



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

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<http://www.epa.gov/region08>

**Enclosure 2**

**Eagle Bronze Fact Sheet**

**Pretreatment ICIS Number:** WY-PF00101

**Facility Name and Address:** Eagle Bronze Incorporated  
130 Poppy Street  
Lander, WY 82520

**Authorized Representative Contact:** Monte Paddleford  
President  
P.O. Box 1100  
Lander, WY 82520  
307-332-5436/ [monte@eaglebronze.com](mailto:monte@eaglebronze.com)

**Applicable Pretreatment Regulations:** Metal Finishing Point Source Category, Non-Significant Categorical Industrial User

**Categorical Reference:** 40 CFR Part 433 (Pretreatment Standards for New Sources at 40 CFR § 433.17)

**Receiving POTW/Collection System:** Lander POTW  
WYPDES Permit No. WY-0020389  
240 Lincoln Street  
Lander, WY 82520-2848

**POTW Contact:** Lance Hopkin, Public Works Director  
City of Lander  
125 Buena Vista Dr.  
Lander, WY 82520  
307-332-3956, [lhopkin@landerwyoming.org](mailto:lhopkin@landerwyoming.org)

## Section 1 Eagle Bronze Process Description Operation

### 1.1 Raw Materials and Chemicals Storage and Spill Potential

Table 1 lists the chemicals the facility uses in its bronze sculpture process:

**Table 1 – Raw Materials and Chemicals Overview**

Chemical	Volume/Mass	Storage Location	Process/Equipment Use
Bronze Ingots	40,000 to 45,000 lbs/year	Stored near pouring area	Put into crucible for melting
Lost Wax	Cardboard boxes, about 5,000 lbs/year, recycle about 90% back into process	Wax room	Wax sculptures
Patina Chemical (sulfurated potash)	1 to 2 lbs, solid form/year	Patina process in main and monument buildings	Patina finish

The raw materials are stored in solid form, and the potash is mixed with water in 1-quart containers on a batch basis to apply onto the sculptures. Based on information gathered from the 2019 facility inspection, there does not appear to be a sanitary sewer spill potential from the raw materials/chemicals.

### 1.2 Bronze Sculptures – Lost Wax Casting, Finishing, Patina Processes

The Eagle Bronze facility (facility) located at 130 Poppy Street in Lander, WY consists of two process buildings; the main building and a monument building (Figure 1). Eagle Bronze has approximately 30 employees that work a 40-hour week from 7:00 am to 3:30 pm (Monday through Friday).



**Figure 1 - Eagle Bronze Facility - Google Earth View**

Eagle Bronze creates sculptures through the lost wax process. Artists create a clay or wax sculpture, and a mold is made of the sculpture to retain a copy of the artists' original wax sculpture. The mold is usually reinforced with plaster. Wax is then poured into the mold. The mold is then removed, and the wax is coated with a ceramic shell. The interior wax is then melted out leaving behind a ceramic shell cast. Molten metal is then poured into the ceramic shell cast to create a metal sculpture.

The source metal to create the bronze sculptures are ingots that contain 95% copper, 4% silica, and 1% manganese. The bronze ingots stored near the pouring area are put into the crucible (200-lb capacity) to melt. The facility uses channels from the crucible to pour the molten metal into the cast. The slag from the channels and large metal pieces from the grinding operation area recycled back into the melting process.

Sculptures may have to be done in pieces, and the parts are welded together after forming to complete the piece. The sculpture is finished with manual grinding and sand blasting. According to Mr. Paddleford, the grinding waste is either recycled into the remelting operation or is swept up with the fugitive dust and is disposed of in the domestic trash.

A significant number of bronze sculptures go through a patina process. The facility performs the patina process in either the main building or the monument building. Small and medium size sculptures go through the patina process in the main building. Larger sculptures that cannot fit in the main building will go through the patina process in the monument building.

The facility mixes the solid sulfured potash (patina chemical) with water in 1-quart containers on a batch basis for each sculpture undergoing the patina process. The facility applies the sulfured potash to the sculpture to produce a dark color on the bronze surface in the patina process by oxidizing the bronze material. The sculpture is scrubbed with a rag or pad in specific areas to control the rate of patina on the sculpture. The sculpture is then rinsed with a shower spray rinse to remove the patina chemical.

In the main building, rinse water from the patina process and water from the sink flow through a pipe into the 7-gallon sump (Figures 2 and 3). Larger sculptures may be rinsed over the main building floor drain with a garden hose and a shower spray wand. The height of the wastewater in the sump is measured and used to calculate the volume of the wastewater. The wastewater is then discharged by turning on the sump pump, which discharges the wastewater to the City of Lander's sewer collection system. Eagle Bronze discharges wastewater from the patina room in the main building approximately three times per week.



**Figure 2 - Main Building Patina Sink and Floor Drain**



**Figure 3 - Main Building Floor Sump**

The patina wastewater generated in the monument building is collected in a trench drain that flows in the middle of the monument building's process floor (Figure 4). The trench drain leads to a 15-gallon sump (Figure 5) that has a potential to overflow and discharge to the City of Lander's sanitary sewer system. Mr. Paddleford stated in the 2019 inspection that the facility has never discharged process wastewater from the monument building, and the EPA inspectors indicated that there was no evidence of wastewater in the trench drain in monument building.

In a follow-up phone call on July 7, 2020, Mr. Paddleford clarified that the wastewater that is generated in the monument building is contained in the trench drain and is absorbed by the residual dust and solids collected in the trench. As a result, to the best of his knowledge, the monument building's floor sump does not ever receive wastewater and is continually empty.



**Figure 4 - Monument Building Trench Drain**



**Figure 5 - Monument Building Floor Sump**

### 1.3 Wastewater Treatment

The sumps located in both the main building and monument building are connected to the sanitary sewer, via a manual sump pump in the main building sump and overflow from the monument building sump. There is no wastewater treatment for the process wastewater generated at the facility's two buildings.

## Section 2 Applicable Pretreatment Regulations

The facility is subject to the Metal Finishing Point Source Category found in 40 C.F.R. Part 433. These regulations 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, Electrochemical 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's application of sulfurated potash and subsequent spray rinsing of the material off of the bronze statue generates a process wastewater that is discharged to the City of Lander publicly owned treatment works (POTW). The wastewater generated from this process is subject to the Metal Finishing Pretreatment Categorical Standards as a core categorical process defined as coating (coloring). Coating is described on page 2-2 of EPA's 1984 *Guidance Manual for Electroplating and Metal Finishing Pretreatment* Standards: "Coatings include chromating, phosphating, metal coloring and passivating... Metal coloring involves the chemical method of converting the metal surface into an oxide or similar metallic compound to produce a decorative finish..."

The facility began operation in 1985 and is a new source to the Metal Finishing regulations (new source date = August 31, 1982). "New source" is defined in 40 C.F.R. § 403.3(m)(1).

The facility entered into an Administrative Order on Consent (AOC), Docket # CWA-08-2015-0018 with the Environmental Protection Agency (EPA) on June 11, 2015 that provided a control mechanism to establish monitoring, reporting and notification requirements under the General Pretreatment Regulations and the Metal Finishing Point Source Category.

### 2.1 Non-Significant Categorical Industrial User (NSCIU) Regulations

The General Pretreatment Regulations at 40 CFR 403.3(v)(2) define an NSCIU as the following:

"The Control Authority may determine that an Industrial User subject to categorical Pretreatment Standards under §403.6 and 40 CFR chapter I, subchapter N is a Non-Significant Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User never discharges more

than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:

- (i) The Industrial User, prior to the Control Authority's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;
- (ii) The Industrial User annually submits the certification statement required in §403.12(q) together with any additional information necessary to support the certification statement; and
- (iii) The Industrial User never discharges any untreated concentrated wastewater.”

An indirect discharger that has been designated an NSCIU by its Control Authority, EPA in this case, is no longer an SIU, so there is no requirement to control it through a permit or other control mechanism. However, NSCIUs are still categorical dischargers and are still required to comply with applicable categorical Pretreatment Standards. If the Control Authority determines that an existing NSCIU no longer meets a required criterion for being categorized as non-significant, the Industrial User becomes an SIU and must be issued a control mechanism.

The Control Authority may reduce sampling and reporting requirements for an NSCIU as it deems appropriate, but at a minimum the facility must annually report and certify that it still meets the definition of an NSCIU, including that it complied with the applicable categorical Pretreatment Standards during the reporting period. The annual report and certification requirements allow the Control Authority to evaluate, at least once per year, whether the NSCIU still meets the non-significant criteria in 40 CFR 403.3(v)(2).

## *2.2 Evaluation of Eagle Bronze NSCIU Criteria*

The 2015 AOC states in paragraph 41, “If Respondent [(Eagle Bronze)] is in consistent compliance with this Order and 40 C.F.R. parts 403 and 433 for two years, never discharges more than 100 gallons of wastewater per day, and never discharges any untreated concentrated wastewater, EPA may determine that Respondent is classified as a nonsignificant categorical industrial user (NSCIU), as described in 40 C.F.R. § 403.3(v)(2), and would therefore not be subject to the requirements contained herein, which apply only to SIUs. EPA and Respondent would then terminate or modify this Order as appropriate.”

EPA evaluated the compliance history of Eagle Bronze under the AOC from January 1, 2018 through the 2<sup>nd</sup> Quarter of 2020 to determine if the facility meets the NSCIU criteria identified 40 CFR 403.3(v)(2) of the Pretreatment Regulations. According to the January 1, 2018 through 2<sup>nd</sup> quarter of 2020 discharge monitoring reporting, the facility’s daily flow average is 1.14 gallons per day with the highest daily maximum of 5.5 gallons per day. In addition, it appears that based on EPA’s 2019 Pretreatment inspection, the facility does not discharge untreated concentrated wastewater to the City of Lander’s sanitary sewer system. Based on EPA’s evaluation, the facility has consistently complied with the Pretreatment Standards for at least two years and meets the NSCIU criteria.

## **Section 3 Pretreatment Requirements**

### *3.1 NSCIU Pretreatment Requirements*

The facility is subject to the definitions and conditions found in 40 CFR Pat 433, but the facility meets the NSCIU criteria identified in 40 CFR 403.3(v)(2). The Pretreatment Requirements apply at outfalls 001 and 002. The Outfalls are defined as follows:



**Outfall 001:** Discharge of the sump located in the main building. The contents of the sump are discharge with a manual sump pump to the sanitary sewer. (Figure 3)

**Outfall 002:** Discharge of the sump located in the monument building. The contents of the sump overflow to the sanitary sewer. (Figure 5)

These NSCIU Requirements allow the facility to discharge less than or equal to 100 gallons per day of regulated wastewater for any production day from Outfalls 001 and 002. An exceedance of 100 gallons per day of regulated wastewater would trigger Pretreatment Requirements for monitoring, reporting, and notification found in 40 CFR §§403.12, 403.16, and 403.17. However, because the facility is classified as an NSCIU, the monitoring and notification requirements found in 40 CFR §§ 403.12, 403.16, and 403.17 do not apply, with the exceptions identified below.

### 3.2 *Monitoring Requirements*

Eagle Bronze is required to monitor for flow of the process discharges from Outfalls 001 and 002 daily and document the discharge quantity in gallons each day of discharge. This flow monitoring required to ensure the facility never discharges more than 100 gallons of total categorical wastewater on any given day as required to maintain its status as an NSCIU.

### 3.3 *Reporting Requirements*

As required in 40 CFR 403.12(q), Eagle Bronze is required to annually submit the following certification statement with an Annual NSCIU Compliance Report:

“Based on my inquiry of the person or persons directly responsible for managing compliance with the categorical Pretreatment Standards under 40 CFR Part 433, I certify that, to the best of my knowledge and belief that during the period from January 1, [*Calendar Year*], to December 31 [*Calendar Year*]:

(a) The facility described as Eagle Bronze met the definition of a non-significant categorical Industrial User as described in §403.3(v)(2); (b) the facility complied with all applicable Pretreatment Standards and requirements during this reporting period; and (c) the facility never discharged more than 100 gallons of total categorical wastewater on any given day during this reporting period. This compliance certification is based upon the following information:

*[Complete or attached required applicable documentation, including process discharge records]”*

The Annual NSCIU Compliance Report shall also include flow documentation data based on flow monitoring at Outfalls 001 and 002. The facility is required to report measured average daily flow for each month (monthly average) and the maximum daily flow for each month (daily maximum) from Outfalls 001 and 002 for each month in the reporting period. If no discharge occurs during a month, it shall be stated as such on the DMR. This flow data will allow EPA to evaluate if the facility ever discharges more than 100 gallons of total categorical wastewater on any given day as required to maintain its status as an NSCIU.

The facility will submit the Annual NSCIU Compliance Report through the NetDMR electronic reporting system, as described in §3.7. Table 2 lists the deadline due dates based on annual reporting:

**Table 2 – Eagle Bronze Reporting Deadline**

<b>Compliance Monitoring Period</b>	<b>Due Date</b>
January through December	January 31

*3.4 Notification of Changed Discharges*

The Pretreatment Regulations at 40 CFR 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 Eagle Bronze to promptly notify EPA, as the Control Authority, and the Town of Lander in advance of any substantial change in the volume or character of pollutants in its discharge. These substantial changes include changes that may affect the NSCIU requirements contained in this notification and could include changes to the operations, wastestream generation, and/or wastewater management (discharges of regulated wastewater above 100 gallons per day for any production day or discharges of concentrated chemical solutions) that may affect the status of Eagle Bronze under the Pretreatment Regulations. This also includes any changes to the operation that changes the discharge of listed or hazardous wastes.

*3.5 Additional Monitoring*

Eagle Bronze is classified as an NSCIU and is not required to sample the pollutants of concern listed in 40 CFR § 433.17 but is still subject to the Pretreatment Standards. 40 CFR § 403.12(g) requires the following:

“If an Industrial User subject to the reporting requirement in paragraph (e) or (h) of this section [*compliance reports*] monitors any regulated pollutant at the appropriate sampling location more frequently than required by the Control Authority, using the procedures prescribed in paragraph (g)(5) of this section [*representative sampling and 40 CFR § 136 analytical methods*], the results of this monitoring shall be included in the report.” [*emphasis added*]

EPA is incorporating this requirement for Eagle Bronze in the NSCIU Requirements using authority for information gathering found in §308 of the Clean Water Act [33 USC § 1318(a)(A)]. If Eagle Bronze monitors any Metal Finishing regulated pollutant listed in Part II.B.1 of the NSCIU Requirements at Outfalls 001 and 002 using representative sampling and analytical procedures listed in 40 CFR 136, the results shall be submitted with their Annual NSCIU Compliance Report. This data will allow EPA to continue to evaluate the facility’s status as an NSCIU and to ensure the facility is in compliance with the Metal Finishing Regulations at 40 CFR 433.17

*3.6 Record-keeping Requirements*

40 CFR § 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 3 years any records of monitoring activities and results (whether or not such monitoring activities are required by the Pretreatment Regulations) and shall make such records available for inspection and copying by EPA and the POTW. This period of retention shall be extended during the course of any unresolved litigation regarding the facility or when requested by EPA.

### 3.7 *Signatory Requirements*

The Annual NSCIU Compliance Report 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.

### 3.8 *Reporting and Notification Contacts*

1. 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 CFR Part 127). The Annual NSCIU Compliance Report is listed in 40 CFR Part 127, Appendix A as a report subject to the Electronic Reporting rule. The deadline for the electronic reporting of Periodic Compliance Reports for CIUs/SIUs in municipalities without an approved Pretreatment (Phase 2 of the Rule) is December 21, 2020 (40 CFR §127.16). A proposal to extend this deadline to December 21, 2023 was signed by the EPA on January 31, 2020. Upon the effective date of the NPDES Electronic Reporting Rule, the facility will be required to:

- a. Establish a NetDMR account to electronically submit the Annual NSCIU Compliance Reports as a discharge monitoring report (DMR)s and notifications and 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 EPA via our [R8NetDMR@epa.gov](mailto:R8NetDMR@epa.gov) mailbox for any individual assistance or one-on-one training and support.
  - b. The Annual NSCIU Compliance Reports will need to be submitted via NetDMR to EPA on an **annual** basis.
2. Until the effective date of the NPDES Electronic Reporting Rule, the facility may either submit Annual NSCIU Compliance Reports electronically, as described above, or submit hard copies to the address below. Other written reports and notifications to 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

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

Lance Hopkin  
Public Works Director  
City of Lander  
125 Buena Vista Dr  
Lander, WY 82520

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

303-312-6312 or 800-227-8917

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

307-332-3956

Eagle Bronze Incorporated Fact Sheet  
WY-PF00101

## **Section 4 Public Notice Period and Response to Comments**

The proposed fact sheet and NSCIU requirements for Eagle Bronze were public noticed at the EPA NPDES Public Notice webpage on August 19, 2020 for a 30-day public comment period.

### **Comments received during Public Notice:**

During the public notice period, EPA received comments from Curt McCormick. The comments are listed below:

1. Authorized flows need to be set at less than or equal to 100 gpd on any day where they discharge regulated wastewater. It would be confusing otherwise. Could footnote with: Exceeding this flow would trigger a., b., c., etc.
2. If it contains a pH limit, monitoring needs to be included because there is a discharge. If no monitoring is being required, this is redundant since the pH is part of the Specific Prohibitions.
3. Monitoring frequency (1 per 6 months) needs to be set if the discharge ever exceeds >100 gpd. Same for the sample type. The intro to the paragraph can indicate annual certification in lieu of monitoring is allowed as long as the IU never discharges >100 gpd. This is the same concept as TTOs in a permit where certification is allowed.
4. Flow reporting: All daily flow data is required to be reported and any that are >100 gpd must be noticed as violations within 24 hours. Unclear why the language reads as it does for average monthly flows. Not clear how they measure flows.
5. Reporting: If any daily flow is >100 gpd, reporting should be 1 per 6 months (reports due during the month following the sampling period).

### **EPA Response to the Public Notice Comments:**

1. EPA agrees that the NSCIU Requirements needs to include a discharge authorization of less than or equal to 100 gallons for any day in which the facility discharges regulated wastewater. The authorization is included in section 3.1 of the fact sheet and in Part II.A(1) of the NSCIU Requirements. In addition, a trigger to SIU monitoring, reporting, and notification requirements are included if a discharge above 100 gallons per day of regulated wastewater were to be exceeded.
2. The Pretreatment Regulations in 40 CFR 403 only require annual reporting for non-significant categorical industrial users, therefore, pH monitoring and limits are not applicable.
3. See EPA response to comment #1.
4. The facility is required to record all daily flows and report the average and maximum daily flows for every month in section 3.4 of the NSCIU Requirements The NSCIU Requirements include a prompt notification of process changes, including regulated wastewater discharges above 100 gallons per day in section 3.4 – Notification of Changed Discharges. EPA will re-evaluate the applicability of the NSCIU Requirements and modify the NSCIU Requirements to a SIU Notification of Discharge Requirements, if a regulated wastewater discharge occurs above 100 gallons per day.
5. See EPA response to comment #1.