

NPDES PERMIT

issued to

Connecticut Galvanizing,
Div. Highway Safety Corp
239 Commerce Street
P.O. Box 358
Glastonbury, Connecticut 06033

Location Address:

239 Commerce Street
Glastonbury, Connecticut

Permit ID: CT0030449

Permit Expires:

Receiving Stream: Wetlands associated with Hubbard Brook & Salmon Brook

Stream Segment Number: **Hubbard Brook: CT4007-00_01**
 Salmon Brook: CT4006-00_02

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) **Connecticut Galvanizing**, ("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 Energy and 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, 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

"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.

"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.

"LC50" means the concentration of a substance, mixture of substances, or discharge which causes mortality to fifty percent of the test organisms in an acute toxicity test.

"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 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 at the CTC.

"Quarterly", in the context of a sampling frequency, means that a representative sample of the stormwater runoff shall be collected during each of the following periods: January - March, inclusive; April - June, inclusive; July - September, inclusive and; October - December, inclusive.

"Semi-Annual" in the context of a sampling frequency, means that a representative sample of the stormwater runoff must be collected during each of the following periods: January-June, inclusive and July-December, inclusive.

"ug/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner has made a final determination and found that such discharge will not cause pollution of any of the waters of the state. The Commissioner's final determination is based on Application No. 201607114 for permit renewal received on June 2, 2016, the addenda submitted August 3, 2016 and August 17, 2016, and the administrative record established in the processing of that application.

- (B) (1) From the issuance of this permit through and including [LAST DAY OF MONTH, MONTH OF PERMIT REISSUANCE], the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. CT0030499, issued by the Commissioner to the Permittee on September 30, 2011, the previous application submitted by the Permittee on October 14, 2005, and all modifications and approvals issued by the Commissioner or the Commissioner's authorized agent for the discharge and/or activities authorized by, or associated with, Permit No. CT0030449, issued by the Commissioner to the Permittee on September 30, 2011.

(2) From [FIRST DAY OF MONTH, MONTH FOLLOWING PERMIT REISSUANCE] until this permit expires or is modified or revoked, the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. CT0030449, issued by the Commissioner to the Permittee on [DATE OF PERMIT ISSUANCE], Application No. 201702461 received by the Department on June 2, 2016, and all modifications and approvals issued by the Commissioner or the Commissioner's authorized agent for the discharge and/or activities authorized by, or associated with, Permit No. CT0030449, issued by the Commissioner to the Permittee on [DATE OF PERMIT ISSUANCE].

- (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°F, or, in any case, raise the normal temperature of the receiving stream more than 4°F.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- (A) Upon permit issuance, the discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the tables below:

Table A

Discharge Serial Number: 101-1						Monitoring Location: 1			
Wastewater Description: Intermittent discharge of stormwater runoff from Catchment Areas 1-6 (bypass of WaveIonics treatment system)									
Monitoring Location Description: Discharge from oil/water/grit separator									
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 ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex, LC50 > 100%	%	NA	NA	NR	NA	> 100%	Quarterly	Grab	
Aquatic Toxicity, Pimephales promelas, LC50 > 100%	%	NA	NA	NR	NA	> 100%	Quarterly	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	NR	-----	Quarterly	Grab	
Chromium, Total	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Copper, Dissolved	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Copper, Total ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Iron, Total	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Lead, Dissolved	mg/l	NA	NA	NR	NA	----	Quarterly	Grab	X
Lead, Total ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Nitrogen, Ammonia	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Nitrogen, Nitrate (total as N) ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Nitrogen, Total Kjeldahl ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Oil and Grease, Total	mg/l	NA	NA	NR	NA	5.0	Quarterly	Grab	
pH	S.U.	NA	NA	NR	NA	5.0 – 9.0	Quarterly	Instantaneous	
Phosphorus, Total ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Total Suspended Solids	mg/l	NA	NA	NR	NA	90	Quarterly	Grab	
Zinc, Dissolved	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Zinc, Total ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X

Table 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 7(A) of this permit.

³ See Section 6 for information about benchmark monitoring.

Remarks:

"Quarterly", means that a representative sample of the discharge shall be collected at any time during each of the following periods: January - March, inclusive; April - June, inclusive; July - September, inclusive and; October - December, inclusive.

For the months when a sample is not collected, the Discharge Monitoring Report shall be submitted with the comment, "Monitoring Conditional".

The results of the Toxicity Tests shall be recorded as LC50 in % effluent on the DMR.

Table B

Discharge Serial Number: 102-1

Monitoring Location: 1

Wastewater Description: Stormwater runoff from the office building roof in Catchment Area 8

Monitoring Location Description: Catch basin at entrance to office building

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 ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex, NOAEL=100%	%	NA	NA	NR	NA	≥ 90%	Quarterly	Grab	
Aquatic Toxicity, Pimephales promelas, NOAEL=100%	%	NA	NA	NR	NA	≥ 90%	Quarterly	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	NR	-----	Quarterly	Grab	
Chromium, Total	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Copper, Total ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Lead, Total ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Nitrogen, Ammonia	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Nitrogen, Nitrate (total as N) ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Nitrogen, Total Kjeldahl ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Oil and Grease, Total	mg/l	NA	NA	NR	NA	5.0	Quarterly	Grab	
pH	S.U.	NA	NA	NR	NA	5.0 – 9.0	Quarterly	Instantaneous	
Phosphorus, Total ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X
Total Suspended Solids	mg/l	NA	NA	NR	NA	90	Quarterly	Grab	
Zinc, Total ³	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	X

Table 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 7(A) of this permit.

³ See Section 6 for information about benchmark monitoring.

Remarks:

"Quarterly", means that a representative sample of the discharge shall be collected at any time during each of the following periods: January - March, inclusive; April - June, inclusive; July - September, inclusive and; October - December, inclusive.

For the months when a sample is not collected, the Discharge Monitoring Report shall be submitted with the comment, "Monitoring Conditional".

Table C

Discharge Serial Number: 103-1					Monitoring Location: 1				
Wastewater Description: Intermittent discharge of stormwater runoff from raw materials storage area east of the fabrication shop (Catchment Area 7)									
Monitoring Location Description: Discharge from grit separator									
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 ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex, NOAEL=100%	%	NA	NA	NR	NA	≥ 90%	Semi-annual	Grab	
Aquatic Toxicity, Pimephales promelas, NOAEL=100%	%	NA	NA	NR	NA	≥ 90%	Semi-annual	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	
Chromium, Total	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	X
Copper, Total ³	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	X
Iron, Total	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	
Lead, Total ³	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	X
Nitrogen, Ammonia	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	
Nitrogen, Nitrate (total as N) ³	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	
Nitrogen, Total Kjeldahl ³	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	
Oil and Grease, Total	mg/l	NA	NA	NR	NA	5.0	Semi-annual	Grab	
pH	S.U.	NA	NA	NR	NA	5.0 – 9.0	Semi-annual	Instantaneous	
Phosphorus, Total ³	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	X
Total Suspended Solids	mg/l	NA	NA	NR	NA	90	Semi-annual	Grab	
Zinc, Total ³	mg/l	NA	NA	NR	NA	-----	Semi-annual	Grab	X

Table 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 7(A) of this permit.

³ See Section 6 for information about benchmark monitoring.

Remarks:

"Quarterly", means that a representative sample of the discharge shall be collected at any time during each of the following periods: January - March, inclusive; April - June, inclusive; July - September, inclusive and; October - December, inclusive.

For the months when a sample is not collected, the Discharge Monitoring Report shall be submitted with the comment, "Monitoring Conditional".

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

(B) Stormwater Sampling

- (1) All samples shall be comprised of only the stormwater described in these tables. Samples shall be collected prior to combination with receiving waters or wastewater of any type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.
- (2) All samples for compliance with Tables A, B and C shall be collected from discharges resulting from a storm event that occurs at least 72 hours after any previous storm event generating a stormwater discharge. Any sample containing snow or ice melt must be identified on the Discharge Monitoring Report.
- (3) Collection of grab samples shall begin during the first thirty (30) minutes of a discharge at the designated monitoring location and shall be completed as soon as possible.
- (4) All discharge samples must be taken during the same storm event, if feasible.
- (5) The date, discharge temperature, time of the start of the discharge, time of sampling, and magnitude (in inches) of the storm event sampled shall be recorded.
- (6) The duration between the storm event sampled and the end of the most recent storm event that produced a discharge shall be recorded.
- (7) 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 Energy and Environmental Protection personnel, the Permittee, or other parties.

SECTION 6: SPECIAL CONDITIONS

- (A) The Permittee shall implement the Stormwater Pollution Prevention Plan prepared by HRP Associates dated November 2011 and updated January 2015 (the Plan), and any amendments to the Plan required by this permit.
- (B) The following benchmarks shall apply to the discharges identified in Section 5 Tables A-C:

Parameter	Benchmark
Chemical Oxygen Demand	75 mg/l
Copper, Total	0.059 mg/l
Lead, Total	0.076 mg/l
Nitrogen, Nitrate	1.10 mg/l
Nitrogen, Total Kjeldahl	2.30 mg/l
Oil and Grease, Total	5 mg/l
Phosphorus, Total	0.40 mg/l
Total Suspended Solids	90 mg/l
Zinc, Total	0.160 mg/l

Should the average of four consecutive monitoring values exceeds the benchmark for any parameter, then the Permittee must review the selection, design, installation and implementation of the existing stormwater control measures to determine if modifications are necessary to meet the benchmarks in this permit, and either:

- Make the necessary modifications to the control measures and the Plan; or
- Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to implement additional control measures or meet the benchmarks. The Permittee must also document the rationale for concluding that no further pollutant reductions are achievable and **submit this documentation to the Commissioner for written approval**. The Permittee must retain all records related to this documentation with the Plan.

If an exceedance of the four event average is mathematically certain, then the Permittee must review the control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full four monitoring events, in accordance with the “Keeping Plan Current”. If after modifying the control measures and conducting additional monitoring, the average of the most recent 4 monitoring events still exceeds the benchmark (or if an exceedance of the benchmark by the 4 event average is mathematically certain for the most recent 4 monitoring events), the Permittee must again review the control measures and take one of the two actions above. **Provided the Permittee complies with all requirements of this Benchmark Monitoring section, exceedance of the benchmarks is not, in itself, a violation of this permit.**

(C) Keeping Plan Current

The Permittee shall amend the Plan whenever;

- (1) there is a change at the site which has an effect on the potential to cause pollution of the surface waters of the state;
- (2) the actions required by the Plan fail to ensure or adequately protect against pollution of the surface waters of the state; or
- (3) the Commissioner requests modification of the Plan;
- (4) the Permittee is notified that they are subject to requirements because the receiving water to which the industrial activity discharges has been designated as impaired under Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report;
- (5) the Permittee is notified that a TMDL to which the Permittee is subject has been established for the stormwater receiving water;
- (6) necessary to address any significant sources or potential sources of pollution identified as a result of any inspection or visual monitoring;
- (7) required as a result of monitoring benchmarks or effluent limitations.

The Plan shall be amended and all actions required by the Plan shall be completed within sixty (60) (or within another interval as may be specified in this permit modification or as may be approved in writing by the Commissioner) of the date the Permittee becomes aware or should have become aware that any of the conditions listed above has occurred.

If significant changes are made to the site or to the Plan, the Permittee shall maintain compliance with such Plan thereafter.

(D) Failure to Prepare or Amend Plan

In no event shall failure to complete or update a Plan in accordance with this permit relieve a Permittee of responsibility to implement actions required to protect the surface waters of the state, complete any actions that would have been required by such Plan, and to comply with all conditions of the permit.

SECTION 7: 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 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-C. 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.

<u>Parameter</u>	<u>Minimum Level</u>
Aluminum	10.0 ug/L
Chromium	5.0 ug/L
Copper	5.0 ug/L
Lead	5.0 ug/L
Nickel	5.0 ug/L
Phosphorus	10.0 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) Grab samples shall be chilled immediately following collection. Samples shall be held at 4 degrees Centigrade until Aquatic Toxicity testing is initiated.

- (b) Stormwater 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-C 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 stormwater 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 stormwater 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) Definitive (multi-concentration) testing, with LC50 as the endpoint, shall be conducted to determine compliance with limits on Aquatic Toxicity and monitoring conditions and shall incorporate, at a minimum, the following effluent concentrations:
 - (i) For Aquatic Toxicity Limits expressed as LC50 values of 33% or greater: 100%, 75%, 50%, 25%, 12.5%, and 6.25%
 - (ii) For Aquatic Toxicity Limits expressed as LC50 values between 15% and 33% and for monitoring only conditions: 100%, 50%, 25%, 12.5%, and 6.25%
 - (iii) For Aquatic Toxicity Limits expressed as LC50 values of 15% or less: 100%, 50%, 25%, 12.5%, 6.25%, and 3%
 - (b) For Aquatic Toxicity Limits and for monitoring only conditions, 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, or 100% in the case of monitoring only conditions, as prescribed in section 22a-430-3(j)(A)(1) 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.
 - (c) Organisms shall not be fed during the tests.
 - (d) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.

- (e) 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 as follows:
 - (a) For limits expressed as a minimum LC50 value, compliance shall be demonstrated when the results of a valid definitive Aquatic Toxicity test indicates that the LC50 value for the test is greater than the Aquatic Toxicity Limit.
 - (b) For limits expressed as an NOAEL value, compliance shall be demonstrated when the results of a valid pass/fail Aquatic Toxicity test indicates there is 90% or greater survival in the effluent at the specified CTC.

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 address listed below in this paragraph.

In addition to the information required by Section 5 Tables A-C, **the following storm event information shall be submitted:**

- The date, discharge temperature, time of the start of the discharge, time of sampling, and magnitude (in inches) of the storm event sampled.
- The uncontaminated rainfall pH (before it contacts the ground or a roof surface) for the storm event sampled.
- The duration between the storm event sampled and the end of the most recent storm event that produced a discharge.

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 Energy and 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 measured daily flow and hours of operation for the 30 consecutive operating days prior to sample collection if compliance with a limit on Aquatic Toxicity is based on toxicity limits based on actual flows described in Section 7, 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 Energy and 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) Prior to one-hundred and twenty (120) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit discharge monitoring reports (DMRs) and other required reports through a secure internet connection. Unless otherwise approved in writing by the Commissioner, no later than one-hundred and twenty (120) days after the issuance of this permit, the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:
1. Subscription to NetDMR
 - a. On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department and subscribe to NetDMR for electronic submission of Discharge Monitoring Report (DMR) information. A copy of the NetDMR subscriber form is available on the Department's website.
 2. Submittal of Reports Using NetDMR
 - a. Unless otherwise approved by the Commissioner, on or before one-hundred and twenty (120) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit DMRs and reports required under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of Section 7 of this permit, including but not limited to the electronic submission of any report in response to a permit violation, which at a minimum includes a detailed explanation of such violation, corrective actions performed and a schedule for the completion of any corrective actions remaining. NetDMR is accessed from the Department webpage: www.ct.gov/dep.
 - b. DMRs shall be submitted electronically to the Department no later than the 15th day of the month following the completed reporting period. All reports required under the permit shall be submitted to the Department as an electronic attachment to the DMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to the Department.

3. Submittal of NetDMR Opt-Out Requests

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

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at dep.netdmr@ct.gov.

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

SECTION 9: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

- (A) If any sample analysis indicates Toxicity, 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 7, 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 the 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: COMPLIANCE SCHEDULE

- (A) On or before 45 days after the date of issuance of this permit, the Permittee shall submit for the Commissioner’s review an update of the site Stormwater Pollution Prevention Plan (rev. June 2015) describing all stormwater management practices currently being implemented.

- (B) On or before 365 days after the date of issuance of this permit, the Permittee shall submit for the Commissioner's review a summary of all stormwater monitoring results, the results of the benchmark evaluation of the stormwater data performed in accordance with Section 6(B) of this permit, and a description of any additional stormwater management practices implemented as a result of the benchmark evaluation.
- (C) The Permittee shall use best efforts to submit to the Commissioner all documents required by this section of the permit in a complete and approvable form. If the Commissioner notifies the Permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the Permittee shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty days of the Commissioner's notice of deficiencies. In approving any document or other action under this Compliance Schedule, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this section of the permit. Nothing in this paragraph shall excuse noncompliance or delay.
- (D) Dates. The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this 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:

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

This permit is hereby issued on

Robert E. Kaliszewski
Deputy Commissioner
Department of Energy and Environmental Protection

REK/KLA

FACT SHEET
NPDES Permit Issuance

APPLICANT	<i>Connecticut Galvanizing, Division of Highway Safety Corporation</i>
PERMIT NO.	<i>CT0030449</i>
APPLICATION NO.	<i>201607114</i>
DATE APPLICATION RECEIVED	<i>June 2, 2016</i>
LOCATION ADDRESS	<i>239 Commerce Street, Glastonbury</i>
FACILITY CONTACT	<i>John Roy, Vice President 860-659-4330 JROY@highwaysafety.net</i>
MAILING ADDRESS	<i>239 Commerce Street, P.O. Box 358, Glastonbury, CT 06033</i>
DMR CONTACT	<i>John Roy, Vice President 860-659-4330 JROY@highwaysafety.net</i>
PERMIT TERM	<i>5 Years</i>
PERMIT CATEGORY	<i>NPDES Minor</i>
SIC CODE(S)	<i>Primary: 3479 (Coating, Engraving, and Allied Services) Secondary: 3444 (Sheet metal work)</i>
PERMIT TYPE	<i>Renewal</i>
OWNERSHIP	<i>Private</i>
RECEIVING WATERBODIES	<i>Salmon Brook Hubbard Brook.</i>
DEEP STAFF ENGINEER	<i>Karen Allen (860-424-3842) Karen.allen@ct.gov</i>
TENTATIVE DECISION FACT SHEET DATE	<i>When preparing a final version of this, change the language to DATE FACT SHEET PREPARED FOR PERMIT ISSUANCE</i>

PERMIT FEES

Application Filing Fee: \$2,620.00
Application Processing Fee: \$5,250.00

Annual Fee:

DISCHARGE CODE	WASTEWATER CATEGORY (per 22a-430-7)	MAXIMUM GPD or CATEGORY	DSN	ANNUAL FEE (per 22a-430-7)
.1080000	Stormwater	N/A	101	\$2,912.50
.108000n	Stormwater	N/A	102	\$0
.108000n	Stormwater	N/A	103	\$0

I. APPLICANT

On June 2, 2016, the Department of Energy and Environmental Protection (“DEEP”) received Application No. 201607114 from Connecticut Galvanizing, Division of Highway Safety Corporation (“CT Galvanizing”) seeking authorization to renew a permit to discharge stormwater runoff associated with galvanizing operations to wetlands associated with Hubbard Brook and Salmon Brook via the Town of Glastonbury storm sewer system. A Notice of Permit Application was published in The Hartford Courant on May 19, 2016. The application was determined to be administratively sufficient on July 29, 2016.

NATURE OF THE BUSINESS GENERATING THE DISCHARGE

The facility galvanizes highway guide rails, signage structures, and miscellaneous metal products. The galvanizing operation does not generate a wastewater discharge. The discharge that is the subject of this permit consists of stormwater runoff from roofs and paved areas of the facility.

The applicant seeks authorization for the following (See Section IV of this fact sheet for additional details)

DSN	PROPOSED MAXIMUM DAILY FLOW (gpd)	PROPOSED WASTESTREAMS	TREATMENT TYPE	DISCHARGE TO
101-1	N/A	Stormwater runoff from material handling and process areas (during extreme weather events only)	Oil/water/grit separator	Wetlands associated with Salmon Brook
102-1	N/A	Stormwater runoff from the office roof	None	Wetlands associated with Hubbard Brook
103-1	N/A	Stormwater runoff from the area east of the fabrication shop	Grit separator	Wetlands associated with Hubbard Brook

II. RECEIVING STREAMS AND SEGMENT NUMBERS

DSN 101 Salmon Brook: CT4006-00_02
Water Quality Standard: A

DSN 102 Hubbard Brook: CT4007-00_01
Water Quality Standard: A

DSN 103 Hubbard Brook: CT4007-00_01
Water Quality Standard: A

III. BACKGROUND/PERMIT HISTORY

CT Galvanizing first registered for coverage under the DEP's *General Permit for the Discharge of Stormwater Associated with Industrial Activity* in June 1993 for the discharge of stormwater runoff to wetlands associated with Hubbard Brook and Salmon Brook. However, the extent of material storage and operations performed outdoors at the site resulted in extremely poor stormwater quality, with concentrations of zinc in the hundreds of parts per million. In June 2001, CT Galvanizing agreed to Consent Order WSWDH01010/WC0005324/1632 to address excessively high concentrations of metals, particularly zinc, in the stormwater runoff from the site, as well as hazardous waste and air issues. Subsequently, in August 2005, DEP determined that CT Galvanizing was not in compliance with the consent order or the industrial stormwater general permit.

Although, CT Galvanizing installed new roofing and implemented additional stormwater best management practices, the quality of the stormwater runoff continued to be very poor. DEP staff made a determination that coverage of the stormwater runoff from the CT Galvanizing site under the industrial stormwater general permit was not protective of the waters of the state and required that CT Galvanizing submit an application for an individual discharge permit. NPDES Permit No. CT0030449 ("NPDES permit") was issued on September 20, 2011 with a schedule requiring CT Galvanizing to install a new treatment system and to implement best management practices in order to meet Water Quality Based effluent limitations.

Following the issuance of the NPDES permit, unforeseen legal complications between CT Galvanizing, the downstream property owner, and the Town of Glastonbury prevented the installation of the stormwater treatment system purchased by CT Galvanizing. Extensive mediation efforts undertaken by Department staff in conjunction with the Attorney General's office failed to resolve the situation between the three parties and CT Galvanizing continued violating the effluent limits contained in the NPDES permit.

In October 2015, CT Galvanizing received notice that the National Environmental Law Center was filing suit on behalf of two local environmental groups for violations of CT Galvanizing's NPDES permit. In response, CT Galvanizing abandoned the treatment system concept originally proposed in the NPDES permit and instead proposed to install a new system to collect and treat stormwater runoff from all the material handling

and processing areas of the site. The proposal, which is the subject of Permit No. SP0002477 (Application No. 201702461 received March 13, 2017), involves redirecting most of the site's storm drain system to a 248,000 gallon subsurface stormwater detention structure followed by treatment utilizing a WaveIonics (by WaterTectonics) stormwater treatment system. The detention structure and treatment system is capable of capturing and treating the runoff generated by 3.6 inches of rainfall in a 24-hour period. A maximum of 120,000 gallons per day of effluent from the treatment system is to be discharged to the Town of Glastonbury Water Pollution Control Facility. The Town of Glastonbury Water Pollution Control Authority approved the discharge of treated stormwater runoff to the sanitary sewer system in January 2017. Stormwater runoff that exceeds the capacity of the treatment system or exceeds the maximum daily flow approved by the Town of Glastonbury will be directed to an oil/water/grit separator and then to wetlands associated with Salmon Brook (DSN 101).

On June 2, 2016, CT Galvanizing submitted Application No. 201607114 to renew NPDES Permit No. CT0030449 to discharge stormwater runoff associated with galvanizing operations to wetlands associated with Hubbard Brook and Salmon Brook via the Town of Glastonbury storm sewer system. However, with the realignment of the on-site storm drain system and the installation of the collection/treatment system for discharge to the sanitary sewer, the NPDES permit renewal is significantly different than the NPDES permit issued on September 20, 2011. Please see the next section for details.

Compliance/Enforcement

Is the Permittee subject to an ongoing enforcement action? Yes No

Consent Order No. WC0005324/1632 issued June 27, 2001 and modified May 16, 2002

Civil Action No.:3:16-cv-00066 filed October 18, 2016 in United States District Court for the State of Connecticut. (Environment America, Inc., d/b/a Environment Connecticut, and Toxics Action Center, Inc. vs. Highway Safety Corp., Highway Safety Design and Fabrication Corp., and Connecticut Galvanizing Corp.)

Does the Permit contain a compliance schedule? Yes No

- | | | |
|---|---|---|
| <input type="checkbox"/> Pollution Prevention | <input type="checkbox"/> Water Conservation | <input type="checkbox"/> Remediation |
| <input checked="" type="checkbox"/> Water Quality Requirement | <input checked="" type="checkbox"/> Treatment Requirement | <input checked="" type="checkbox"/> Other |

See Section VI of this fact sheet for information regarding the compliance schedule

IV. STORM DRAINAGE AND TREATMENT DESCRIPTION (by DSN)

See table below for drainage descriptions and changes to site conditions since the last permit issuance. See the attached site drainage map for catchment areas

DSN	SITE CONDITIONS UNDER PREVIOUS PERMIT	DSN	SITE CONDITIONS UNDER CURRENT PERMIT
001	Stormwater runoff from the employee parking lot, the area around the grinding shed and maintenance building, and the storage area at the west end of the site. The untreated stormwater runoff from this 3.48 acre drainage area previously discharged to the Town of Glastonbury separate storm sewer system prior to discharging to wetlands of Salmon Brook located northwest of the site.	101	Stormwater runoff from all material handling and process areas (Catchments 1-6), except for some raw material storage east of the fabrication shop (Catchment 7), will be collected in a subsurface detention system for treatment utilizing electrocoagulation, settling and filtration. The Permittee has received approval from the Glastonbury Water Pollution Control Authority to discharge the effluent from the treatment system to the Town of Glastonbury sanitary sewer line in accordance with Permit No. SP0002477, DSN 201. Excess stormwater runoff generated by storm events resulting in greater than 3.6 inches of rainfall in 24 hours will bypass the collection/treatment system and instead discharge through an oil/water/grit separator, then to this existing stormwater outfall and drainage swale located northwest of the site, and finally to wetlands associated with Salmon Brook.
002	Stormwater runoff from the 2.2 acre drainage area that encompasses the central and eastern portions of the site, including the east end of the galvanizing building, the fabrication shop and the office. The runoff has discharged untreated to wetlands of Hubbard Brook located south of Commerce Street.	102	As a result of the realignment of the storm drain system on site, stormwater runoff only from a portion of the roof of the office building will continue to discharge untreated to this outfall which drains into the Town of Glastonbury storm sewer system and then to wetlands associated with Hubbard Brook located south of Commerce Street.
003	Stormwater runoff from the area east of the fabrication shop (Catchment 7). The drainage area contributing to this outfall is approximately 0.14 acres and is used for raw materials (un-galvanized steel) storage. The stormwater runoff discharges to a 3,500 gallon grit separator which essentially acts as a holding tank. Stormwater that collects in the separator is manually pumped and used in the galvanizing process. There has not been a discharge of stormwater to this outfall since the installation of the separator in June 2015.	103	There has not been a discharge of stormwater to this outfall since June 2015. It is possible, however, that under extreme weather events, the grit chamber will discharge to the Town of Glastonbury storm sewer system in Commerce Street and then to wetlands associated with Hubbard Brook.

V. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

BASIS FOR LIMITS, STANDARDS OR CONDITIONS	
	Federal Effluent Limitation Guideline (ELG)
	Pretreatment Standards for Existing Sources (PSES)
	Pretreatment Standards for New Sources (PSNS)
	Performance Standards
	Section 22a-430-4(s) of the Regulations of Connecticut State Agencies (RCSA)
X	Connecticut Water Quality Standards
X	Case-by-Case Determination using Best Professional Judgment (BPJ)
X	Department File Information
X	DEEP's <i>General Permit for the Discharge of Stormwater Associated with Industrial Activity, reissued without modifications, effective October 1, 2016-September 30, 2018</i>

A. **DSN 101-1
Monitoring Parameters, Limits and Monitoring Frequency**

DSN 101

PARAMETER	BPJ			Monitoring Frequency	Minimum Level (ug/L)
	Required Range	Maximum Instantaneous (mg/L)	Benchmark (mg/L)		
Aluminum, Total				Quarterly	10.0
Chemical Oxygen Demand			75	Quarterly	
Chromium, Total				Quarterly	5.0
Copper, Total			0.059	Quarterly	5.0
Lead, Total			0.076	Quarterly	5.0
Nickel, Total				Quarterly	5.0
Nitrogen, Ammonia				Quarterly	
Nitrogen, Nitrate			1.10	Quarterly	
Nitrogen, Total Kjeldahl			2.30	Quarterly	
Oil and Grease, Total		5.0		Quarterly	
pH	6.0 – 9.0 su			Quarterly	
Phosphorus, Total			0.40	Quarterly	10.0
Total Suspended Solids		90.0		Quarterly	
Zinc, Total			0.160	Quarterly	10.0

PARAMETER	In order to meet in-stream water quality	
	Maximum Instantaneous (mg/L)	Monitoring Frequency
Aquatic Toxicity, <i>Daphnia pulex</i> , LC ₅₀ >100%	≥ 100%	Quarterly
Aquatic Pimephales <i>promelas</i> , LC ₅₀ >100%	≥ 100%	Quarterly

Comments

Under the new site conditions, the frequency and the water quality of this stormwater discharge are unknown. The new stormwater detention structure and treatment system that will discharge to the Town of Glastonbury sanitary sewer (Permit No. SP0002477) is capable of storing and treating the runoff generated by up to 3.6 inches of rainfall in a 24-hour period. Historical rainfall data for the area submitted by the Permittee indicates that this rainfall event constitutes over 99% of storm events that have occurred over the last 21 years. In addition, the Permittee is planning to divert approximately 37,500 gallons (~1,250 gpd) of treated stormwater per month to be utilized in plant operations. A discharge of stormwater runoff to DSN 101 is expected to occur infrequently, and only during extreme storm events and periods of prolonged rainfall.

Until adequate, site-specific data becomes available, this outfall will continue to be monitored on a quarterly basis. Utilizing best professional judgment, the benchmarks contained in the current version of DEEP’s General Permit for the Discharge of Stormwater Associated with Industrial Activity (industrial stormwater general permit) have been incorporated into this permit as final limits for total oil and grease, pH and total suspended solids. The requirements for benchmark monitoring contained in the industrial stormwater general permit have been incorporated in this permit for total copper, total lead, total zinc, chemical oxygen demand, nitrate-nitrogen, total Kjeldahl nitrogen and total phosphorus. A monitoring requirement for aluminum, ammonia-nitrogen, total chromium and total nickel has been included in this permit renewal to develop the data necessary to evaluate the discharge for consistency with available acute aquatic life criteria.

Monitoring requirements and effluent limitations for this outfall will be reevaluated as additional information becomes available.

**B. DSN 102-1
Monitoring Parameters, Limits and Monitoring Frequency**

DSN 102

PARAMETER	BPJ			Monitoring Frequency	Minimum Level (ug/L)
	Required Range	Maximum Instantaneous (mg/L)	Benchmark (mg/L)		
Aluminum, Total				Quarterly	10.0
Chemical Oxygen Demand			75	Quarterly	
Chromium, Total				Quarterly	5.0
Copper, Total			0.059	Quarterly	5.0
Lead, Total			0.076	Quarterly	5.0
Nickel, Total				Quarterly	5.0
Nitrogen, Ammonia				Quarterly	
Nitrogen, Nitrate			1.10	Quarterly	
Nitrogen, Total Kjeldahl			2.30	Quarterly	
Oil and Grease, Total		5.0		Quarterly	
pH	6.0 – 9.0 su			Quarterly	
Phosphorus, Total			0.40	Quarterly	10.0
Total Suspended Solids		90.0		Quarterly	
Zinc, Total			0.160	Quarterly	10.0

PARAMETER	In order to meet in-stream water quality	
	Maximum Instantaneous (mg/L)	Monitoring Frequency
Aquatic Toxicity, Daphnia pulex, NOAEL=100%	≥ 90%	Quarterly
Aquatic Pimephales promelas, NOAEL=100%	≥ 90%	Quarterly

Comments

Realignment of the site's storm drain system will direct most of the stormwater runoff that previously discharged to wetlands associated with Hubbard Brook (formerly DSN 002) into the new collection/treatment system. As a result, the discharge to this monitoring location will consist only of stormwater runoff from a portion of the office building roof. In order to determine the quality of the stormwater under these new site conditions, this outfall will continue to be monitored on a quarterly basis. Utilizing best professional judgment, the benchmarks contained in the current version of the industrial stormwater general permit have been incorporated into this permit renewal as final limits for total oil and grease, pH and total suspended solids. The requirements for benchmark monitoring contained in the general permit have been incorporated in this permit renewal for total copper, total lead, total zinc, chemical oxygen demand, nitrate-nitrogen, total Kjeldahl nitrogen and total phosphorus. A monitoring requirement for aluminum, ammonia-nitrogen, total chromium and total nickel has been included in this permit to develop the data necessary to evaluate all discharges for consistency with available acute aquatic life criteria.

Monitoring requirements and effluent limitations for this outfall will be reevaluated as additional information becomes available.

**C. DSN 103-1
Monitoring Parameters, Limits and Monitoring Frequency**

DSN 103

PARAMETER	BPJ			Monitoring Frequency	Minimum Level (ug/L)
	Required Range	Maximum Instantaneous (mg/L)	Benchmark (mg/L)		
Aluminum, Total				Semi-annual	10.0
Chemical Oxygen Demand			75	Semi-annual	
Chromium, Total				Semi-annual	5.0
Copper, Total			0.059	Semi-annual	5.0
Lead, Total			0.076	Semi-annual	5.0
Nickel, Total				Semi-annual	5.0
Nitrogen, Ammonia				Semi-annual	
Nitrogen, Nitrate			1.10	Semi-annual	
Nitrogen, Total Kjeldahl			2.30	Semi-annual	
Oil and Grease, Total		5.0		Semi-annual	
pH	6.0 – 9.0 su			Semi-annual	
Phosphorus, Total			0.40	Semi-annual	10.0
Total Suspended Solids		90.0		Semi-annual	
Zinc, Total			0.160	Semi-annual	10.0

PARAMETER	In order to meet in-stream water quality	
	Maximum Instantaneous (mg/L)	Monitoring Frequency
Aquatic Toxicity, Daphnia pulex, NOAEL=100%	≥ 90%	Semi-annual
Aquatic Pimephales promelas, NOAEL=100%	≥ 90%	Semi-annual

Comments

There has been no discharge from this outfall since the installation of a 3,500 gallon grit separator in June 2015. Instead, stormwater runoff that collects in the separator is pumped out and used in CT Galvanizing's process tanks. It is possible however, that a discharge may occur under extreme weather conditions, so this outfall will be monitored on a semi-annual basis. Utilizing best professional judgment, the benchmarks contained in the current version of the industrial stormwater general permit have been incorporated into this

permit renewal as final limits for total oil and grease, pH and total suspended solids. The requirements for benchmark monitoring contained in the industrial stormwater general permit have been incorporated in this permit for total copper, total lead, total zinc, chemical oxygen demand, nitrate-nitrogen, total Kjeldahl nitrogen and total phosphorus.

VI. COMPLIANCE SCHEDULE

This permit renewal contains the following schedule:

- Section 10(A) requires the submittal of an updated Stormwater Pollution Prevention Plan within 45 days of permit issuance.
- Section 10(B) requires, within 365 days of permit issuance, the submittal of a benchmark evaluation of all stormwater monitoring data performed in accordance with Section 6(B) of the permit, and a description of any additional stormwater management practices implemented as a result of that evaluation.

VII. MISCELLANEOUS

The DEEP's *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (industrial stormwater general permit, effective October 1, 2016) was used as a reference for the requirements for the Stormwater Pollution Prevention Plan referred to in this permit.

The Permittee is registered for the General Permit for the Discharge of Vehicle Maintenance Wastewaters (Permit No. GVM000604).

Stormwater runoff in excess of the treatment system capabilities will discharge to the Town of Glastonbury storm sewer system and then to wetlands associated with Salmon Brook in accordance with NPDES Permit No. CT0030449.

Spill History

On December 26, 2015, a CT Galvanizing employee discovered an ongoing spill in the galvanizing building; a result of apparent vandalism. A hose from the city water system was found in the caustic tank, and both the main water valve to the galvanizing building and the valve to the hose had been opened. In addition, the transfer valves for acid tanks #2 and #3 had been opened. DEEP Emergency Response was called. A police investigation resulted in the arrest of a former CT Galvanizing employee.

VIII. SITE & RESOURCE INFORMATION

A. INDIAN LAND

As indicated in the permit application, the site is not located on federally-recognized Indian Land

B. COASTAL BOUNDARY

As indicated in the permit application, the site is not within the coastal boundary.

C. ENDANGERED OR THREATENED SPECIES

As indicated in the permit application, the site is not located in an area identified as habitat for endangered, threatened or special concern species.

D. AQUIFER PROTECTION AREAS

As indicated in the application, the site is not located within a mapped Aquifer Protection Area.

E. CONSERVATION OR PRESERVATION RESTRICTION

As indicated in the application, the site property is not subject to a conservation or preservation restriction.

F. MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

Stormwater runoff that is not discharged to the sanitary sewer system, discharges to the Town of Glastonbury municipal storm sewer system (Permit No. GSM000057).

G. PUBLIC WATER SUPPLY WATERSHED – not applicable