

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8 1595 Wynkoop Street DENVER, CO 80202 Phone 800-227-8917 http://www.epa.gov/region08

Enclosure 2

Pretreatment ICIS Number:	WY-P000019
Facility Name and Address:	L&H Industrial Incorporated – Sheridan 1909 and 1921 Commercial Avenue Sheridan, WY 82801
Authorized Representative Contact:	Jay Will General Manager 1909 Commercial Avenue Sheridan, WY 82801 307-674-4431, j <u>will@Inh.net</u>
Applicable Pretreatment Regulations:	Metal Finishing Point Source Category, Zero- Discharging Categorical Industrial User
Categorical Reference:	40 C.F.R. Part 433 (Pretreatment Standards for New Sources at 40 C.F.R. § 433.17)
Receiving POTW/Collection System:	Sheridan POTW WYDPS Permit No. WY-0020010 393 Fort Road Sheridan, WY 82801
POTW Contact:	Brian Edwards, POTW Superintendent City of Sheridan 393 Fort Road Sheridan, WY 82801 301-674-7038, <u>bewards@sheridanwy.gov</u>

Section 1 L&H Industrial Incorporated – Sheridan Site and Building Layout

1.1 Facility Description

The L&H Industrial Incorporated – Sheridan facility (facility) is located at 1909 and 1921 Commercial Avenue, Sheridan, WY 82801. According to the Notice of Discharge Requirements (NDR) application submitted by the facility on March 25, 2024, 36 individuals are employed at the facility with the majority working the dayshift from Monday through Friday; and four people working the nightshift Monday through Friday. Figure 1 provides an overall site diagram of the facility. Figure 2 provides a building shop layout (identified as Plating/Machining Shop in Figure 1).



Figure 1 – L & H Industrial Incorporated-Sheridan Site Diagram



Figure 2 – L & H Industrial Incorporated – Sheridan Shop Building Layout

1.2 Raw Materials and Chemicals Storage and Spill Potential

The facility submitted its chemical inventory and spill emergency contingency plan in the March 24, 2024 NDR application. Raw materials and chemicals are received on the Northeast corner of the building and distributed to the appropriate departments - painting, machining, assembly, or plating - depending on the final product order.

Table 1 lists the chemicals the facility uses in its machining and metal finishing unit operations:

Table 1 – Raw Materials and Chemicals Overview

Chemical	Volume/Mass
Stainless Steel	100 lbs used but not stored on-site
Steel	Several tons annually but not stored onsite
Chromium	10,000 gallons contained in the chrome plating tanks – concentration of 34oz./gallon
Chromium flakes	Chrome plating supply; 2,000 lbs
LHP8040 Acetone	5 gal
2126-99 Acid 1 Reagent	100 lbs
LHC1273 Alcohol Isopropanol	64 oz
LHP8057 Aluminum Sulfate	50 lbs
B9 nickel strip	300 lbs
LHP3038 Barium Carbonate	75 lbs
LHC1277 Bromcresol Green Indicator Solution	50 ml
Buffer Solution PH 4,01	500 ml
Buffer Solution PH 7,00	500 ml
Buffer Solution PH 10,01	500 ml
LHP8055 Calcium Chloride Dry	80 lbs
LHC1270 Cancel St-45	42 lbs
LHP8058 Caustic Soda Beads	80 lbs
LHP11308 Caustic Soda Liquid	55 gal
LHP8034vChromium Flakes	110 lbs
2043-99 Chromium 1 Reagent	100 lbs
2044-99 Chromium 2 Reagent	100 lbs
12066-99 Chromium 3 Reagent	100 lbs
141542 Chromium Trivalent Standard	100 ml
Citrol	10 gal
21058-69 Copper 1 Reagent	100 lbs

LHC1275 Dura Prep	50 lbs
LHP8035 Dynadet Oakite Cleaner	450 lbs
LHP8056 Ferrous Sulfate Dry	50 lbs
HSC 25 High sp. Chrome	110 lbs
Hydrochloric Acid	15 gal
LHC1276 Hydrogen Peroxide	1000 ml
Hydrogenated Lime	50 lbs
21057-69 Iron 1 Reagent	100 lbs
LHC1274 Nitric Acid Cone	½ gal
LHP8048 N-28 Solution	1000 ml
LHC1268 N-75 Solution	1000 ml
LHP8050 Oakite 90	50 lbs
ORP Test Solution	1000 ml
LHP8042 R-35 Solution	1000 ml
LHP8043 R-39 Solution	1000 ml
LHP8044 R-40 Solution	1000 ml
LHP8045 R-41 Solution	1000 ml
LHP8046 R-42 Solution	1000 ml
LHP8047 R-89 Solution	50 ml
LHC1269 R-9 Solution	500 ml
HP8039 Rochelle Salt	50 lbs
Rust Remover	16 oz
LHP8051 Separade 201	30 gal
Sodium Bisulfate	55 gal
LHC1272 Soak 029	350 lbs
LHC8041 Sodium Bisulfite Liquid	15 gal
LHP8052 Solution A	1000 ml
LHP8054 Solution B	1000 ml
LHP8049 Solution Indicator BDS	250 ml
Solvent 142	5 gal
LHP8037 Sulfuric Acid	50 gal
LHC1267 Xylene	5 gal
PSB 9	5 gal

Based on the chemical inventory, it appears that the most significant chemicals onsite are the chromium plating raw materials: sulfuric acid and chrome. The facility provides storage of the chromium chemicals near the plating line and appears to have the appropriate spill containment measure and spill cleanup procedures/equipment. The chromium plating line and chemical storage is shown in Figure 3.



Figure 3 - Chrome Plating Line/Chemical Storage

1.3 Water Use and Distribution

According to the application, the facility receives its water from the City of Sheridan and used a total of 199,295 gallons in the previous 12 months and an average daily water consumption of 767 gallons per day (gpd). Water is supplied by the City of Sheridan and is used in the following processes: power washing products in receiving, replenishing plating baths and rinsing chrome-plated products.

Table 2 provides information on the water usage and distribution in the facility:

Table 2 – L&H Industrial Water Usage and Distribution

Туре	Average Water Usage (gpd)	Estimate (E) or Measured (M)
Irrigation (landscaping and lawn care)	10	E

Sanitary/Domestic	480	E
Plant and equipment sanitation and cleaning	10	E
Process Water/Contained in Chrome plating line	10,000 gallons total, remains in system	E
Contact cooling water	50	E
Non-contact cooling water	NA	
Boiler feed water	50	E
Total:	600	E

1.4 Metal Finishing Unit Operations

L&H Industrial provides design, custom manufacturing, and comprehensive services for heavy industrial machinery used in mining, oil and gas, railroad, and other industries such as hydraulic cylinders and mining equipment as well as railroad maintenance equipment. The facility conducts welding, machining, hard chrome plating, mechanical assembly, and painting operations per customer specifications.

Steam Cleaning: Some products received at the facility require removal of dust/debris. A steam cleaning unit is located in the receiving area in northeast corner of the facility. Any residual steam/rinse water resulting from the cleaning process is directed to and collected in the sump pit that holds approximately 150 gallons. The sump contents are transferred to the evaporator or removed approximately once per year by pumping sump liquids and solids to 55-gallon drums and hauled off site by Mountain States Environmental Services, Inc. (MSEC). The steam cleaning unit and sump is shown in Figure 4.



Figure 4 - Steam Cleaning Unit and 150-gallon Wastewater Collection Sump

Mechanical Assembly and Teardown: Cylinders or other existing equipment/parts received at the facility are sent to the teardown portion of the shop to be cleaned, assessed, and taken apart to determine the scope of necessary work. Parts are inventoried and stored in the teardown room and warehouse until they are needed in other areas of the shop. Once the cylinder is ready for re-assembly it is brought back into the teardown room to be cleaned and prepped for assembly, it is then transferred into the clean room to be measured, assembled, and tested.

Welding: The facility rehabilitates existing equipment by welding damaged areas for re-machining, fixing any structural damage by replacing and welding in new components and by cutting out cracks with an air arc or oxy- acetylene torch and re-welding to original quality. The welding shop, and hydraulic cylinder repair shops are located adjacent to machining shops. There is no use of process water in the welding unit operations.

Machining: The machining shop is located on the south half of the facility and consists of approximately six CNC and ten manual milling and lathe machines, grinders, polisher, inspection benches and chemical and materials storage. The facility manufactures new components using new steel and also repairs and remachines components by reconditioning them to OEM specs. Small quantities of wastes are generated from this area include spent trimsol cutting fluid/coolant. The used machine coolant is collected in 55-gal drums and transferred to L&H's facility in Gillette for disposal. Used oil is also collected in 55-gal drums, stored, and hauled off-site by MSEC There is no wastewater used in or discharged from these process lines.

Hard Chrome Plating: Following fabrication or repair, hydraulic cylinder components requiring plating are transported to the plating area on the west side of facility. The caustic stripping tank is used to remove any paint from products. The tank has a capacity of 540 gallons including its own secondary containment. The spent solids from the caustic stripping tank are hauled off-site by MSEC. Caustic stripping tank liquids are removed as they become spent, approximately once per year. The caustic strip tank is shown in Figure 5.



Figure 5 - Caustic Strip Tank

The plating line consists of three chrome plating tank baths – Tank A and Tank B are used for smaller sized parts; both are 12-foot depth tanks with two cells per tank with approximate capacity of 2,600 gallons each. Tank C is used for larger cylinder components, with a tank capacity of approximately 4,500 gallons. After being dipped in plating baths, products are allowed to drip dry over the tanks to prevent any drag out. Chrome Plating Tanks A and B are shown in Figure 6 and Tank C is shown in Figure 7.



Figure 6 - Chrome Plating Tanks A and B



Figure 7 - Chrome Plating Tank C

Following plating, products requiring rinsing, are rinsed over the plating rinse sump pit located next to plating tanks A and B and the caustic strip tank. The plating rinse sump has a capacity of about 800 gallons. Rinse waters collected in the sump remain in place and if possible, allowed to evaporate, or about every two weeks, are pumped to barrels and transferred to the evaporator unit adjacent to plating line to burn

off the rinse liquids. Sludge from the plating rinse sump is collected in 55-gallon drums and are hauled offsite by MSEC Inc. The plating rinse sump is shown in Figure 8.



Figure 8 - Plating Rinse Sump

As needed, plating tanks are replenished with water supplied from the City, and chromium flake additives to increase chromic acid levels in the tank. The plating tank baths are changed very infrequently, approximately every 10 years, and are predominately topped off or replenished if needed. When a tank is turned over, or emptied completely for cleaning, any chrome sludge and chrome tank liquid remaining is collected in drums and hauled off site by MSEC Inc.

Painting:

Painting processes are conducted in a wet paint booth located in the northeast portion of the facility. Paint products and small quantities of chemicals, such as 5-gallon buckets of xylene are stored in lockers near the booth.

1.5 Wastewater Management/Zero Discharge Evaporation

Based on the observations from an EPA inspection conducted on November 7, 2023, and an NDR application submitted on March 25, 2024, the facility does not discharge process wastewaters regulated by the Metal Finishing Categorical Pretreatment Standards found in 40 CFR 433. The only discharge to the City of Sheridan is domestic wastewater from restrooms/lockers in the plating/finishing shop and office.

The facility has installed and operates an evaporation system for process wastewater generated in the plating/finishing shop to ensure it maintains its zero-discharge status, as described below:

Wastewater from the pressure washer is directed to the sump directly adjacent and remains in place to be evaporated, transferred to the evaporator or is pumped out to barrels for disposal by MSEC.

Wastewater collected in either the power wash sump or plating rinse sump are pumped into barrels and transported to the evaporation unit located adjacent to the chrome plating line, shown in Figure 9. Liquid is placed in the evaporator as the disposal method, condensation is directed to air scrubbers in the mezzanine, filters collect any residual metals in the condensation and prior to release to the atmosphere. Air scrubber filters are replaced approximately every two years and stored in barrels located next to the unit to await disposal. Additionally, if needed, waste evaporator liquid stored in containers may be hauled and disposed off-site by MSEC Inc. Any residual byproduct wastes from the plating process – including tape debris with chrome and waste wood contaminated with chrome – are stored in barrels and once full are picked up and disposed of by MSEC Inc.



Figure 9 – Evaporation Unit

In addition, the facility hauls process wastewater or used/spent liquids offsite to maintain its zerodischarge status. Table 3 lists history and frequency of wastewater/spent liquids hauled off-site, as reported by the facility in the NDR application:

Waste Material Number	Type of Waste	Volume generated	Type of Disposal
Non-Hazardous	Steam Cleaning Sump Contents	About 150 gallons every three years	Hauled off-site by MSEC
Non-Hazardous	Spent Trimsol cutting fluid/coolant	About 200 gallons/year	Transferred to Gillete facility
Non-Hazardous	Used Oil	3,600 to 5,000 gallons/year	Hauled off-site by Kissick

Non-Hazardous	Metal Cuttings/Turnings	About 10 tons/year	Hauled off-site by Pacific Steel & Recycling
US DOT Desc. # UN3262	Caustic Stripping Tank Spent Solids	Last shipment was 55 gallons in 2018	Hauled off-site by MSEC
US DOT Desc. # UN3266	Chrome Tank Liquids	About 250 gallons/5 years	Hauled off-site by MSEC
US DOT Desc. # UN3264	Waste Evaporation Liquid	About 100 gallons/3years	Hauled off-site by MSEC
US DOT Desc. # UN3082	Chromium Plating Residual Byproducts	About 300 gallons/5 years	Hauled off-site by MSEC
US DOT Desc. # UN3260	Steam Cleaner Sludge	About 200 gallons/3 years	Hauled off-site by MSEC
	Plating Rinse Sump Sludge	No shipments in the past 10 years	

1.6 Outfalls to the City Sanitary Sewer

According to the NDR application and as shown in Figure 1, the facility has a sewer service line that collects domestic wastewater from the office and restrooms from the plating/fabrication shop and connects to the City sewer located on Commercial Avenue. There is no discharge of process wastewater from any of the unit operations in the plating/fabrication shop.

Section 2 Applicable Pretreatment Regulations

The Metal Finishing Point Source Category found in 40 C.F.R. Part 433 are applicable to discharges from facilities which perform any of the following six metal finishing operations: Electroplating, Electroless Plating, Anodizing, Coating (chromating, phosphating, and coloring), Chemical Etching and Milling, and Printed Circuit Board Manufacture. If any of those six operations are present, then this part applies to discharges from those operations and also to discharges from any of the following 40 process operations: Cleaning, Machining, Grinding, Polishing, Tumbling, Burnishing, Impact Deformation, Pressure Deformation, Shearing, Heat Treating, Thermal Cutting, Welding, Brazing, Soldering, Flame Spraying, Sand Blasting, Other Abrasive Jet Machining, Electric Discharge Machining, Ultrasonic Machining, Electron Beam Machining, Laser Beam Machining, Plasma Arc Machining, Ultrasonic Machining, Sintering, Laminating, Hot Dip Coating, Sputtering, Vapor Plating, Thermal Infusion, Salt Bath Descaling, Solvent Degreasing, Paint Stripping, Painting, Electrostatic Painting, Electropainting, Vacuum Metalizing, Assembly, Calibration, Testing, and Mechanical Plating.

The facility currently conducts chrome plating and ancillary operations such as grinding, cleaning, machining, welding, painting, paint stripping and assembly defined by the Metal Finishing Regulations; however, the facility does not discharge wastewater from any of the core or ancillary operations. The NDR issued to the facility prohibits discharge of wastewater generated from the Metal Finishing core and ancillary operations identified in the NDR application.

2.1 Reporting, Monitoring, Notification and Record-Keeping Requirements

The reporting, monitoring, notification, and record keeping requirements are found in 40 C.F.R. Part 403 of the General Pretreatment Regulations and include the following:

- Baseline Report and 90-Day Compliance Report Monitoring Requirements (40 C.F.R. § 403.12(b) and (d); 40 C.F.R. § 403.12(g));
- Periodic Compliance Report Monitoring Requirements (40 CFR§ 403.12(e); 40 C.F.R. § 403.12(g))
- Potential Problem and Slug Reporting (40 C.F.R. § 403.12(f))
- Effluent Violation Reporting and Resampling (40 C.F.R. § 403.12(g)(2))
- Notification of Changed Discharge (40 C.F.R. § 403.12(j))
- Hazardous Waste Discharge Notification (40 C.F.R. § 403.12(p))
- Upset Effect, Notification, and Reporting (40 C.F.R. § 403.16)
- Bypass Requirements Notification (40 C.F.R. § 403.17)
- Report Signatory Requirements (40 C.F.R. § 403.12(I))
- Retention of Records (40 C.F.R. § 403.12(o))

These Pretreatment Requirements include monitoring, recordkeeping, reporting, and notification requirements found in 40 C.F.R. Sections 403.12, 403.16, and 403.17 and specialized definitions and monitoring requirements specific to the Metal Finishing Point Source Category found in 40 C.F.R. §433. The applicable effluent limits are listed in the pretreatment standards for new sources at 40 C.F.R. 433.17.

The facility does not discharge wastewater defined by the Metal Finishing Regulations, as a result, the Baseline report, 90-day compliance report and periodic compliance report monitoring requirements do not apply. The facility is required to submit a zero-discharge reporting on a 6-month frequency. In addition, the Notification of Changed Discharge required in 40 C.F.R. § 403.12(j) that may affect the facility's zero discharge status is required. The facility is required to maintain adequate records required in 40 C.F.R. § 403.12(o) to document its zero-discharge status and demonstrate compliance with this zero-discharge NDR.

2.2 Zero-Discharge Reporting Requirement

40 C.F.R. § 403.12(e) requires industrial users "subject to a categorical Pretreatment Standard" to monitor and report twice per year "unless required more frequently...by the Control Authority," which is the EPA in this case. Because the facility maintains a zero-discharge status of its unit operations, there are no monitoring requirements, however, the facility is required to submit a zero-discharge compliance

report and certification every 6 months.

L&H Industrial must submit reports through the NetDMR electronic reporting system, as described in section 2.6. Table 4 lists the deadline due dates based on semi-annual reporting:

Compliance Monitoring Period	Due Date
January through June	July 31
July through December	January 31

 Table 4 - Self-Monitoring Reporting Frequency

Zero-Discharge Compliance Report Requirements:

- a. Permit number.
- b. Facility name and address.
- c. If applicable, any significant changes in processes and procedures differing from those described in the NDR Application.
- d. Manifests for all off-site disposal of wastes and operational logs maintained for the evaporation unit.
- e. The certification statement required in section 2.5 of this NDR and signed by the authorized representative.
- f. The following zero-discharge certification statement, signed by the Facility's authorized representative:

"I certify that <u>no discharge</u> of any industrial wastewater or wastes prohibited by this permit has occurred in this reporting period. I have reported all required information and I understand that there are significant penalties for making false statements, including criminal penalties."

2.3 Notification of Changed Discharges

The Pretreatment Regulations at 40 C.F.R. 403.12(j) states the following: "All Industrial Users shall promptly notify the Control Authority (and the POTW if the POTW is not the Control Authority) in advance of any substantial change in the volume or character of pollutants in their Discharge, including the listed or characteristic hazardous wastes for which the Industrial User has submitted initial notification under paragraph (p) of this section."

This regulation requires the Facility to promptly notify EPA, as the Control Authority, and the City of Sheridan in advance of any substantial change in its unit operations that may affect its zero-discharge status, such as changes to the unit operations, wastestream generation, and/or wastewater management.

2.4 Record-keeping Requirements

40 C.F.R. § 403.12(o) establishes record-keeping requirements for any Industrial User subject to

reporting requirements resulting from any monitoring (including flow monitoring), including documentation with Best Management Practices.

The facility shall be required to retain for a minimum of three years any records documenting its zerodischarge status, including operational logs for the evaporation unit and manifests for process wastewater hauled off-site and shall make such records available for inspection and copying by EPA and the POTW. This period of retention shall be extended during any unresolved litigation regarding the facility or when requested by EPA.

2.5 Signatory Requirement

Pursuant to 40 C.F.R. §403.12(I), the Zero-Discharge Compliance Reports shall include the following signed certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

The certification statement shall be signed as follows:

- 1. By a responsible corporate officer, if the Industrial User is a corporation. For the purpose of this paragraph, a responsible corporate officer means:
 - a. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 2. By a general partner or proprietor if the Industrial User is a partnership, or sole proprietorship respectively.
- 3. By a duly authorized representative of the individual designated in (1) or (2) of this section if:
 - a. The authorization is made in writing by the individual described in paragraph (1) or (2);
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent

responsibility, or having overall responsibility for environmental matters for the company; and

- c. The written authorization is submitted to the EPA.
- 4. If an authorization under (3) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of (3) of this section must be submitted to EPA prior to or together with any reports to be signed by an authorized representative.

2.6 Reporting and Notification Contacts

On October 22, 2015, the Environmental Protection Agency (EPA) published in the federal register the NPDES Electronic Reporting rule for all NPDES permit reporting and notification requirements (40 C.F.R. Part 127). The deadline for the electronic reporting of Periodic Compliance Reports for CIUs/SIUs in municipalities without an approved Pretreatment is December 21, 2020 (40 C.F.R. § 127.16). The facility is required to:

- a. Establish a NetDMR account to electronically submit DMRs and notifications and must sign and certify all electronic submissions in accordance with the signatory requirements of the control mechanism. NetDMR is accessed from the internet at https://netdmr.zendesk.com/home. Additionally, the facility can contact the EPA via our R8NetDMR@epa.gov mailbox for any individual assistance or one-on-one training and support.
- b. Effluent monitoring results will be summarized for each month and recorded on a DMR to be submitted via NetDMR to the EPA on a quarterly basis. If no discharge occurs during a month, it shall be stated as such on the DMR.

Other written reports and notifications to the EPA shall be submitted at the following address:

NPDES and Wetlands Enforcement Section (8ENF-W-NW) US EPA Region 8 1595 Wynkoop Street Denver, CO 80202 Attention: Pretreatment

All written reports and notifications must also be submitted to the POTW at the following address:

Brian Edwards, POTW Superintendent City of Sheridan 393 Fort Road Sheridan, WY 82801 <u>bedwards@sheridanwy.gov</u>

Verbal notifications required to be submitted to the EPA shall be made by calling either number below and asking to speak with NPDES Enforcement, Pretreatment.

303-312-6312 or 800-227-8917

Verbal notifications required to be submitted to the POTW shall be made by calling the number below.

307-674-7038 Ext. 350

Section 3 Public Notice Period and Response to Comments

The proposed fact sheet and discharge requirements for L&H Industrial, NPDES ID # WYP000019 were public noticed on the EPA website on XXXXXX. During the 30-day public notice period, EPA received no public comments.