NPDES PERMIT

issued to

Location Address:

Seidel Inc.
2223 Thomaston Avenue
Waterbury, Connecticut 06704

2223 Thomaston Avenue
Waterbury, Connecticut 06704

Facility ID: 151-215

Permit ID: CT0026808

Receiving Water Body: Naugatuck River

Permit Expires: **June 19, 2016**

Receiving Water Body ID: CT6900-00_05

SECTION 1: GENERAL PROVISIONS

(A) This permit is re-issued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and 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 NPDES permit program.

(B) Seidel Inc., ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsections (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(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

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(b) General
(c) Inspection and Entry
(d) Effect of a Permit
(e) Duty
(f) Proper Operation and Maintenance
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Section 22a-430-4 Procedures and Criteria

(a) Duty to Apply
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(c) Application Requirements
(d) Preliminary Review
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(h) Public Comments
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(j) Public Hearings
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(*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
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(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 ("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.

(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.

"40 CFR" means Title 40 of the Code of Federal Regulations.

"Annually" means sampling is required in the month of July.

"Average Monthly Limit" means the maximum allowable "Average Monthly Concentration" as defined in section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g., mg/l). Otherwise, it means "Average Monthly Discharge Limitation" as defined in section 22a-430-3(a) of the RCSA.

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

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

"IC" means "Inhibition Concentration".

"IC_{25}" means a point estimate of the toxicant concentration that would cause a 25% reduction in a non-lethal biological measurement of the test organism, such as reproduction or growth.

"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.

"LC" means Lethal Concentration

"LC_{50}" means the concentration lethal to 50 per cent of the test organisms.

"Lowest Observed Effect Concentration" ("LOEC") means the lowest concentration of an effluent or toxicant that results in adverse effects on the test organisms.

"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".

"No Observed Effect Concentration" ("NOEC") means the highest tested concentration of an effluent or toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation.

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

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

"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.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner has issued a final determination and found that with respect to DSN 001, continuance of the existing system will not cause pollution of the waters of the state. The Commissioner's decision is based on Application 201006644 for permit issuance received on December 14, 2010 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 discharges are restricted by, and shall be monitored in accordance with, the table below. Additionally, the discharges shall not exceed, and shall otherwise conform to the specific terms and conditions listed below:

(1) All samples shall be comprised of only the wastewater described in this table. 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 limit(s) will be considered non-compliance.

(4) 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.

(5) The Permittee shall maintain compliance with its Solvent Management Plan which was approved by the Department on August 5, 2009 or any subsequent revisions to the plan which have been approved by the Department.

Table A

Discharge Serial Number: **DSN 001-1** | Monitoring Location: **1**

Wastewater Description: **Anodizing and etching rinsewaters; metal cleaning rinsewaters; air scrubber wastewater; RO reject wastewater; ion exchange regeneration wastewater**

Monitoring Location Description: **After the final pH control tank**

Discharge is to: **Naugatuck River** | Dilution Factor: **49:1** | In-stream Waste Concentration: **2%**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level[3]	Monitoring Required with Toxicity Testing
		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		
Acute Toxicity, *Ceriodaphnia dubia* [See Remark 2]	%	NA	LC_{50} ≥40%	Quarterly	Daily Composite	NA	NR	NA		
Acute Toxicity, *Pimephales promelas* [See Remark 2]	%	NA	LC_{50} ≥40%	Quarterly	Daily Composite	NA	NR	NA		
Chronic Toxicity, *Ceriodaphnia dubia* [See Remark 3]	%	NA	---	Annually	Daily Composite	NA	NR	NA		
Chronic Toxicity, *Pimephales promelas* [See Remark 3]	%	NA	---	Annually	Daily Composite	NA	NR	NA		
Aluminum, Total	mg/L	2.0	4.0	Weekly	Daily Composite	6.0	NR	Grab	0.05	✓
Aluminum, Total	kg/day	0.55	1.09	Weekly	Daily Composite	NA	NR	NA		
Ammonia (as N)	mg/L	NA	---	Quarterly	Daily Composite	NA	NR	NA		✓
Cadmium, Total	µg/L	5.0	10.1	Monthly	Daily Composite	15.1	NR	Grab	0.1	✓
Cadmium, Total	g/day	1.4	2.7	Monthly	Daily Composite	NA	NR	NA		
Chromium, Total	mg/L	1.0	2.0	Annually	Daily Composite	3.0	NR	Grab		✓
Chromium, Total	kg/day	0.27	0.55	Annually	Daily Composite	NA	NR	NA		
Copper, Total	mg/L	0.24	0.35	Weekly	Daily Composite	0.52	NR	Grab	0.004	✓
Copper, Total	kg/day	0.065	0.095	Weekly	Daily Composite	NA	NR	NA		
Cyanide, Total	mg/L	0.209	0.419	Annually	Grab Sample Average	0.628	NR	Grab	0.005	✓
Cyanide, Total	kg/day	0.06	0.11	Annually	Grab Sample Average	NA	NR	NA		
Duration of Discharge	hr/day	---	---	Daily/Monthly	Daily Flow	NA	NR	NA		
Flow rate (Average daily)[2]	gpd	72,000	NA	Daily/Monthly	Daily Flow	NA	NR	NA		
Flow, Maximum during 24 hour period[2]	gpd	NA	120,000	Daily/Monthly	Daily Flow	NA	NR	NA		
Flow (Day of Sampling)	gpd	NA	120,000	Weekly/Monthly	Daily Flow	NA	NR	NA		
Kjeldahl Nitrogen, Total (as N)	mg/L	NA	---	Quarterly	Daily Composite	NA	NR	NA		✓
Lead, Total	µg/L	48	77	Monthly	Daily Composite	145	NR	Grab	1	✓
Lead, Total	g/day	13	21	Monthly	Daily Composite	NA	NR	NA		
Nickel, Total	mg/L	1.0	2.0	Monthly	Daily Composite	3.0	NR	Grab	0.005	✓
Nickel, Total	kg/day	0.27	0.55	Monthly	Daily Composite	NA	NR	NA		
Nitrate (as N)	mg/L	NA	---	Quarterly	Daily Composite	NA	NR	NA		✓
Nitrite (as N)	mg/L	NA	---	Quarterly	Daily Composite	NA	NR	NA		✓

Table A

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Monitoring Location Description: **After the final pH control tank**

Discharge is to: **Naugatuck River** | Dilution Factor: **49:1** | In-stream Waste Concentration: **2%**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level[3]	Monitoring Required with Toxicity Testing
		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		
Nitrogen, Total [See Remark 4]	lbs/day	NA	---	Quarterly	Calculated	NA	NR	NA		
Oil & Grease, Total	mg/L	10	15	Monthly	Grab Sample Average	20	NR	Grab		✓
pH, Minimum	SU	NA	NA	NR	NA	6.0	Continuous	Continuous		
pH, Maximum	SU	NA	NA	NR	NA	9.0	Continuous	Continuous		
pH, Day of Sampling	SU	NA	NA	NR	NA	6.0-9.0	Weekly	Grab		✓
Phosphorus, Total	lbs/day	---	---	Weekly	Daily Composite	NA	NR	NA		✓
Phosphorus, Total [See Remark 5]	mg/L	1.0	---	Weekly	Daily Composite	NA	NR	NA		
Silver, Total	µg/L	25	37	Weekly	Daily Composite	75	NR	Grab	1	✓
Silver, Total	g/day	6.8	10.0	Weekly	Daily Composite	NA	NR	NA		
Temperature	° F	NA	NA	NR	NA	---	Quarterly	Grab		
Total Suspended Solids	mg/L	20	30	Weekly	Daily Composite	45	NR	Grab		✓
Total Toxic Organics [See Remark 6]	mg/L	NA	NA	NR	NA	0.5	Weekly	Grab		
Zinc, Total	mg/L	0.61	0.89	Quarterly	Daily Composite	1.3	NR	Grab	10	✓
Zinc, Total	kg/day	0.17	0.20	Quarterly	Daily Composite	NA	NR	NA		

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] For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day and shall submit the record of the total flow for each day and shall record the Average Daily Flow and the Maximum Daily Flow for each month.

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

Remarks:

1. Abbreviations used for units are as follows: gpd means gallons per day; g/d means grams/day; kg/d means kilograms/day; mg/L = milligrams/liter; lbs/day means pounds per day; SU means Standard Units; µg/l means micrograms/liter. Other abbreviations are as follows: NA means Not Applicable; ND means Non-Detectable; NR means Not Reportable; RDS means Range During Sampling.

2. The duration of the acute testing is 48 hours. The LC_{50} results for the modified acute toxicity testing shall be reported on the DMR. Four and one-half years after issuance of the permit, the limit for aquatic toxicity shall be LC_{50} >100%.

3. The duration of the chronic testing is 7 days. The C-NOEC (Chronic-No Observed Effect Concentration) results for the chronic toxicity testing shall be reported on the DMR. The C-NOEC is defined as the highest concentration of effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the results exhibit a linear dose-response relationship.

4. Total nitrogen = Ammonia + Organic nitrogen (Kjeldahl Nitrogen - Ammonia) + Nitrate + Nitrite. The calculated monthly mass loading of total nitrogen shall be reported in lbs/day.

5. The limit for Total Phosphorus will not apply until four and one-half years after permit issuance.

6. Monitoring for Total Toxic Organics shall be performed in accordance with Paragraph 8(D) of this permit.

SECTION 6: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with limits and conditions established in this permit shall be performed using "sufficiently sensitive" methods approved pursuant to the 40 CFR 136 for the analysis of pollutants having approved methods under that part 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.

(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 in Table A represent the concentrations at which quantification must be achieved and verified during the chemical analyses for those noted 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.

(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.

SECTION 7: AQUATIC TOXICITY TESTING

(A) ***Chronic (and Modified Acute) Aquatic Toxicity Testing: DSN 001***

(1) Chronic (and modified acute) aquatic toxicity testing shall be performed on the discharge for the following: *Ceriodaphnia dubia* for survival and reproduction and *Pimephales promelas* for larval growth and survival. Acute aquatic toxicity requirements shall be determined from the first 48 hours of a valid chronic toxicity test. This testing shall be accomplished as follows:

(a) Chronic (and modified acute) toxicity testing shall be performed 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)

(b) Daily composite samples of the discharge shall be collected on: Day 1 of the test (for test initiation and renewal on Day 2 of the test); Day 3 of the test (for test solution renewal on Day 3 and Day 4 of the test); and on Day 5 of the test, (for test solution renewal on Day 5, Day 6, and Day 7 of the test).

(c) Chronic toxicity tests shall be comprised of a minimum of six effluent dilutions: 100% effluent, 50% effluent, 25% effluent, 12.5% effluent, 6.25% effluent, and 2% effluent. Naugatuck River water shall be used as the dilution water unless approval has been received to use an alternative dilution water.

(d) Naugatuck River water shall be collected upstream of DSN 001, outside of any area potentially impacted by DSN 001 and downstream of other effluent sources. Naugatuck River water shall be collected on each renewal day.

(e) If the Naugatuck River dilution water is found or is suspected to be toxic or unreliable, an alternative dilution water standard shall be used in the toxicity test. The use of an alternative dilution water standard is species-specific and shall be conditionally allowed in either of the following two instances:

i) Instance 1: *When an invalid toxicity test is repeated*. In this instance, the Permittee shall implement the use of an alternative dilution water sample without the approval of the Department if the following conditions are met: 1) the test is repeated during the required time frame; 2) the alternative dilution water is of known quality with hardness, pH, conductivity, alkalinity, organic carbon, and total suspended solids, similar to that of the Naugatuck River and the alternative dilution water does not produce a toxic response; 3) receiving water controls are run during the alternative dilution water tests; 4) a complete toxicity test report is submitted by the Permittee and it shall clearly document: that site water toxicity rendered the first test invalid; that a re-test was conducted using an alternative dilution water that matched the characteristics of the site water; that site water controls were included in the re-test; and that the site water controls of the re-test met the minimum acceptability criteria. However, if the re-test documented that the site water controls met the minimum test acceptability criteria, site water must be used as the diluent in future toxicity tests. If the site water controls of the re-test failed to meet test acceptability criteria, an alternative dilution water may be used in future toxicity tests using the effected test organism after submitting written documentation to the Department.

ii) Instance 2: *In future toxicity tests, where there are at least two recent documented incidents where use of the Naugatuck River as the dilution water was found to be unreliable*. In this instance, the Permittee must receive written approval from the Commissioner prior to using an alternative dilution water. The documentation submitted to the Department in support of the use of alternative dilution water in this instance must include the following: Documentation of site water toxicity including all supporting documentation as well an identification of the effected test organism and an identification of the effected quarterly test period; a description of the alternative dilution water proposed; a description of the controls that will be used in future toxicity tests. Upon approval, the Permittee shall implement the use of the alternative dilution water testing for the term of the permit.

(f) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/l (±5 mg/l) as $CaCO_3$ prepared as described in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA-821-R-02-013) shall be used as laboratory control water.

(g) All samples, including composite samples, shall be chilled as they are being collected and shall not be dechlorinated, filtered, or modified in any way prior to the testing.

(h) Chemical analysis for the parameters identified in the permit under "Chemical Analysis required with Toxicity Test" shall be conducted on an aliquot of each sample of effluent and each sample of Naugatuck River water used in the test.

(i) At a minimum, pH, specific conductance, total alkalinity, total hardness, nitrogen (ammonia), and nitrogen (nitrate), and total residual chlorine shall be measured in each sample of effluent and Naugatuck River water used in the test.

(j) Dissolved oxygen, pH, and temperature shall be measured in each sample of effluent and the Naugatuck River water prior to and immediately following renewal of the test solutions.

(k) Tests shall employ neonatal (<24 hours old) *Ceriodaphnia dubia* and newly hatched *Pimephales promelas* (<24 hours old) as test organisms.

(*l*) Reference toxicant tests using reagent grade sodium chloride diluted with laboratory water to achieve a dilution series of 0.5, 1, 2, 4, and 8 g/l of sodium chloride shall be conducted on the same population or organisms used for the chronic toxicity test.

(m) If the laboratory control fails to meet test acceptability criteria for either of the test organisms at the end of the respective test periods, then the test is considered invalid and the test must be repeated.

(n) In the event of a failure to meet the acute toxicity limitations in Section 5, a single sample of the effluent shall be collected and re-tested for acute aquatic toxicity and the associated chemical parameters. The re-test to determine compliance with the acute toxicity limit shall be performed using a single sample with only the test species that failed and shall be terminated after 48 hours.

(2) A report detailing the results of the chronic and modified acute toxicity monitoring shall be submitted no later than 60 days following the day sampling was concluded for that test. The report shall include a summary of the test results which includes, at a minimum, percent survival in each replicate test chamber and all supporting chemical/physical measurements performed in association with the toxicity test. Endpoints to be reported are: 48-hour LC_{50} (acute endpoint), 7-day LC_{50} (survival), 7-day C-NOEC (survival), 7-day C-LOEC (survival), 7-day C-NOEC (growth), 7-day C-LOEC (growth), 7-day C-NOEC (reproduction), 7-day C-LOEC (reproduction), 7-day IC_{25} (growth and reproduction).

SECTION 8: 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, LC_{50} values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including measured daily flow and hours of operation for the 30 consecutive operating days prior to sample collection, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Protection and Land Reuse 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) For Total Toxic Organics (TTO) monitoring, the Permittee may, in lieu of analyzing for TTO, include a

statement on each DMR certifying compliance with its approved Solvent Management Plan. This certification statement shall be as follows:

> *Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report which required such certification. I further certify that this facility is implementing the solvent management plan approved by the commissioner.*

SECTION 9: 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 Materials Management and Compliance Assurance (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.

SECTION 10: SPECIAL CONDITIONS

(A) The Permittee shall evaluate the source of the toxicity in the DSN 001 effluent and eliminate it or reduce it to the greatest extent practicable. An evaluation shall be conducted each time the acute toxicity results are less than 100%. This evaluation shall include, but not be limited to, those protocols identified in EPA guidance[1] for conducting Toxicity Identification Evaluations (TIEs) and Toxicity Reduction Evaluations (TREs), as those protocols relate to the subject discharge. Following the evaluation, the Permittee shall implement any and all corrective actions necessary to reduce or eliminate toxicity in the effluent and to prevent the recurrence of toxicity. On or before December 31 of each year that this permit is in effect, the Permittee shall submit documentation for the review of the Department that shall identify those remedial actions that have been undertaken to reduce the level of toxicity in the discharge and shall quantify the reduction of acute toxicity achieved. If the corrective actions taken do not fully address the elimination or reduction of toxicity in the effluent to the satisfaction of the Commissioner, additional investigations shall be performed in accordance with a supplemental plan and schedule approved in writing by the Commissioner. Unless otherwise specified in writing by the Commissioner, the supplemental plan and schedule shall be submitted for the Commissioner's review and written approval on or before thirty (30) days after notice from the Commissioner that they are required. The Permittee shall implement all supplemental actions required.

(B) The Permittee shall make best efforts to reduce the level of total phosphorus in DSN 001. This shall involve the evaluation and implementation of actions designed to achieve reduced levels of total phosphorus in the

[1] EPA Guidance shall include, but is not limited to: *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA 600-2-88-070); *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition* (EPA 600 R-91-003); *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA 600-R-92-080); *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA 600-R-92-081); *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluent, Phase I* (EPA 600-6-91-005F).

discharge. Such actions shall include, but not be 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. The evaluation shall also consider any adverse environmental impacts that may occur with each such action. On or before December 31 of each year that this permit is in effect, the Permittee shall submit documentation for the review of the Department that shall identify those remedial actions that are in place to reduce the level of total phosphorus in the discharge and shall quantify the reduction of total phosphorus achieved.

(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 section, 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 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.

(E) 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.

(F) 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.

(G) 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:

79 Elm Street
Hartford, CT 06106-5127

This permit is hereby issued on June 20, 2011

AMEY W. MARRELLA
Deputy Commissioner

AWM:CMG