REGION 8
DENVER, CO 80202

Enclosure 2

Jabil, Incorporated Fact Sheet

Pretreatment ICIS Number:	CO-PF00101
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Applicable Pretreatment Regulations:	Metal Finishing, New Source
Categorical Reference:	40 CFR Part 433 (Pretreatment Standards for New Sources at 40 CFR § 433.17)
Receiving POTW/Collection System:	Tri-Lakes Wastewater Treatment Facility CDPS Permit No. CO-0020435 16510 Mitchell Avenue Monument, Colorado 80132 Bill Burks, Executive Director Monument Sanitation District 130 2nd Street Monument, Colorado 80123 Mike Wicklund, District Manager

Fact Sheet and Notice of Discharge Requirements (NDR) Summary

The fact sheet and the notice of discharge requirements (NDR) are modified to reflect current conditions at the Jabil, Incorporated facility (the facility). The current conditions gathered from a February 26, 2025 facility inspection was used as the basis for the modifications. The significant changes to the NDR from the 2020 issuance are the production levels, wastewater treatment system configuration the volume of non-regulated wastestreams discharged to outfall 001, and a result of these changes a re-calculation of NDR limits based on the combined wastestream formula (CWF).

The following sections within this fact sheet are modified:

- 2025 production levels – identified in Section 1.0 of the fact sheet.
- Discharge volumes of non-regulated wastestreams – identified in sections 1.8.4 and 2.3 of the factsheet.
- Calculations of NDR limits based on the CWF – formulas and calculations updated in section 3.1.2. and updated NDR limits, summarized in Table 4.
- Wastewater treatment system configuration – identified in Figure 6 and associated descriptions of outfall 001 in section 1.10.

Section 1.0 – Jabil Inc. Manufacturing Operation

The facility located in Monument, CO 80132, is a manufacturer of titanium and stainless-steel orthopedic devices (screws, screw blanks, and nails). The Jabil complex in Monument consists of the following buildings (Figure 1):

- 1051 Synthes Avenue (Manufacturing Building) – manufacturing, wastewater treatment, and offices
- 1101 Synthes Avenue (Distribution Building) – distribution center, non-sterile and sterile packaging

Figure 1 - Jabil, Incorporated - Google Earth View-Aug 2019

According to the information gathered in the February 26, 2025 faciltiy inspection, the facility produced an average of 8.2 million screws and 314,000 nails over the past two years. The facility operates 24-hours per day, Monday through Friday, with weekend overtime on Saturday and Sunday. The facility is currently supported by approximately 600 employees spread out over three 8-hour shifts 6 am to 2 pm, 2 pm to 10 pm and 10 pm to 6 am each day. Finishing is conducted during all three shifts, six days a week. The facility does pause production operations for approximately two weeks in December and during other holidays.

The facility manufactures these parts for the following surgical implant orthopedic products:

- Screw Blanks – the screw blanks are manufactured for external distribution and used internally for screw manufacturing
- Screws
- Nails

An overview of the manufacturing processes for the above-mentioned products includes the following:

- Machining operations – CNC machines, lathes
- Support – vibratory finishing, bead blasting, cleaning
- Metal Finishing Operations – electropolish, anodize, passivation
- Packaging – sterile and non-sterile packaging

Each product is manufactured in different areas of the Manufacturing and Distribution buildings (1051 Synthes Avenue and 1101 Synthes Avenue) and includes unit operations dedicated to the product. Attachment A includes a photolog generated during an EPA inspection performed on March 27, 2019 that details the facility's chemical storage, unit operations, and wastewater treatment system.

1.1 – Raw Materials and Chemical Storage/Handling

The raw bar stock used for nails and screws and the coil stock used for the manufacturing of screw blanks are stored for use in the process. The facility typically uses 316 grade stainless steel, titanium/molybdenum, and a titanium alloy bar stock. The raw materials are received and stored in the WATS building and moved by forklift or box truck to the 1051 Synthes Avenue building. Table 1 lists the bulk chemicals and storage locations identified during the March 27, 2019 facility inspection.

Table 1 – Chemicals and Raw Materials Overview

Chemical/Raw Material	Volume/Mass	Storage Location	Process Use
Screw blanks (titanium and stainless steel)	Variable	Stock – WATs Building	Manufacturing
Machine oils/coolants	30 to 50 drums (55-gal)	Oil/coolant storage – Manufacturing Building	Machining
Lubricants	Numerous 55-gal drums	Oil/coolant storage – Manufacturing Building	Maintenance of machines

Corrosives (HNO_3, PO_4 acids), cleaners	• ~19 55-gal drums - HNO_3 acid • four 55-gal drums – H_3PO_4 acid • three 5-gal containers – cleaners	Oil/coolant storage mezzanine– Manufacturing Building	Metal Finishing
Vapor degreasers	two 55-gal drums	Oil/coolant storage mezzanine– Manufacturing Building	Degreasing of metal parts
Ammonia and anodizing chemicals	three 55-gal drums total	Chemical storage cabinet – outside of metal finishing room	Metal Finishing
Waste treatment chemicals (acids, flocculant, polymer)	About five 55-gal drums	Waste treatment room	Waste treatment
Foam packaging liquids (instapack components A+B)	four totes (250-gal)	Distribution Building (1101 Jabil Avenue)	Packaging

The drums of oil and coolants, and isopropyl alcohol are transferred by dolly from the receiving area to the storage area on the mezzanine level of the oil/coolant storage room in the Manufacturing Building. The oils and coolants used on the process floor of the Manufacturing Building are pumped into fourteen 60-gallon dispensing stations, mounted on shelves under the mezzanine, on the ground level, of the oil/coolant storage area. The machine operators fill 10-gallon totes using the valves located at the bottom of the dispensing stations and transport the fluids to the process floor to be pumped into the machines. There are no open floor or trench drains in the oil/coolant storage area or on the Manufacturing Building's process floor.

1.2 – Manufacturing Operations Overview

All manufacturing operations occur in the Manufacturing Building at 1051 Synthes Avenue. The manufacturing and support unit operations for the products (screw blanks, screws, and nails) are performed in segregated departments within the Manufacturing Building. Each department (Heading, Screw 1, Screw 2, and Nail) has various configurations of machines, cleaning, vibratory finishing, bead blasting operations to produce the different sizes and configurations of the product. The products manufactured in the Heading, Screw 1, Screw 2, and Nail Departments are moved to a centralized metal finishing room to be anodized, passivated or electropolished, depending on the specifications of each product line.

1.3 – Heading Department

The manufacturing processes in the Heading Department are used to create screw heads using an induction or cold heading technique. The coil stock materials are loaded into the heading machines and are cut to length. The screw head is formed in the TOWAS CNC machines. The facility has ten TOWAS machines, and each machine has a 10-gallon coolant sump. The screw blanks are then sent to the four pointer machines that each have 10-gallon coolant sumps.

After the machining, the screw blanks are sent to the cleaning and deburring processes consisting of bead blasting, ultrasonic cleaning, vibratory finishing, and an automated Amsonic cleaning line. The bead blaster uses glass beads to smooth out edges and burrs; no water rinsing is used in the bead blaster. The waste glass from this process is collected and sent to the landfill. The screw blanks are then cleaned in an ultrasonic cleaning tank, which contains a 15-gallon container of Mirachem 500 cleaner (Mirachem) and a rinse tank. The contents of the ultrasonic rinse tank are discharged daily to wastewater treatment; the spent cleaner is changed out weekly and sent to wastewater treatment. The vibratory finisher uses ceramic media and Mirachem detergent to smooth out edges and burrs. The Mirachem detergent is recycled in the vibratory finisher from a 15-gallon sump, and the spent detergent is discharged to wastewater treatment every shift. The solid waste from the ceramic media is collected and disposed of in the landfill.

The screw blanks manufactured in the various Header process lines are cleaned in a six-stage centralized and automated Amsonic cleaning line, consisting of the following 13-gallon baths:

- 2% Potassium hydroxide (KOH) clean tank
- 5% Phosphoric acid (H_3PO_4) clean tank
- Rinse tank
- 10% H_3PO_4 clean tank
- Rinse tank
- Deionized water (DI) rinse tank

The acid chemical supplies are kept within the cleaning line in blue carboy containers, and the waste rinse waters from the cleaning line are collected in a 10-gallon wastewater collection container. The 10-gallon tank is set-up with a float switch that discharges the waste rinse water to the wastewater treatment. The spent acid and base solutions are changed every two weeks by pumping them into barrels and sent to the wastewater treatment system. The completed screw blanks are used as raw material for the Screw 1 Department or are packaged and shipped to customers.

1.4 – Screw 1 (Blanks) and Screw 2 (Turn Complete) Departments

The Screw 1 and Screw 2 Departments use the same manufacturing processes; the difference is that the Screw 1 Department uses the screw blanks created in the Heading Department and the Screw 2 Department uses either titanium or stainless steel barstock.

1.4.1 – Screw 1 Department

The headed blanks in the Screw 1 Department are CNC machined in various machines (Hasegawa, Monnier, and Meyers) that have oil and coolant sumps from 10 to 20 gallons. The screws are bead blasted, cleaned using three ultrasonic cleaners, and deburred using eight vibratory finishers. The chemicals used and the management of wastewaters from the ultrasonic cleaners and vibratory finishers are similar to that described in the Header Department. All spent baths and rinse wastewater are sent to the wastewater treatment system. The screws are then degreased in the vapor degreaser located in this department. The vapor degreaser has a small heated reservoir that contains 3M Novec Engineered Fluid 72DE, consisting of 68-72% 1,2-Trans-dischloroethylene. The screws are loaded up in a basket to dip in the reservoir and are drip dried over the tank. The spent degreaser is managed by chemical technicians on a frequency determined by a preventative maintenance schedule (typically once or twice a week). The spent degreaser is collected in 15-gallon drums, stored in the 90-day hazardous waste storage area, and hauled off-site by Safety Kleen. The manufactured and cleaned parts from the Screw 1 Department are sent to the Finishing Department for metal finishing.

1.4.2 – Screw 2 Department

The titanium or stainless-steel bar stock used in the Screw 2 Department are CNC machined in turn complete machines and then star lathes to cut to length, shape, and manufacture the screw heads. The coolants sumps in the Screw 2 Department CNC machines range from 32 to 95 gallons. There are about 55 star lathes with coolant sumps ranging from 10 to 25 gallons. The screws are bead blasted (two machines in department), ultrasonic cleaned (three ultrasonic cleaner and rinse stations in department) and undergo vibratory finishing (two machines in department). The screws in this department undergo degreasing in a vapor degreaser dedicated to this department. The wastestreams from the ultrasonic cleaners, vibratory finishers, and vapor degreasers are managed similarly to those identified in the Screw 1 department. All spent baths and rinse wastewater are sent to the wastewater treatment system and spent degreaser is hauled off-site by Safety Kleen. The manufactured and cleaned parts from the Screw 2 Department are sent to the Finishing Department for metal finishing.

1.5 – Nail Department

The facility uses stainless-steel or a titanium-molybdenum alloy bar stock in the manufacturing of nails. The facility currently has seven manufacturing lines for the various nail parts (EX, TFNA, and TFN). The bar stock undergoes the following machining operations (Note: the facility has twenty-four CNC machines and Robodrills):

- Bar Feeder Lathe –– produces the head profile – 15-gal coolant sump
- Gun Drilling – machines out the cannulation of the nails – 400 to 600-gallon coolant sumps
- Amota Milling – used for scalloping and machining holes in the nails used for insertion, 15-gallon coolant sump
- Robodrill – drills holes in the side of the nails to attach screws, 15-gallon coolant sump
- Fabrication (bending) – the nails are bent along 5-axes to meet the specifications of the device

The machined nail products are bead-blasted, ultrasonic cleaned and undergo vibratory finishing. The wastestreams from the ultrasonic cleaning and vibratory finisher are managed similar to previously described Screw 1 and Screw 2 processes. All spent baths and rinse wastewater are sent to the wastewater treatment system. The nails are laser etched and sent to the Finishing Department for metal finishing.

1.6 – Machining Coolant and Scrap Metal Management

The machines used in the manufacturing processes at the facility use either oil-based or water-based coolants. The coolant in the various machine sumps in the Manufacturing Building are managed by coolant technicians on frequencies determined by a coolant management schedule. The coolant is pumped out of the individual machine sumps into coolant carts. The waste coolants are collected in dedicated used coolant tanks, depending on the type of coolant, either water-based or oil based. Both coolant collection tanks are located below-grade in the receiving docks located by the oil/water separator and are hauled off-site by Safety Kleen. The scrap metal from the machining operations is collected in a 30-yard roll-off dumpster and sold to Western Scrap for recycling. The coolant drained from the scrap metal is collected in a pit located below the scrap metal bin. The pit is slanted to a sump, which is pumped to the oil/water separator.

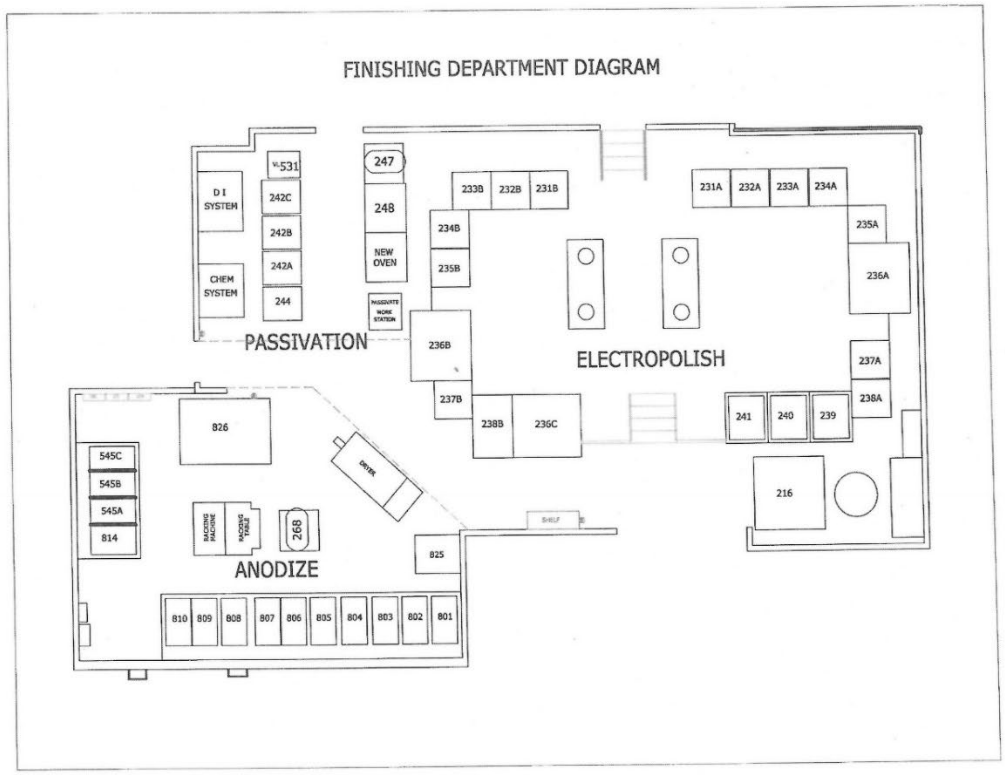
The facility has an oil/water separator that is used to treat the mop water from floor washing in the manufacturing areas. The facility performs process floor washing on a regular basis. The mop water buckets from the floor washing are brought to a centralized discharge containment and discharged into a pit located beneath an oil/water filtration unit. The containment pit also collects coolant drained from the scrap metal bin and the rinse booth used to rinse out mops and buckets. The coolant dispensing stations also have spill containment troughs located at the floor-level that drain into the collection pit. The accumulation of oils and oily water in the pit is pumped up to a series of three tanks and treated through cellulose filled tubes for separation of the oil and the wastewater. The clarified water is collected in a barrel located above the water-based coolant tank and is transported to the System 1 wastewater treatment system when full; the oily materials are collected in the water-based coolants waste tank.

1.7 – Metal Finishing Operations

The machined and cleaned screws and nails are sent to the Finishing Department for metal finishing. The unit operations in the Finishing Department include the following:

- Electropolishing (EP)
- Passivation
- Anodizing

The process lines are segregated into areas within the Finishing Department room (Figure 2). The metal finishing process line layout and tank descriptions are included in Attachment B. The process lines are mounted on above-grade grates located above two collection pits. One larger collection pit encompasses the EP and passivation lines; a smaller collection pit is located below the anodizing line.



Finishing Department – Configuration of Process Lines

Figure 2 - Jabil Metal Finishing Department

1.7.1 – Electropolishing Process Line

The EP line configuration is shown in Figure 3. The parts are routed through the EP line either through an A or B route with identical baths in the metal finishing line. The hot and cold rinse baths on the EP line are 200 gallons in capacity, and all others are 350-gallon EP chemical solution tanks:

- Heated alkaline clean bath (sodium bicarbonate, 6% solution) – bath changed out every two months.
- Hot water static rinse bath – discharged to collection pit when spent.
- Cold water rinse bath – discharged to collection pit when spent.
- De-Ox descaling bath-electrical current (H_3PO_4 acid-butylene glycol) – decanted when spent and recharged.
- Four heated electropolish tanks with low electrical current (H_3PO_4 acid – H_2SO_4 acid) – hauled off-site.
- Heated water rinse bath – overflow discharged.

- Two DI cold water countercurrent rinse baths – overflow discharged.

The wastewaters generated from the EP process line, the overflow from the EP rinse tanks and the manual discharge of the chemical tanks are collected in the larger collection pit located underneath the EP and passivation process lines.

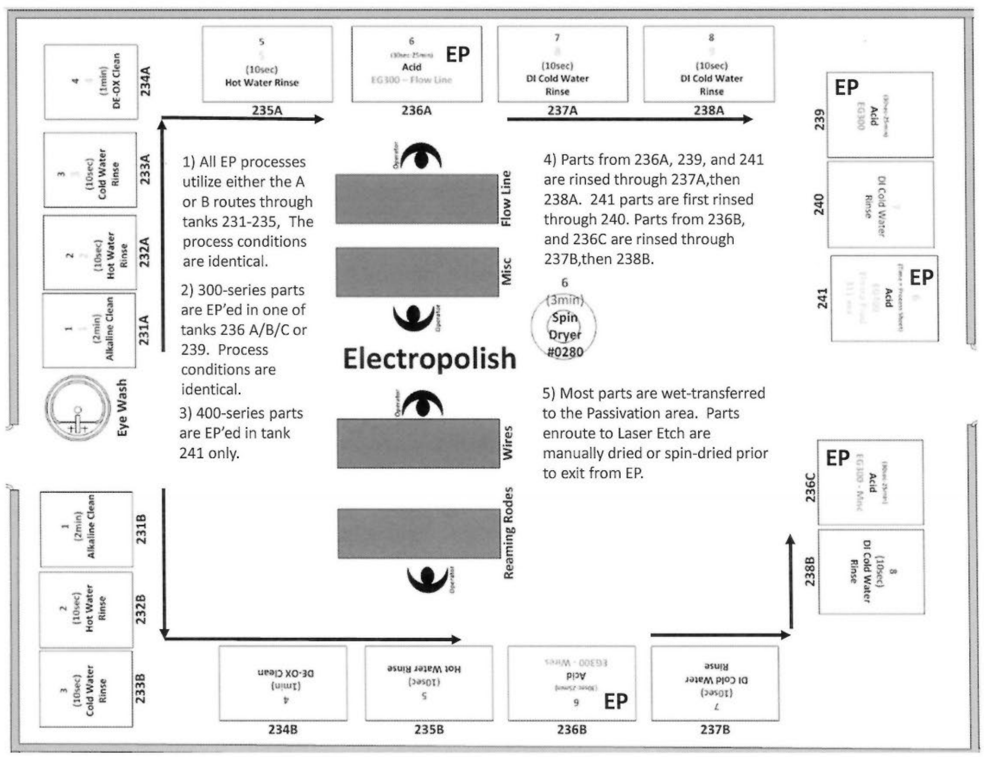


Figure 3 - Electropolish Line Configuration

1.7.2 – Passivation Process Line

The passivation line configuration is shown in Figure 4 and is used for all stainless-steel parts and some titanium parts. The passivation line consists of the following 135-gallon baths, in series:

- 50% HNO_3 bath – changed out every 3 months.
- 20% HNO_3 bath – changed out every 3 months.
- DI cold water rinse bath – overflow discharged.
- DI cold water rinse bath – counter-current to previous DI cold rinse water bath.

- Ultrasonic rinse bath (55-gal) – discharged.

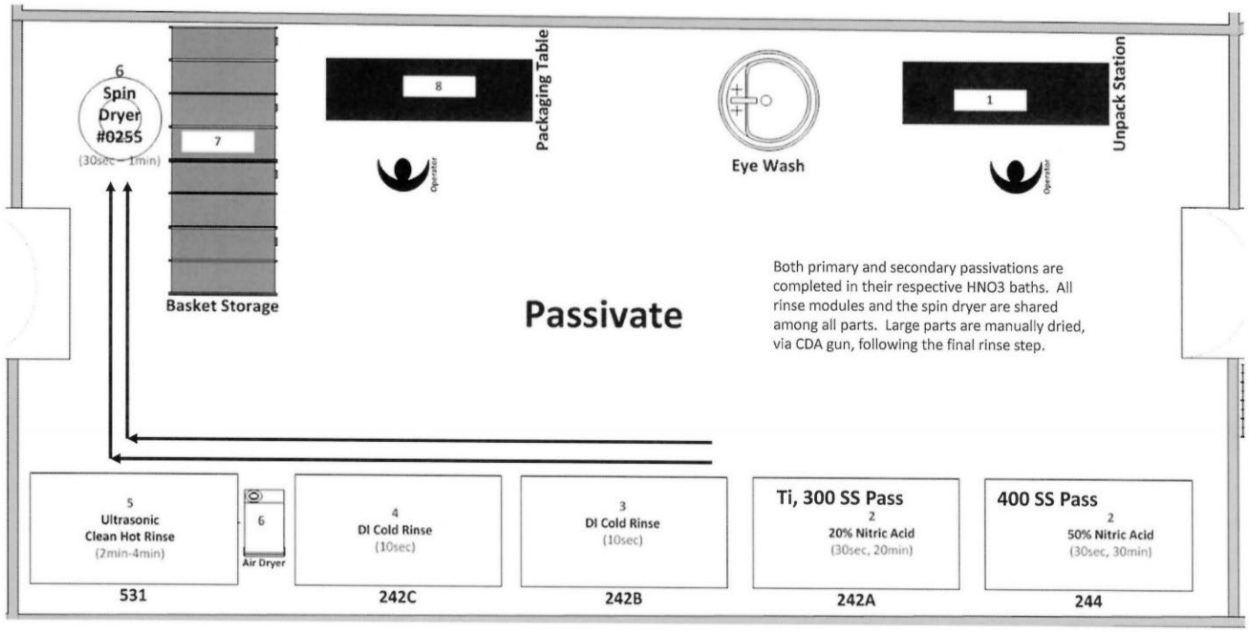


Figure 4 - Passivation Process Line Configuration

1.7.3 – Anodizing Process Line

The anodizing line configuration is shown in Figure 5 and consists of the following 110-gal tanks, in series:

- UC Sparkleen (sol) – diluted detergent used for cleaning; the Anodize line has four cleaning tanks. Three of these tanks are 110 gallons and one is 55 gallons. The 110-gallon tanks are changed out and discharged monthly, and the 55-gallon tank is cleaned out and discharged weekly.
- DI cold-water rinse bath – continuous overflow discharge.
- DI cold-water rinse bath – counter-current to previous DI cold water rinse bath.
- Bondonite nitric acid bath – the bath is recharged as needed and is considered spent for change-out about every two months. The contents of this tank are barreled and hauled off-site.
- DI cold-water rinse bath – continuous overflow discharge.
- DI cold-water rinse bath – counter-current to previous DI cold water rinse bath.

- Anodize neutral salt bath (two tanks) – the tanks are changed out on a quarterly frequency and the wastewater is sent to treatment.
- DI cold-water rinse bath – continuous overflow discharge.
- DI cold-water rinse bath – counter-current to previous DI cold water rinse bath.

The wastewater generated from the anodizing process line is discharged to the smaller collection pit that only encompasses the anodizing line. The wastewater contained in the smaller collection pit is pumped to the larger collection pit and eventually to System 2 of the wastewater treatment system.

Parts in the metal finishing process that do not meet the quality standards are re-worked, according to Mr. Bill Bowers, Senior Manufacturing Engineer-Chemical Processes (March 27, 2019 EPA inspection). The oxide on the parts are stripped off in the Bondonite nitric acid etch bath and undergo the metal finish process. The facility also has a 500-gallon Ultrasonic Clean tank (Mirachem 500) that is used to pre-clean parts received from vendors prior to metal finishing.

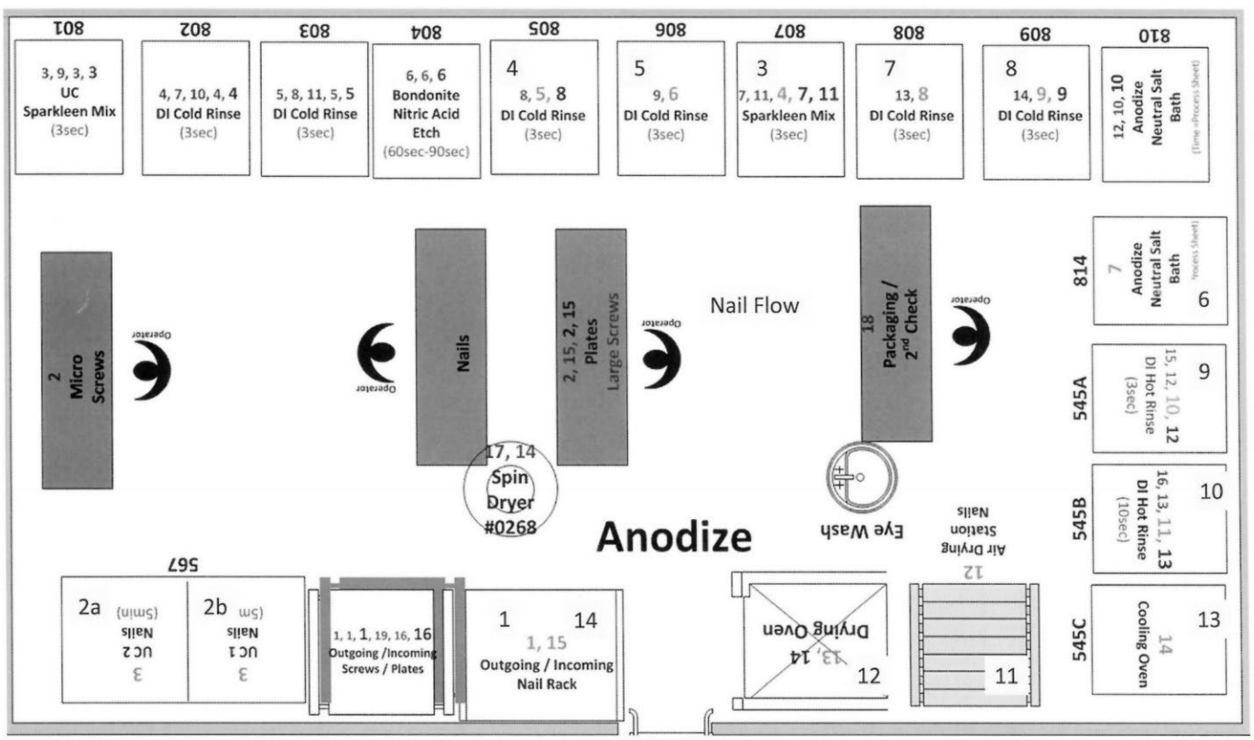


Figure 5 - Anodizing Process Line Configuration

1.7.4 – Collection of Regulated Wastewater from the Metal Finishing Room

Wastewater generated from the process lines (e.g., overflow discharge from the rinse water baths, spills, and/or the manual discharge from the spent chemical solution tanks) is collected in these pits. According to Jerrod Cano, Senior Finishing Operator, the manual tank change-outs and associated discharges to the pits are performed on Sundays, when the metal finishing process lines are not operating (March 27, 2019 EPA inspection).

The smaller anodizing collection pit pumps the wastewater to the larger collection pit located under the EP and passivation lines. The wastewater collected in this larger pit is pumped to System 2 of the wastewater treatment system. A shut-off valve is located on the discharge pipe from the larger collection pit should the pit receive wastewater that the treatment system cannot treat.

1.8 – Non-Regulated Wastestreams under the Metal Finishing Regulations (40 CFR Part 433)

1.8.1 – Oil/Water Filtration Wastewater

The facility performs process floor washing on a regular basis. The mop water buckets from the floor washing are brought to a centralized discharge containment and discharged into a collection pit located beneath an oil/water filtration unit. The collection pit also receives wastewater from the mop bucket rinse booth, the drained coolant from the scrap metal container located on the receiving dock, and overflow from the oil-based and water-based coolant tanks. The mop and oily water are pumped up to a series of 3 tanks and treated through cellulose filled tubes for separation of the oil and the wastewater. The supernatant is collected in a 40-gallon container and transported to System 1 of the wastewater treatment system. The supernatant wastewater is not categorically regulated and is considered a dilution wastestream. According to the 2019 application, the approximate volume is 205 gallons per day (gpd).

1.8.2 – Metal Finishing Ventilation/Air Scrubber Return

The facility has installed ventilation hoods to service some of the metal finishing process tanks in the Finishing Department room. The exhaust from this venting system is sent through a wet air scrubber prior to emission into the atmosphere. Treated effluent from the wastewater treatment system is diverted to a collection tank in the wastewater treatment system and pumped to a 500-gallon tank for the air scrubber. Head pressure in the system results in an overflow discharge back into the System 1 wastewater treatment system. According to the 2019 application, the approximate volume is 190 gpd.

1.8.3 – Sterile Product Packaging – Thermal Rinse

The facility packages the manufactured products, either in sterile or non-sterile packaging in the Distribution Building at 1101 Jabil Avenue. The non-sterile parts are packaged, and sterilization occurs in the field or in the hospital. The parts packaged under sterile conditions are first rinsed in one of five thermal rinse washers at 180°F for sterilization and are air-dried prior to packaging. The wastewater from the thermal rinse washers is collected in a conditioning tank to allow the temperature of the wastewater to equalize and then discharged to System 1 of the wastewater treatment system. According to the 2019 application, the approximate volume is 450 gpd.

1.8.4 – Water Supply – DI/Reverse Osmosis Treatment

The facility treats a portion of its incoming water supply for use in processes, such as the Thermal Rinse process that requires a higher quality of water supply. The incoming water is sent through 6-foot water softener resin canisters and carbon filtration canisters in series. The canisters are rotated and changed as breakthrough occurs (about once every two years). The softened water undergoes UV for disinfection and then is sent through 2µ reverse osmosis (RO) membranes. The membranes are backwashed. The RO water is sent to a 2,000-gallon storage tank where it undergoes UV and 0.25µ filtration prior to DI filtration. The facility uses four DI canisters that are changed out every 8-10 days. The RO and DI water is stored and distributed throughout the facility for process use. According to the 2025 facility inspection, the facility ceased the discharge of RO backwash water or brine to outfall 001 in March 2024 and discharges it directly to the sanitary sewer through a hard-piped connection located in the wastewater treatment room.

1.9 – Wastewater Treatment

The facility has a wastewater treatment system (Figure 6) that is used in two parallel treatment systems (System 1 and System 2) designed to treat wastewater from the various manufacturing processes. System 1 receives regulated wastewater generated from the ultrasonic cleaners, vibratory finishers, and the Amsonic cleaning line in the Manufacturing Building, as well as non-regulated wastewater from the oil/water separator and the metal finishing ventilation/air scrubber. System 2 receives regulated wastewater from the metal finishing process lines in the Finishing Department.

Figure 6 - Wastewater Treatment System

1.9.1 – System 1 Wastewater Treatment System

The wastewaters from the System 1 sources are collected in a 9,400-gallon pit located underneath wastewater treatment Systems 1 and 2. The wastewater in the collection pit is pumped to a series of three treatment chambers:

1. Chamber 1 –The facility stores 55-gallon barrels of defoamer, anionic coagulant, and if necessary, 25% caustic for pH adjustment near Chamber 1 in a spill containment berm. The caustic acid barrel is located directly above the wastewater pit without secondary spill containment.
2. Chamber 2 – The wastewater is sent from Chamber 1 to Chamber 2 for mixing and equalization.
3. Chamber 3 – Cationic flocculant is added to bind the metals into a floc.
4. The wastewater overflows from chamber 3 to a surge tank, which is pumped to a clarifier.

The tank bottom from the clarifier is pumped to the filter press. The supernatant from the filter press and the effluent from the clarifier flow to two 10-micron filters and is sent to a 3-foot x 4-foot System 1 discharge tank. The wastewater from this tank flows to an equalization tank, flows to the final discharge tank, and then combines with treated wastewater from System 2.

1.9.2 – System 2 Wastewater Treatment System

The wastewaters for System 2 are collected in three 5,000-gallon storage tanks. The three tanks are hydraulically connected for storage and equalization prior to treatment. The wastewater from the wastewater storage tanks is discharged into a 400-gallon wastewater collection pit located under the System 2 wastewater treatment equipment. The wastewater is pumped from this pit to a series of treatment chambers:

1. Chamber 1 – Defoamer and an anionic coagulant is added to provide preliminary treatment.
2. Chamber 2 – The wastewater is sent form Chamber 1 to Chamber 2 for mixing and equalization.
3. Chamber 3 – Cationic flocculant is added to bind the metals into a floc.
4. The wastewater overflows from Chamber 3 to a surge tank, which is pumped to a clarifier.

The tank bottom from the clarifier is sent to the System 2 filter press. The supernatant from the filter press and the effluent from the clarifier are plumbed to a 150-gallon storage tank. The wastewater from this storage tank flows through a series of two 10-micron bag filter canisters and then to the final discharge tank where it combines with System 1 treated wastewater. The facility generates about 55 gpd of wastewater from the maintenance and cleaning of the wastewater treatment system.

1.10 – Discharges to the POTW/Outfall 001

The contents of the final discharge tank are continuously discharged to the Monument Sanitation District sanitary sewer system. The pH of the wastewater is continuously measured from the final discharge tank. The wastewater flow is measured through a flow meter installed on the discharge pipe. This is designated as Outfall 001 in the Notification of Discharge Requirements. Outfall 001 is defined as the final discharge tank. Based on flow data gathered from the 2025 facility inspection, the facility discharges an average of 7,629 gpd through Outfall 001.

Section 2.0 – Applicable Pretreatment Regulations

Based on the facility's current manufacturing operations and processes, the Metal Finishing Categorical Pretreatment Standards apply. The Metal Finishing Point Source Category regulations found in 40 CFR Part 433 apply to facilities that perform any of six core unit operations listed in 40 CFR § 433.10(a) (Electroplating, Electroless Plating, Anodizing, Coating, Chemical Etching & Milling, and Printed Circuit Board Manufacturing). If any of these six core unit operations are present, then the categorical Pretreatment Standards also apply to wastewaters generated from the forty ancillary unit operations listed in 40 CFR § 433.10(a). The forty ancillary unit operations include, but are not limited to, machining, solvent degreasing, cleaning, tumbling, assembly, and testing.

The facility began operations in 1979; the current metal finishing operations (anodizing, electropolishing, and passivation) were installed in a building expansion in 1992. Anodizing is defined as a core unit operation under the Metal Finishing Regulations. Electropolishing and passivation are included as processes covered by Coating, which is defined as a core unit operation under the Metal Finishing Regulations. Therefore, the facility is considered to be a new source that is subject to the Metal Finishing Regulations (new source date = August 31, 1982). "New source" is defined in 40 C.F.R. § 403.3(m)(1). Based on the information submitted in the application and the 2019 facility inspection, the following facility's unit operations are subject to the Metal Finishing Point Source Category regulations:

2.1 – Core unit operations under the Metal Finishing Point Source Category, 40 CFR § 433.10(a) – Applicability

- Anodizing: process line with chemical solutions and rinse baths in the Finishing Department.
- Passivation: Coating process line with chemical solutions and rinse baths in the Finishing Department.
- Electropolishing: Metal coloring (Coating) process line with chemical solutions and rinse baths in the Finishing Room.

These regulated wastestreams from the Finishing Department unit operations (Anodizing, Electropolishing, and Passivating) are treated in wastewater treatment System 2 and discharged through Outfall 001.

2.2 – Ancillary unit operations under the Metal Finishing Point Source Category, 40 CFR § 433.10(a) – Applicability

- Machining operations within the Nail, Heading, Screw 1, and Screw 2 Departments,
- Tumbling (vibratory finishing) operations within the Nail, Screw 1, and Screw 2 Departments,
- Cleaning (ultrasonic cleaning and Amsonic cleaning) operations within the Nail, Heading, Screw 1, and Screw 2 Departments,
- Solvent (vapor) degreasing operations within the Screw 1 and Screw 2 Departments, and
- Assembly and testing.

Most of the machining operations waste (used coolant) is hauled off-site, and some coolant drained from the scrap metal is treated in wastewater treatment System 2 and discharged through Outfall 001. Solvent degreasing waste is hauled off-site. Regulated tumbling (vibratory finishing) and cleaning wastestreams from the Heading, Screw 1, Screw 2, Nail Departments are hauled-off site and treated in wastewater treatment System 2 and discharged through Outfall 001.

2.3 – Non-Regulated Wastewaters discharged to the Wastewater Treatment System and Outfall 001

Based on findings from the 2025 facility inspection, the facility currently discharges the following non-regulated wastestreams through the treatment system and Outfall 001. The discharge of these non-regulated wastestreams result in dilution of the regulated wastestreams: (**Note**: the non-regulated wastewater flows are updated below to show the changes from 2019 to 2025).

Table 2 – Non-Regulated Wastestreams (comparison of 2019 and 2025)

Non-regulated wastestreams going to Treatment #1	2019 inspection basis for NDR (approx.)	2025 inspection
Oil/water filtration effluent	205 gpd	200 gpd
Air scrubbers return water	190 gpd	0 gpd
DI RO water supply treatment brine	4,379 gpd	0 gpd
Cleaning/Maintenance wastewater of pretreatment system	55 gpd	7 gpd
Sterile product packaging thermal rinse	450 gpd	735 gpd
Total non-regulated Wastewaters	**5,279 gpd (approx.)**	**942 gpd**

Section 3.0 – Applicable Pretreatment Requirements

The Pretreatment Regulations found in 40 CFR 403 impose Pretreatment Requirements on the facility based on the core and ancillary metal finishing operations and resulting discharge to the POTW. These Pretreatment Requirements include monitoring, reporting, and notification requirements found in 40 CFR 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 CFR Part 433. The applicable effluent limits are listed in the pretreatment standards for new sources at 40 CFR 433.17.

3.1 – Discharge Limitations

3.1.1 – Categorical Pretreatment Standards

The Metal Finishing New Source Categorical Pretreatment Standards found in 40 CFR Section 433.17(a) establish the limitations for listed pollutants. Any new source subject to this subpart that introduces pollutants into a POTW must comply with 40 CFR part 403 and achieve the following pretreatment standards for new sources:

Table 3 - Metal Finishing Pretreatment Standards for New Sources -- 40 CFR 433.17(a)

Pollutant	Daily Maximum (mg/L)	Monthly Average (mg/L)
Cadmium (Cd), Total	0.11	0.07
Chromium (Cr), Total	2.77	1.71
Copper (Cu), Total	3.38	2.07
Lead (Pb), Total	0.69	0.43

Nickel (Ni), Total	3.98	2.38
Silver (Ag), Total	0.43	0.24
Zinc (Zn), Total	2.61	1.48
Cyanide (CN), Total	1.20	0.65
Total Toxic Organics (TTO) (1)	2.13	---

1. TTO is the summation of all quantifiable values greater than 0.01 mg/L for the toxic organics listed in 40 CFR § 433.11(e).

Because the facility does not have cyanide treatment, 40 CFR § 433.17(b) does not apply. These provisions allow for an amenable limit in place of a total cyanide limit, upon agreement with the EPA.

40 CFR § 433.17(c) states, "No user subject to the provisions of this subpart shall augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this limitation."

3.1.2 – Limits based on the Combined Wastestream Formula

40 CFR § 403.6(d) of the Pretreatment Regulations prohibits dilution as a substitute for treatment. "Except where expressly authorized to do so by an applicable Pretreatment Standard or Requirement, no Industrial User shall ever increase the use of process water, or in any other way attempt to dilute a Discharge as a partial or complete substitute for adequate treatment to achieve compliance with a Pretreatment Standard or Requirement. The Control Authority may impose mass limitations on Industrial Users which are using dilution to meet applicable Pretreatment Standards or Requirements, or in other cases where the imposition of mass limitations is appropriate."

40 CFR § 403.6(e) of the Pretreatment Regulations states, "Where process effluent is mixed prior to treatment with wastewaters other than those generated by the regulated process, fixed alternative discharge limits may be derived by the Control Authority or by the Industrial User with the written concurrence of the Control Authority. These alternative limits shall be applied to the mixed effluent. When deriving alternative categorical limits, the Control Authority or Industrial User shall calculate both an alternative daily maximum value using the daily maximum value(s) specified in the appropriate categorical Pretreatment Standard(s) and an alternative consecutive sampling day average value using the monthly average value(s) specified in the appropriate categorical Pretreatment Standard(s). The Industrial User shall comply with the alternative daily maximum and monthly average limits fixed by the Control Authority until the Control Authority modifies the limits or approves an Industrial User modification request. Modification is authorized whenever there is a material or significant change in the values used in the calculation to fix alternative limits for the regulated pollutant. An Industrial User must immediately report any such material or significant change to the Control Authority. Where appropriate new alternative categorical limits shall be calculated within 30 days."

Based on the 2025 Pretreatment inspection, the facility discharges an average of 7,629 gpd through Outfall

001. The wastewater discharge consists of regulated process wastewater and non-regulated wastestreams identified in §§2.1 through 2.3 of this fact sheet. The total volume of non-regulated wastestreams is 942 gpd.

Alternative limit calculation. For purposes of these formulas, the “average daily flow” means a reasonable measure of the average daily flow for a 30-day period. For new sources, flows shall be estimated using projected values. The alternative limit for a specified pollutant will be derived by the use of either of the following formulas:

$$C_T = \left(\frac{\sum_{i=1}^{N} C_i F_i}{\sum_{i=1}^{N} F_i} \right) \left(\frac{F_T - F_D}{F_T} \right)$$

where

C_T = the alternative concentration limit for the combined wastestream.

C_i = the categorical Pretreatment Standard concentration limit for a pollutant in the regulated stream i.

F_i = the average daily flow (at least a 30-day average) of stream i to the extent that it is regulated for such pollutant.

F_D = the average daily flow (at least a 30-day average) from non-regulated wastestreams:

F_T = The average daily flow (at least a 30-day average) through the combined treatment facility (includes F_i, F_D and unregulated streams).

N = The total number of regulated streams.

The calculations of the alternative limits, based on current 2025 conditions at the facility are included in Figure 7. The alternative Metal Finishing limits based on the Combined Wastestream Formula are listed in Table 4.

Attachment 1 - Combined Waste Stream Formula (based on data gathered in the 2025 facility inspection)

Parameter	40 CFR 433.17 – Metal Finishing Limits Daily Max	 Monthly Avg
Total Cadmium	0.11	0.07
Total Chromium	2.77	1.71
Total Copper	3.38	2.07
Total Lead	0.69	0.43
Total Nickel	3.98	2.38
Total Silver	0.43	0.24
Total Zinc	2.61	1.48
Total Cyanide	1.20	0.65
Total Toxic Organics	2.13	

Data from 2019 permit application

Non-Regulated Process	Flow (gpd)
Oil/Water Filtration	200
Air Scrubber Return	0
DI-Reverse Osmosis brine	0
Treatment System Cleaning	7
Sterile Product Packaging-Thermal Rinse	735
Total Non-Regulated Flow =	942

Average Daily Flow – 2016-2019 DI

7,629

INPUTS	
7,629	Average flow to Tri-Lakes (gpd)
942	Amount of non-regulated process water (gpd)
12.35%	% of non-regulated flow to regulated flow

Determination of *Daily* Alternative Concentration Limit

	Regular Limit **(daily max)**	Adjustment (Regular limit times the % of non-regulated flow)	New Limit (Regular Limit - adjustment)	Difference
Total Cadmium	0.11	0.013582383	0.10	0.01
Total Chromium	2.77	0.342029099	2.43	0.34
Total Copper	3.38	0.417349587	2.96	0.42
Total Lead	0.69	0.085198584	0.60	0.09
Total Nickel	3.98	0.491435313	3.49	0.49
Total Silver	0.43	0.05309477	0.38	0.05
Total Zinc	2.61	0.322272906	2.29	0.32
Total Cyanide	1.20	0.148171451	1.05	0.15
Total Toxic Organics	2.13	0.263004326	1.87	0.26

Determination of *Monthly* Alternative Concentration Limit

	Regular Limit **(monthly avg)**	Adjustment (Regular limit times the % of non-regulated flow)	New Limit (Regular Limit - adjustment)	Difference
Total Cadmium	0.07	0.008643335	0.06	0.01
Total Chromium	1.71	0.211144318	1.50	0.21
Total Copper	2.07	0.255595753	1.81	0.26
Total Lead	0.43	0.05309477	0.38	0.05
Total Nickel	2.38	0.293873378	2.09	0.29
Total Silver	0.24	0.02963429	0.21	0.03
Total Zinc	1.48	0.18274479	1.30	0.18
Total Cyanide	0.65	0.080259536	0.57	0.08
Total Toxic Organics	n/a			

Figure 7 - Alternative Limits Calculations based on the Combined Wastestream Formula, 40 CFR § 403.6(e)

Table 4 – Jabil Inc. Alternative Metal Finishing Limits, based on the Combined Wastestream Formula

Pollutant	Daily Maximum (mg/L)	Monthly Average (mg/L)
Cadmium (Cd), Total	0.10	0.06
Chromium (Cr), Total	2.43	1.50
Copper (Cu), Total	2.96	1.81
Lead (Pb), Total	0.60	0.38
Nickel (Ni), Total	3.49	2.09
Silver (Ag), Total	0.38	0.21
Zinc (Zn), Total	2.23	1.30
Cyanide (CN), Total	1.05	0.57
Total Toxic Organics (TTO)	1.87	---

3.1.3 – Toxic Organic Management Plan

40 CFR § 433.17(d) states, "An existing source submitting a [Total Toxic Organics] certification in lieu of monitoring pursuant to §433.12 (a) and (b) of this regulation must implement the toxic organic management plan approved by the control authority." 40 CFR § 433.12 (a) and (b) provide the following:

> (a) In lieu of requiring monitoring for TTO, the control authority may allow dischargers to make the following certification statement: "Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation [or pretreatment standard] 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 of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting [or control] authority." For indirect dischargers, the statement is to be included as a comment to the periodic reports required by 40 CFR 403.12(e). If monitoring is necessary to measure compliance with the TTO standard, the industrial discharger need analyze for only those pollutants which would reasonably be expected to be present.
>
> (b) In requesting the certification alternative, a discharger shall submit a solvent management plan that specifies to the satisfaction of the control authority the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater.

Jabil Incorporated submitted an updated Toxic Organic Management Plan (TOMP) that included a TTO screen to provide recent quantifiable data of TTOs in its effluent. The TOMP listed the TTOs used in the facility's unit operations, the method of disposal used instead of discharge and other procedures to ensure the TTOs do not spill or leak into the wastewater. The facility uses 1.2-trans dichloroethylene as a degreaser in its manufacturing operations, and the TOMP describes the measures used to collect and haul off the spent degreaser and to minimize spills to ensure it does not reach the sanitary sewer. Based on the EPA's evaluation of the TTO data and the submitted TOMP, the facility is allowed to certify for TTOs in lieu of monitoring for TTOs.

3.2 – Reporting, Monitoring, Notification and Record-Keeping Requirements

The reporting, monitoring, notification, and record keeping requirements are found in 40 CFR 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)(3) and (4);
- **Periodic Compliance Report Monitoring Requirements** (40 C.F.R.§ 403.12(e); 40 C.F.R.§ 403.12(g)(3) and (4))
- **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(l))
- **Retention of Records** (40 C.F.R. § 403.12(o))

3.2.2 – Reporting Requirements

40 CFR § 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. The reporting requirements for Jabil, Inc. are more frequent than the twice a year minimum listed in 40 CFR § 403.12(e) to ensure compliance with the Pretreatment Standards found in the Metal Finishing regulations (40 CFR § 433.17). The facility has a continuous discharge that averages about 18,000 gpd. The EPA is requiring a quarterly monitoring frequency and corresponding reporting frequency to gather an adequate dataset and determine compliance with the Metal Finishing Categorical Pretreatment Standards. The facility is currently monitoring and reporting on a quarterly frequency.

Jabil Inc. will submit reports through the NetDMR electronic reporting system, as described in §3.3.1(1). Table 3 lists the deadline due dates based on quarterly reporting:

Table 5 – Jabil, Inc. Discharge Monitoring Reporting Frequency

Compliance Monitoring Period	Due Date
January through March	April 30
April through June	July 31
July through September	October 31
October through December	January 31

3.2.3 – Monitoring Requirements

The discharges from the facility at Outfall 001 are subject to the following monitoring requirements, listed in Table 4. Outfall 001is defined as the sampling port located on the 3-inch PVC discharge pipe from the final discharge tank. The sampling port is located on a rise in the PVC pipe after the final flow and pH meters and prior to discharge to the POTW.

40 C.F.R. § 403.12(g)(3) requires that periodic compliance reports "must be based upon data obtained through appropriate sampling and analyses performed during the period covered by the report, which data are representative of the conditions occurring during the reporting period." Based on the EPA's evaluation of the facility's discharge characteristics, a flow-proportional composite sampling for the metals is representative of the discharge for the production day. In addition, the facility is required to continuously measure for flow and pH because of the potential for fluctuations during the discharge. At a minimum, the pH and flow measurements shall be recorded at one-minute intervals on a continuous recording device.

All analyses shall be performed in accordance with test procedures established in 40 CFR Part 136. Sampling methods shall be those defined in 40 CFR Part 136, 40 CFR Part 403, as further described in the Notification of Discharge Requirements.

Table 6 – Jabil Inc. Monitoring Frequency

Pollutant	Sample Type	Sampling Frequency
Flow	Continuously measured	Continuously recorded
pH	Continuously measured	Continuously recorded
Cadmium (Cd)	Composite (1)	Quarterly
Chromium (Cr)	Composite (1)	Quarterly
Copper (Cu)	Composite (1)	Quarterly
Lead (Pb)	Composite (1)	Quarterly

Nickel (Ni)	Composite (1)	Quarterly
Silver (Ag)	Composite (1)	Quarterly
Zinc (Zn)	Composite (1)	Quarterly
Cyanide (CN)	Composite (1)	Quarterly
Total Toxic Organics (TTO)	Composite (1) with the exception of Volatile Organics (grab samples composited in the laboratory)	Semi-Annually

(1) – A flow proportional composite sample representative of the discharge for the production day. The sampling may be done using an automatic sampler programmed to perform representative flow-proportional sampling or manually by taking aliquots every 2 hours during the period of discharge for the production day and compositing the aliquots using one of the following flow-proportional techniques. Discrete sampling may be flow proportioned either by varying the time interval between each aliquot or the volume of each aliquot. All composites should be flow proportional to either the stream flow at the time of collection of the influent aliquot or to the total influent flow since the previous influent aliquot. Volatile pollutant aliquots must be combined in the laboratory immediately before analysis.

3.3 – Signatory Requirements

Per 40 CFR Section 403.12(l), the Baseline Report, 90-day Compliance Report, and Periodic Compliance Reports (Parts III.A and B) 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 Respondent 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.

3.3.1 – 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 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 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.

2. Until the effective date of the NPDES Electron Reporting Rule, the facility may either submit Periodic Compliance Reports electronically, as described above, or submit hard copies to the address below. 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

3. Written reports and notifications required to be submitted to the POTW shall be sent to the following address:

Monument Sanitation District
130 Second Street
Monument, CO 80132

Tri-Lakes Wastewater Treatment Facility
16510 Mitchell Avenue
Monument, Colorado 80132

4. 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

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

719-481-4053 (Tri-Lakes Wastewater Treatment Facility) and
719-481-4886 (Monument Sanitation District