrective actions taken to obtain compliance with Sections 5(A)(6) through 5(A)(8) of this permit.

(B) Within one (1) year after the date of issuance of this permit, the Permittee shall submit for the review and written approval of the Commissioner a comprehensive and thorough report that describes and evaluates alternative actions which may be taken by the Permittee to reduce the amount of river water used for non-contact cooling. At a minimum such report shall:

(1) evaluate alternative water conservation measures for the non-contact cooling water system, including, but not limited to, process changes/innovations, total recycle of the discharge, and zero discharge systems;

(2) state in detail the most expeditious schedule to perform and implement each alternative;

(3) list all permits and approvals required for each water conservation 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;

(4) propose a preferred alternative or combination of alternatives with supporting justification to achieve water conservation pursuant to section 22a-430-3(o) of the Regulations of Connecticut State Agencies; and

(5) propose a detailed program and schedule to perform all actions required by the preferred water conservation alternative including but not limited to a schedule for submission of engineering

plans and specifications and applying for and obtaining all permits and approvals required for such actions.

(C) In accordance with the schedule approved under Section 9(B)(5) of this permit, the Permittee shall obtain all necessary approvals and permits and implement the approved actions. Within fifteen days after completing such actions, the Permittee shall certify to the Commissioner in writing that the actions have been completed as approved.

(D) 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 notified 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.

(E) 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 section of the 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 only of the permit, to be submitted, or performed, by a date which falls on, Saturday, Sunday, or, a legal Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or legal Connecticut or federal holiday.

(F) Notification of noncompliance. In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this section of the permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates that may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

(G) 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.

(H) Submission of documents. Any document, other than a discharge monitoring report, required to be submitted to the Commissioner under this section and Section 8(D) of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Enna Herrera
Department of Environmental Protection
Bureau of Materials Management and Compliance Assurance

Water Permitting and Enforcement Division
79 Elm Street
Hartford, CT 06106-5127

This permit revises and supersedes the permit issued on November 20, 2006 and modified on December 15, 2006. This permit is hereby issued on December 3,2010

/S/AMEY W. MARRELLA
COMMISSIONER

AWM/mlg