

PRETREATMENT PERMIT

issued to

The Har-Conn Chrome Company
603 New Park Avenue
West Hartford, CT 06110

Location Address:

603 New Park Avenue
West Hartford, CT

Permit ID: SP0002230

Permit Expires: February 27, 2019

SECTION 1: GENERAL PROVISIONS

- (A) This permit is reissued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and a modified Memorandum of Agreement dated June 3, 1981, by the Administrator of the United States Environmental Protection Agency which authorizes the State of Connecticut to administer a Pretreatment Program pursuant to 40 CFR Part 403.
- (B) The Har-Conn Chrome Company ("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)(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, penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA. Specifically, civil penalties of up to twenty-five thousand dollars may be assessed per violation per day.
- (D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with section 22a-6, under section 53a-157b of the CGS.
- (E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Energy and Environmental Protection ("the Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner at least thirty (30) days prior to the transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure by the transferee to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.
- (F) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- (G) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the RCSA.

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 sections 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 monitoring tables A, B, and C means a limit is not specified but a value must be reported on the Discharge Monitoring Report ("DMR").

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

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

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

"Grab Sample Average" ("GSA") means the arithmetic average of all grab sample analyses. Grab samples shall be collected just prior to discharge from each tank over a full operating day for as long as a discharge exists on that day (minimum of two grab samples per day).

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

"Maximum Daily Limit" means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l). Otherwise, it means the maximum allowable "Daily Quantity" as defined above unless it is expressed as a flow quantity. If expressed as a flow quantity, it means "Maximum Daily Flow" as defined in section 22a-430-3(a) of the RCSA.

"mg/l" means milligrams per liter.

"NA" as a monitoring table abbreviation means "not applicable".

"NR" as a monitoring table abbreviation means "not required".

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

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

"Semi-Annually" in the context of a sampling frequency, means the sample must be collected in the months of June and December.

SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner has made a final determination and found that continued use of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 201300057 for permit reissuance received on January 2, 2013 and the administrative record established in the processing of that application.
- (B) (1) From the issuance of this permit through and including February 28, 2014, the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. SP0002230, issued by the Commissioner to the Permittee on July 3, 2008, the previous application submitted by the Permittee on April 5, 1999, 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. SP0002230, issued by the Commissioner to the Permittee on July 3, 2008.

(2) From March 1, 2014 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. SP0002230, issued by the Commissioner to the Permittee on July 3, 2008, Application No. 201300057 received by the Department on January 2, 2013, 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. SP0002230, issued by the Commissioner to the Permittee on February 28, 2014.
- (C) The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions that may be authorized under the Federal Clean Water Act or the 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: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Table A

Table A								
Discharge Serial Number: DSN 001-1						Monitoring Location: 1		
Wastewater Description: Metal finishing wastewater, pretreated cyanide-bearing wastewaters (DSN 001-A), pretreated hexavalent chromium-bearing wastewaters (DSN 001-B), drum cleaning rinsewaters, air compressor condensate, air scrubber wastewater, laboratory wastewater and filter cleaning wastewater								
Monitoring Location Description: After final pH adjustment								
Discharge is to: The Metropolitan District Commission (“MDC”) Hartford Water Pollution Control Facility via the MDC sanitary sewer system in the town of West Hartford								
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample/Reporting Frequency ²	Sample Type or Measurement to be Reported
Aluminum, Total	mg/l	2.0	4.0	Weekly	Daily Composite	6.0	NR	Grab
Cadmium, Total	mg/l	0.07	0.11	Weekly	Daily Composite	0.16	NR	Grab
Chromium, Total	mg/l	1.0	2.0	Weekly	Daily Composite	3.0	NR	Grab
Copper, Total	mg/l	1.0	2.0	Weekly	Daily Composite	3.0	NR	Grab
Cyanide, Amenable	mg/l	0.06	0.15	Weekly	GSA	0.23	NR	Grab
Cyanide, Total	mg/l	0.11	0.21	Weekly	GSA	0.32	NR	Grab
Flow Rate (Average Daily) ¹	gpd	55,000	NA	Continuously	Daily Flow	NA	NR	NA
Flow, Maximum during 24 hr period ¹	gpd	NA	90,000	Continuously	Daily Flow	NA	NR	NA
Flow (Day of Sampling)	gpd	NA	90,000	Weekly	Daily Flow	NA	NR	NA
Iron, Total	mg/l	3.0	5.0	Weekly	Daily Composite	7.5	NR	Grab
Lead, Total	mg/l	0.1	0.5	Semi-Annually	Daily Composite	0.75	NR	Grab
Nickel, Total	mg/l	1.0	2.0	Weekly	Daily Composite	3.0	NR	Grab
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0-10.0	Weekly	RDS
pH, Minimum	S.U.	NA	NA	NR	NA	6.0	Continuously	Continuously
pH, Maximum	S.U.	NA	NA	NR	NA	10.0	Continuously	Continuously
Silver, Total	mg/l	0.1	0.43	Weekly	Daily Composite	0.64	NR	Grab
Titanium, Total	mg/l	1.0	2.0	Monthly	Daily Composite	3.0	NR	Grab
Total Suspended Solids	mg/l	----	250.0	Weekly	Daily Composite	300.0	NR	Grab
Total Toxic Organics ³	mg/l	NA	NA	NR	NA	2.13	Quarterly	Grab
Zinc, Total	mg/l	1.0	2.0	Weekly	Daily Composite	3.0	NR	Grab
Footnotes: ¹ For this parameter, the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each sampling month. ² The first entry in this column is the ‘Sample Frequency’. If this entry is not followed by a ‘Reporting Frequency’ and the ‘Sample Frequency’ is more frequent than monthly then the ‘Reporting Frequency’ is monthly. If the ‘Sample Frequency’ is specified as monthly, or less frequently, then the ‘Reporting Frequency’ is the same as the ‘Sample Frequency’. ³ See Section 5, paragraph G.								

Table B								
Discharge Serial Number: DSN 001-A						Monitoring Location: 1		
Wastewater Description: Cyanide-bearing wastewaters, including laboratory wastewaters and wash-out from cyanide containers								
Monitoring Location Description: Feed pump discharge line								
Discharge is to: Cyanide treatment								
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample/ Reporting Frequency ²	Sample Type or Measurement to be Reported
Flow Rate (Average Daily) ¹	gpd	----	NA	Continuously	Daily Flow	NA	NR	NA
Flow (Day of Sampling)	gpd	NA	----	Weekly	Daily Flow	NA	NR	NA
Footnotes: ¹ For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each sampling month. ² The first entry in this column is the ‘Sample Frequency’. If this entry is not followed by a ‘Reporting Frequency’ and the ‘Sample Frequency’ is more frequent than monthly then the ‘Reporting Frequency’ is monthly. If the ‘Sample Frequency’ is specified as monthly, or less frequently, then the ‘Reporting Frequency’ is the same as the ‘Sample Frequency’.								

Table C								
Discharge Serial Number: DSN 001-B						Monitoring Location: 1		
Wastewater Description: Hexavalent chromium-bearing wastewaters, non-cyanide bearing laboratory wastewater, air compressor condensate and mesh pad scrubber wastewater								
Monitoring Location Description: Feed pump discharge line								
Discharge is to: Hexavalent chromium treatment								
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample/Reporting Frequency ²	Sample Type or Measurement to be Reported
Chromium, Hexavalent	mg/l	0.1	0.2	Weekly	Daily Composite	0.3	NR	Grab
Flow Rate (Average Daily) ¹	gpd	----	NA	Continuously	Daily Flow	NA	NR	NA
Flow (Day of Sampling)	gpd	NA	----	Weekly	Daily Flow	NA	NR	NA
Footnotes: ¹ For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each sampling month. ² The first entry in this column is the ‘Sample Frequency’. If this entry is not followed by a ‘Reporting Frequency’ and the ‘Sample Frequency’ is more frequent than monthly then the ‘Reporting Frequency’ is monthly. If the ‘Sample Frequency’ is specified as monthly, or less frequently, then the ‘Reporting Frequency’ is the same as the ‘Sample Frequency’.								

- (B) All samples shall be comprised of only those wastewaters described in this schedule. Therefore, samples shall be taken prior to combination with wastewaters of any other type and after all approved treatment units, if applicable. All samples taken shall be representative of the discharge during standard operating conditions.
- (C) In cases where limits and sample type are specified but sampling is not required, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Energy and Environmental Protection personnel, the Permittee, or other parties.

SECTION 5: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES AND REPORTING REQUIREMENTS

- (A) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved by the Environmental Protection Agency pursuant to 40 CFR 136 unless an alternative method has been approved in writing in accordance with 40 CFR 136.4 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.
- (B) All metals analyses identified in this permit shall refer to analyses for total recoverable metal as defined in 40 CFR 136 unless otherwise specified.
- (C) The results of chemical analysis required above shall be entered on the DMR, provided by this office, and reported to the Water Permitting and Enforcement Division at the address below. Except for continuous monitoring, any monitoring required more frequently than monthly shall be reported on an attachment to the DMR, and any additional monitoring conducted in accordance with 40 CFR 136 or other methods approved by the Commissioner shall also be included on the DMR, or as an attachment, if necessary. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at the address below by the last day of the month following the month in which samples are taken.

Water Permitting and Enforcement Division (Attn: DMR Processing)
Bureau of Materials Management and Compliance Assurance
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

- (D) If this permit requires monitoring of a discharge on a calendar basis (e.g. monthly, quarterly) but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR as scheduled, indicating "NO DISCHARGE". For those permittees whose required monitoring is discharge dependent (e.g. per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.

(E) NetDMR Reporting Requirements

1. Prior to one-hundred and eighty (180) 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 DMRs and other required reports through a secure internet connection. Unless otherwise approved in writing by the Commissioner, no later than one-hundred and eighty (180) 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:

a. Submittal of *NetDMR Subscriber Agreement*

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's DMRs ("Signatory Authority") as described in section 22a-430-3(b)(2) of the RCSA shall contact the Department at deep.netdmr@ct.gov and initiate the NetDMR subscription process for electronic submission of DMR information. Information on NetDMR is available on the Department's website at www.ct.gov/deep/netdmr. On or before ninety (90) days after issuance of this permit, the Permittee shall submit a signed and notarized copy of the **Connecticut DEEP NetDMR Subscriber Agreement** to the Department.

b. Submittal of Reports Using NetDMR

Unless otherwise approved by the Commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall begin electronically submitting

DMRs and reports required under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of section 5(C) of this permit.

DMRs shall be submitted electronically to the Department no later than the thirtieth (30th) day of the month following the completed reporting period. All reports required under the permit, including any monitoring conducted more frequently than monthly or any additional monitoring conducted in accordance with 40 CFR 136, shall be submitted to the Department as an electronic attachment to the DMR in NetDMR. 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. The Permittee shall also electronically file any written report of non-compliance described in section 6 of this permit as an attachment in NetDMR. NetDMR is accessed from: <http://www.epa.gov/netdmr>.

c. Submittal of NetDMR Opt-Out Requests

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 the 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 deep.netdmr@ct.gov:

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

- (F) Copies of all DMRs shall be submitted concurrently to the Metropolitan District Commission ("MDC"), which is involved in the collection and treatment of the permitted discharge. Copies of the DMRs should be sent by e-mail to DMRs@themdc.com.
- (G) For Total Toxic Organics ("TTO") monitoring, in accordance with section 22a-430-4(l) of the RCSA and, 40 CFR 433 (Metal Finishing Point Source Category), 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 6: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

- (A) If any sample analysis indicates that an effluent limitation specified in section 4 of this permit has been exceeded, a second sample of the effluent shall be collected and analyzed for the parameter(s) in question and the results reported to the Water Permitting and Enforcement Division (Attn: DMR Processing) within thirty (30) days of the exceedance.
- (B) The Permittee shall immediately notify the Water Permitting and Enforcement Division and the MDC of all discharges that could cause problems to the Publicly Owned Treatment Works ("POTW"), including but not limited to slug loadings of pollutants which may cause a violation of the POTW's NPDES permit, or which may inhibit or disrupt the POTW, its treatment processes or operations, or its sludge processes, use or disposal.
- (C) In addition to the notification requirements specified in section 1B of this permit, if any sampling and analysis of the discharge performed by the Permittee indicates a violation of limits specified in section 4 of this permit, the Permittee shall notify the Bureau of Materials Management and Compliance Assurance within twenty-four (24) hours of becoming aware of the violation.

SECTION 7: COMPLIANCE CONDITIONS

In accordance with 40 CFR 403.8(f)(2)(viii), the Commissioner may provide public notification, in a newspaper of general circulation in the area of the respective POTW, of permittees that at any time in the previous twelve (12) months were in

significant noncompliance with the provisions of this permit. For the purposes of this provision, a permittee that is a Significant Industrial User is in significant noncompliance if its violation(s) meet(s) one or more of the following criteria:

- **Chronic violations:** Those in which sixty-six percent (66%) or more of all measurements taken for the same pollutant parameter during a six (6) month period exceed (by any magnitude) the Average Monthly, Maximum Daily or Maximum Instantaneous Limit(s).
- **Technical Review Criteria violations:** Those in which thirty-three percent (33%) or more of all of the measurements taken for the same pollutant parameter during a six (6) month period equal or exceed the Average Monthly, Maximum Daily or Maximum Instantaneous Limit(s) multiplied by 1.4 for BOD, TSS, and fats, oil, and grease, or 1.2 for all other pollutants except pH.
- **Monitoring Reports:** Failure to provide, within forty-five (45) days after the due date, required reports such as DMRs.
- **Compliance Schedule:** Failure to meet within ninety (90) days after the schedule date, a compliance schedule milestone contained in or linked to a respective permit for starting construction, completing construction or attaining final compliance.
- **Noncompliance Reporting:** Failure to accurately report noncompliance in accordance with the provisions identified in section 6 of this permit.
- **Discretionary:** Any other violation of an effluent limit that the Department determines has caused, alone or in combination with other discharges, a violation of the POTW's NPDES permit, inhibition or disruption of the POTW, its treatment processes or operations, or its sludge processes, use or disposal.
- **Imminent Endangerment:** Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment, or has resulted in the Department's exercise of its emergency authority under 40 CFR 403.8(f)(1)(vi)(B) to halt or prevent such a discharge.
- **Best Management Practices ("BMPs"):** Any other violation or group of violations, which may include a violation of BMPs, which the Department determines will adversely affect the operation or implementation of the pretreatment program.

This permit is hereby issued on **2/28/2014**

/s/Macky McCleary
Deputy Commissioner
Department of Energy and Environmental Protection

MM/MVM

cc: The Metropolitan District Commission ("MDC") Hartford Water Pollution Control Facility

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: The Har-Conn Chrome Company

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT No.: SP0002230 APPLICATION No.: 201300057

DEEP Staff Engineer Mariana Miller

<u>Mailing Address:</u> Street: 603 New Park Avenue City: West Hartford ST: CT Zip: 06110 Contact Name: Claudia Bechard Phone No.: (860) 236-6801 Email: claudia@har-conn.com	<u>Location Address:</u> Street: 603 New Park Avenue City: West Hartford ST: CT DMR Contact Claudia Bechard Phone No.: (860) 236-6801 Email: claudia@har-conn.com
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Permit Information

Duration 5 Year X 10 Year ____ 30 Year ____
Type New ____ Reissuance X Modification ____
Categorization Point Source (X) Non-Point Source () GIS No. ____
NPDES () Pretreatment (X) Groundwater (UIC) () Groundwater (Other) ()

NPDES Major (**MA**)
NPDES or Pretreatment SIU (**SI**) X
NPDES or Pretreatment Minor (**MI**)
Pretreatment Significant Industrial User (**SIU**) X
Pretreatment Categorical (**CIU**) X

Pollution Prevention Mandate ____ Environmental Equity Issue

Standard Industrial Classification ("SIC") Code: 3471 – Electroplating, Plating, Polishing, Anodizing, and Coloring

Solvent Management Plan

Is the facility operating under an approved solvent management plan? Yes X No ____
Approved on: June 12, 2013

Compliance Issues

Compliance Schedule Yes ____ No X
Is the permittee subject to a pending enforcement action? Yes ____ No X

Ownership Code

Private X Federal ____ State ____ Municipal (town only) ____ Other

Permit Fees

Discharge Code	DSN Number	Annual Fee
501035Z	001-1	\$8,425.00
501035N	001-A	*See comment
501035N	001-B	*See comment
Total		\$8,425.00

*DSN 001-A and DSN 001-B are internal wastestreams, therefore no charges were applied.

For Sewer Discharges

Discharge to the Metropolitan District Commission (“MDC”) Hartford Water Pollution Control Facility (“WPCF”) via the MDC sanitary sewer system in the town of West Hartford. The facility I.D. number of the POTW is 064-001.

Nature of Business Generating Discharge

The Har-Conn Chrome Company performs metal finishing operations on metal stock provided by customers in the aerospace and automotive industries. Metal finishing operations that generate wastewater are:

- Electroplating of copper cyanide, alkaline copper, nickel sulfamate, nickel chloride, cadmium cyanide, silver cyanide, and hard chromium
- Electroless plating of nickel
- Sulfuric acid anodizing, chromic acid anodizing, and hardcoat anodizing
- Chromating, alkaline cleaning, acid pickling, metal stripping

Other wastewaters produced at this site include wet scrubber system wastewater, air compressor condensate, laboratory wastewater, and non-contact cooling wastewater.

Process and Treatment Description (by DSN)

DSN 001-1: The wastewaters discharged from this outfall consist of up to 90,000 gallons per day of process wastewaters generated by metal finishing operations, pretreated cyanide wastewater, pretreated chromium wastewater, air compressor condensate, laboratory wastewater, and scrubber wastewater. The wastewater treatment system for this discharge consists of pH adjustment, coagulation, microfiltration, and sludge dewatering. The wastewater from this outfall is discharged to the MDC Hartford WPCF.

DSN 001-A: This internal wastestream consists of cyanide-bearing wastewaters, including laboratory wastewaters and wash-out from cyanide containers. The cyanide wastewaters are treated through two stage cyanide destruction and then discharged to the wastewater treatment system at DSN 001-1.

DSN 001-B: This internal wastestream consists of hexavalent chromium-bearing wastewaters, non-cyanide bearing laboratory wastewater, air compressor condensate and mesh pad scrubber wastewater. The chromium wastewaters are treated through hexavalent chromium reduction and then discharged to the wastewater treatment system at DSN 001-1.

Resources Used to Draft Permit

 X Federal Effluent Limitation Guideline

 X Department File Information

40 CFR 433
Metal Finishing Point Source Category

Basis for Limitations, Standards or Conditions

- X Case-by-Case Determination using Best Professional Judgement (“BPJ”) (See *Other Comments*)
- X Section 22a-430-4(s) of the Regulations of Connecticut State Agencies (“RCSA”)
- X Pretreatment Standards for New Sources (“PSNS”)

Outfall	Parameter	BPJ	RCSA	PSNS
001-1	Aluminum, Total; AML, MDL, MIL		X	
	Cadmium, Total; AML, MDL		X	
	Cadmium, Total; MIL	X		
	Chromium, Total; AML, MDL, MIL		X	
	Copper, Total; AML, MDL, MIL		X	
	Cyanide, Amenable; AML, MDL, MIL	X		
	Cyanide, Total; AML, MDL, MIL	X		
	Iron, Total; AML, MDL, MIL		X	
	Lead, Total; AML, MDL, MIL		X	
	Nickel, Total; AML, MDL, MIL		X	
	pH	X		
	Silver, Total; AML		X	
	Silver, Total; MDL			X
	Silver, Total, MIL	X		
	Titanium, Total; AML, MDL, MIL	X		
	Total Suspended Solids; AML, MDL, MIL	X		
	Total Toxic Organics (TTOs); MIL			X
	Zinc, Total; AML, MDL, MIL		X	
001-B	Chromium, Hexavalent; AML, MDL, MIL		X	

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

General Comments

In developing the permit's concentration limits, EPA Metal Finishing Categorical Limits (40 CFR Part 433) and limits outlined in section 22a-430-4(s)(2) of the RCSA were compared. The Connecticut limits were found to be more stringent and thus incorporated in the permit, except for the silver MDL.

Other Comments

The Har-Conn Chrome Company is a “job shop”, as defined in 40 CFR 433. A job shop is a facility which owns not more than 50% (annual area basis) of the materials undergoing metal finishing.

The MIL is generally calculated by multiplying the MDL by a factor of 1.5. The previous permit included an MIL of 0.17 mg/l for cadmium. For this permit, the calculated MIL value $((0.11 \text{ mg/l}) \times (1.5))$ was rounded to 0.16 mg/l in order to remain conservative.

In the previous permit, the dilution ratio calculated based on the average monthly flow data recorded for DSN 001-1 and DSN 001-A was equal to 17%. Therefore, the cyanide limits were calculated by multiplying EPA’s categorical end-of-pipe PSNS limits for cyanide by 0.17. This method is consistent with that provided in section 5.4.2 of EPA’s *Guidance Manual for Electroplating and Metal Finishing Pretreatment Standards* (EPA-440184091G). The limits for amenable and total cyanide have been retained from the previous permit.

The pH limits of 6.0-10.0 S.U. are considered to be protective of sanitary sewer systems.

The previous permit included an MIL of 0.65 mg/l for silver. For this permit, the calculated MIL value $((0.43 \text{ mg/l}) \times (1.5))$ was rounded to 0.64 mg/l in order to remain conservative.

Effluent results provided in DMR data from 2010 to the present show that titanium has not been detected in the wastewater. For this reason, the monitoring frequency for this parameter has been reduced from weekly to monthly. The effluent limits for titanium have been retained from the previous permit as well.

The effluent limits for total suspended solids have also been retained from the previous permit.

The previously issued permit included MDL of 1.42 mg/l for TTOs. However, the *Sample/Reporting Frequency* and *Sample Type or Measurement to Be Reported* for this parameter were indicated as “NR” (not required) and “NA” (not applicable), respectively. For this reason, the new permit will not include an AML and MDL for TTOs. The 2.13 mg/l MIL still applies.

Pre-treated hexavalent chromium wastewater is an internal wastestream (DSN 001-B) that discharges to DSN 001-1. Previously, only flow was monitored at DSN 001-B. However, because there is no dilution factor applied at DSN 001-1, effluent limits have been applied to monitoring table C.

The Har-Conn Chrome Company has proposed to extend its operations to 85 Grassmere Avenue in West Hartford, which is across the street from the company’s main operations at 603 New Park Avenue. Phosphoric acid anodizing and painting operations will take place at 85 Grassmere Avenue. No wastewater will be discharged from this location. The wastewater generated here will be collected in totes, transported across the street to 603 New Park Avenue and treated in the main wastewater treatment system. This change was approved on September 18, 2013.

The following changes were also approved during the previous permit term:

- August 22, 2012: Install a double-wall polypropylene tank for the cyanide descaler process.
- August 22, 2012: Place the cyanide descaler tank and the associated rinse tanks in containment systems.
- August 22, 2012: Pipe the containment system to the cyanide sump system, where the solution collected in the containment would be pumped to the cyanide equalization tank.
- September 11, 2012: Replace the electrical controls for the microfiltration system with a new control cabinet.
- March 25, 2013: Discontinue the use of submersible pumps and sumps.
- March 25, 2013: Install lift stations to convey the wastewaters from the main and chrome lines to the wastewater treatment system.

- April 4, 2013: Install an additional valve setup to serve as a backup for the existing electric actuated valves, in the event that the existing valves fail.

The Har-Conn Chrome Company also generates wastewaters covered under the *General Permit for the Discharge of Minor Boiler Blowdown Wastewater*, the *General Permit for the Discharge of Stormwater Associated with Industrial Activity*, and the *General Permit for the Discharge of Minor Non-Contact Cooling and Heat Pump Water*.

The MDC Hartford WPCF confirmed its approval with the permit conditions on December 16, 2013.

The public notice was published in the Hartford Courant on January 15, 2014. The Department has received no written comments on the proposed action.