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Enclosure 2

JM Shafer Generating Station Fact Sheet

Pretreatment ICIS Number:	CO-PF00107
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Applicable Pretreatment Regulations:	Steam Electric Power Generating Point Source Category, New Source, (began operations on June 4, 1994)
Categorical Reference:	40 CFR Part 423 (Pretreatment Standards for New Sources at 40 CFR § 423.17)
Receiving POTW/Collection System:	Fort Lupton POTW CDPS Permit No. CO-0021440 12285 Highway 52 Fort Lupton, CO 80621
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Section 1 JM Shafer Generating Station Process Description Operation

The JM Shafer Generating Station (facility) is a gas-fired, cogeneration power plant, which produces up to 272 megawatt hours (MWh) of instantaneous peak power generating capacity. The facility is limited by an air permit to ~62% Capacity 12 Month Rolling Average (max), equivalent to ~1,477,286 MWh/rolling 12 months. The actual rolling average is generally between 20% and 45% of total capacity. In the its permit application, the facility estimates its power usage, which is a measurement of energy produced and used, for the calendar year 2020 will be 700,000 MWh.

The facility is owned and operated by the Thermo Cogeneration Partnership L.P., which is a wholly-owned subsidiary of the Tri-State Generation and Transmission, Inc. The facility began operations in two phases; the first phase was completed on June 4, 1994 and the second phase began operation on July 1, 1994. The facility is located approximately three miles northeast from Fort Lupton, Colorado and discharges wastewater to the Fort Lupton publicly owned treatment works (POTW).

The facility operates 24 hours per day, seven days per week and is supported by approximately 19 employees. Operations personnel (two staff) work 12-hour shifts (6am-6pm), and maintenance personnel (four to six staff, depending on the day) work 10-hour or 8-hour shifts.

Figure 1 shows the site layout of the facility and Figure 2 is the Google Earth view of the site.

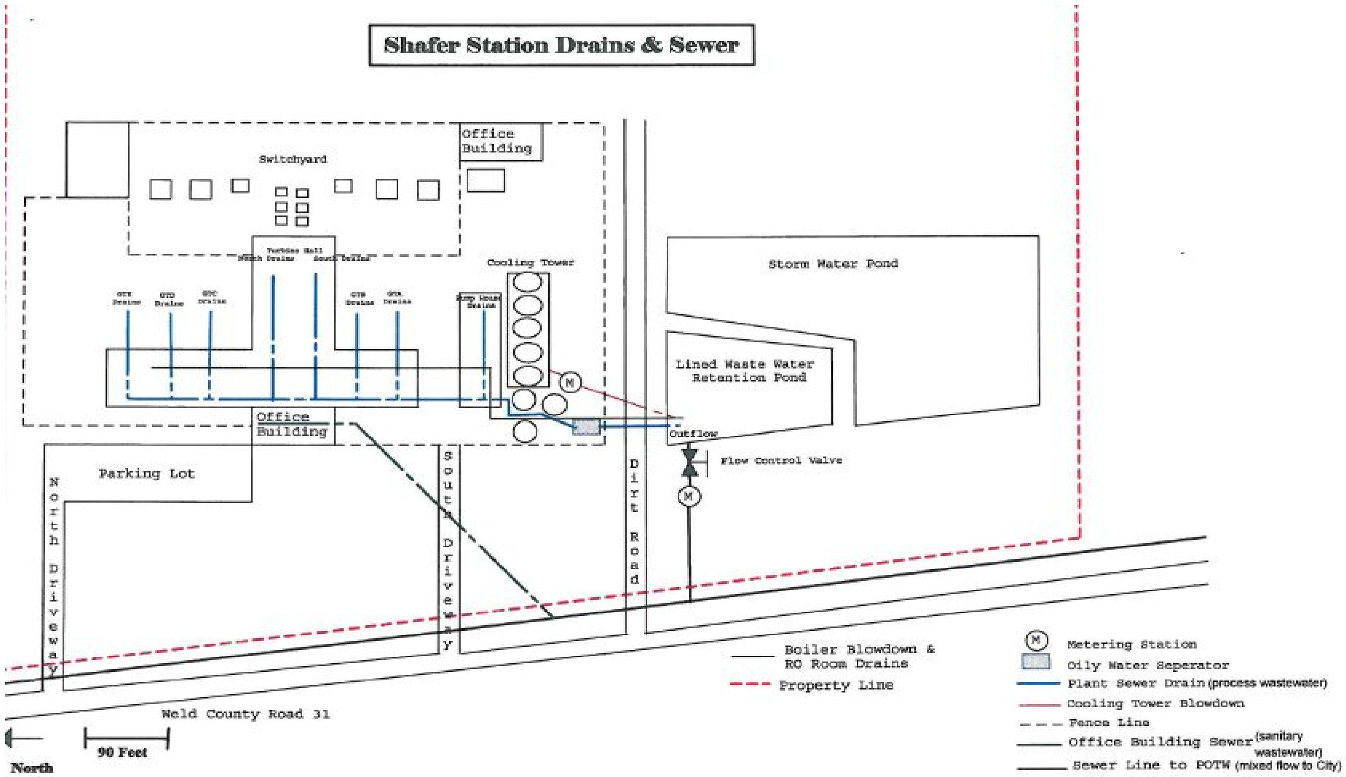

Figure 1 - JM Shafer Site Layout

Figure 2 - JM Shafer Power Generating Station-Google Earth View

1.1 Raw Materials and Chemicals Storage and Spill Potential

Table 1 lists the chemicals the facility uses in its natural gas fired, combined-cycle power generation process:

Table 1 – Raw Materials and Chemicals Overview

Chemical	Volume/Mass	Storage Location	Process/Equipment Use
Inhibitor AS8104	1,000-gallon tank	Control Room – NW door	Cooling Tower
Gengard GN8225	1,000-gallon tank	Control Room – NW door	Cooling Tower
$Bleach_{(sol)}$ (10%)	2,500-gallon tank	Pump House	Cooling Tower
Sulfuric Acid (93%)	5,200-gallon tank	Control Room – NW door	Cooling Tower

Airgas Aqua Ammonia (19%)	1,000-gallon tank	Control Room – NW door	Heat Recovery Steam Generator (HRSG) Boiler (condensate pH conditioner)
Anodamine	Two 250-gallon totes	Control Room – NW door	HRSG Boiler (surface corrosion inhibitor)
Hypersperse MDC 714	1,000-gallon tank	Reverse Osmosis (RO) room	RO System (anti-sealant)
Sodium Hydroxide	350-gallon tank	RO room	RO System (pH stabilizer)
Diesel	350-gallon tank	Containment next to fire pump	Fire Pump Tank
Diesel	207-gallon tank	East side of Pump House	Forklift fuel
R-134 Refrigerant	12,450 lbs	Contained inside three chiller units	Chillers
Ethylene Glycol (50%)	500-gallon tank	Between Chillers A and B	Chiller Anti-freeze
	40,000-gallon	Closed-loop system- contained within five gas turbine heating/cooling sets and a tube and shell heat exchanger for heating or three mechanical chillers for cooling	Closed-loop Heating/Cooling system
CorrShield M D4100 Molybdte-nitrite	Three 15-gallon containers	Next to P-2501B, P-2601 B or in bulk containment	Closed -Loop Heating/Cooling System
Hydraulic Oil	Two 105-gallon tanks	Located between STGA and SGTB	Steam Turbines (hydraulic oil)
Optisperse PO5061	335-gallon tank	Bulk Chemical Storage	Boiler Water Phosphate Corrosion inhibitor
Turbine Oil, Generator Oil	2,400-gallon tank	Located between SGTA and SGTB	Steam Turbines (lubrication)
Gas Turbine Oil	Five 150-gallon tanks	AUX package	Gas Turbine lubrication
Generator Oil	Five 500-gallon tanks	Main package	Gas Turbine lubrication
Hydraulic Oil	Five 40-gallon tanks	AUX package	Gas Turbine hydraulic starter

Spectrus DT1403	850-gallon tank	RO Room	Dechlorination
Transformer Oil	75,940 gallons	Contained in transformers Tl, T2, T3, T4, AMF1, AMF 2, ATF 1-6, SPARE XFormor	Transformer lubrication
Klair Aid	55-gallon barrel	RO room	Coagulant

According to the facility's slug discharge control plan, spill kits are maintained and readily accessible in all areas where chemicals are stored and used in the facility. These kits are filled with their full complement of clean-up materials and a tamper evident seal is applied so that during routine inspections, operators can verify that the contents have not changed.

Chemicals are typically stored either on portable containment pallets or within secondary containment berms. Larger tanks such as the sulfuric acid tanks and the inside diesel fuel tank are located within walled secondary containment structures. The bleach tank is located outside of the building (away from other chemical storage tanks) and is double walled. Catch basins and bermed areas have been strategically built for additional protection in areas where bulk chemicals are stored and used.

The appropriate drains in areas of bulk chemical storage (areas such as those located in the Pump House Building next to the cooling tower and the reverse osmosis process area) have been plugged or capped to prevent any spilled material from entering the City of Fort Lupton's sewer system. Plugs remain in place at all times except during routine cleaning and maintenance activities. Drain covers are painted red on all drains that are plugged so that operators will know which floor drains have the potential to discharge in the event of a spill.

All chemicals and materials are handled according to manufacturer's specifications and facility safety protocols. An operator is present during every transfer of chemicals, according to Standard Operating Procedures for the facility. Drip pans or other secondary containers are used during transfer to minimize the chances that a spill will occur at the hose connection points. Non-compatible chemicals are received, transferred and stored at a distance that will minimize risk of accidental contact, and each chemical has its own secondary containment. When there is a significant distance between the chemical delivery point and the storage tank or vessel, a portable wheeled transfer container with secondary containment (porta-feed) is used to safely move the chemicals closer to the tank and minimize the distance and number of connections required to complete the transfer.

1.2 Incoming Water Supply and Treatment

The primary water source for the facility is the Colorado Big Thompson River via the recently constructed reservoir located approximately three miles east of the facility. The maximum daily water usage for a single day is 2.6 million gallons per day (MGD). The facility's cooling tower makeup and reverse osmosis (RO) units comprise the majority of the water usage. The water supply is transferred to a raw water storage tank that feeds the RO water treatment and the cooling tower. The RO treated water is used in the boiler and steam generation system.

According to the application, the facility is in the planning stages to install a new RO system in the summer of 2020. Currently, the water is sent to the first-stage RO process and is then either sent to the second-stage RO process or is used for domestic purposes (e.g., toilets or other non-drinking water use). The first-stage reject water is discharged into floor drains in the RO room that convey this wastewater directly to the retention pond. [*Note: the 1st stage reject water will be plumbed to the cooling tower after the new RO installation*.] The water treated in the second-stage RO process passes through a third-stage treatment of mixed beds and demineralization banks and is collected in two 100,000-gallon tanks that are used to supply the HRSG boilers. The second-stage RO reject water is used as makeup water in the cooling towers. [*Note: the 2nd stage reject water will be re-treated in the RO system and the 3rd stage treatment will not be necessary*.] The chemicals used in the RO system include Hypersperse MDC 714 and sodium hydroxide. The current usage of process water in the power plant is provided in Figure 3.

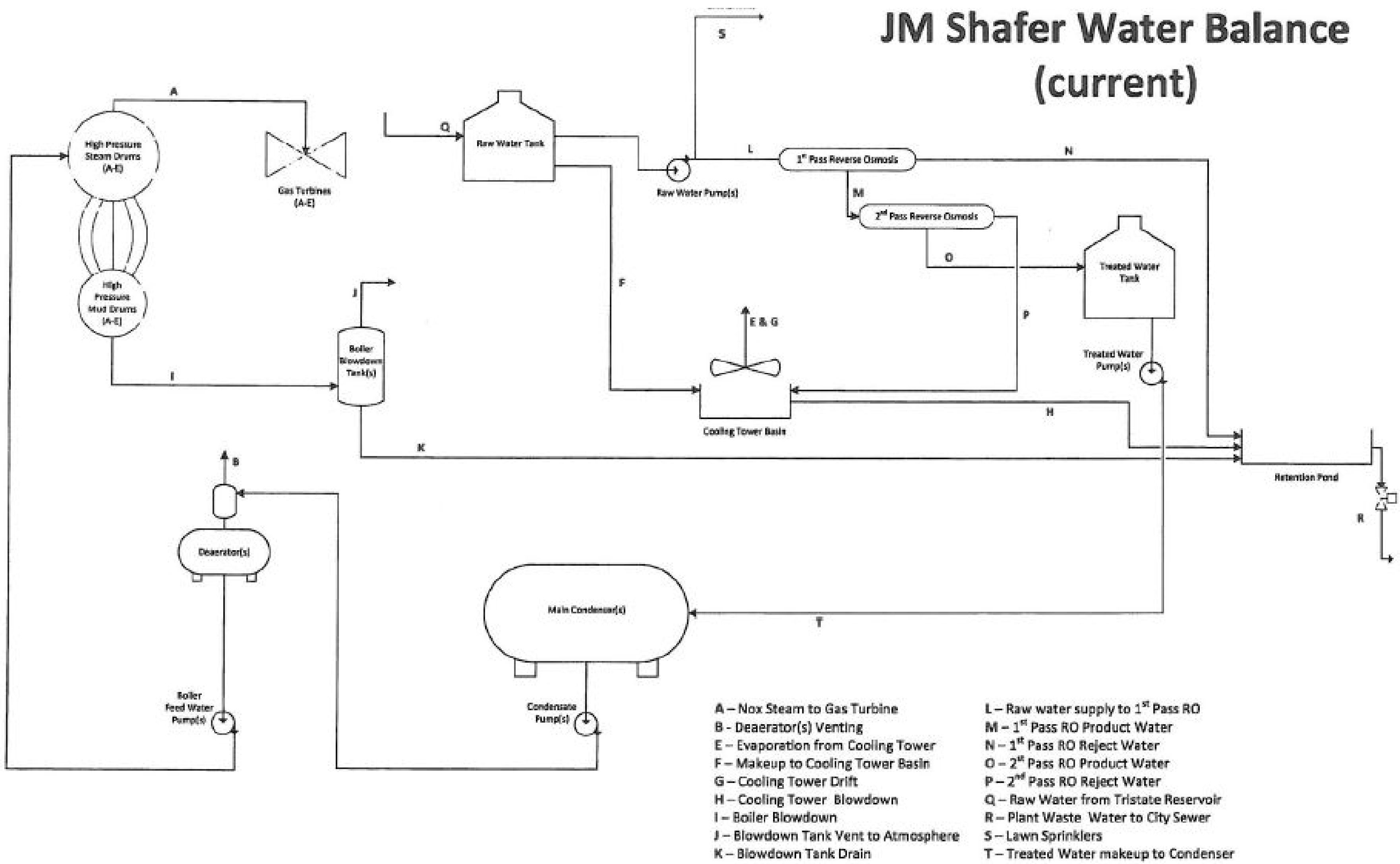

Figure 3 - JM Shafer Water Balance

1.3 Steam Electric Generation Overview

The combined-cycle power plant at the facility consists of five gas turbines, two steam turbines and seven generators, as shown in Figure 4.

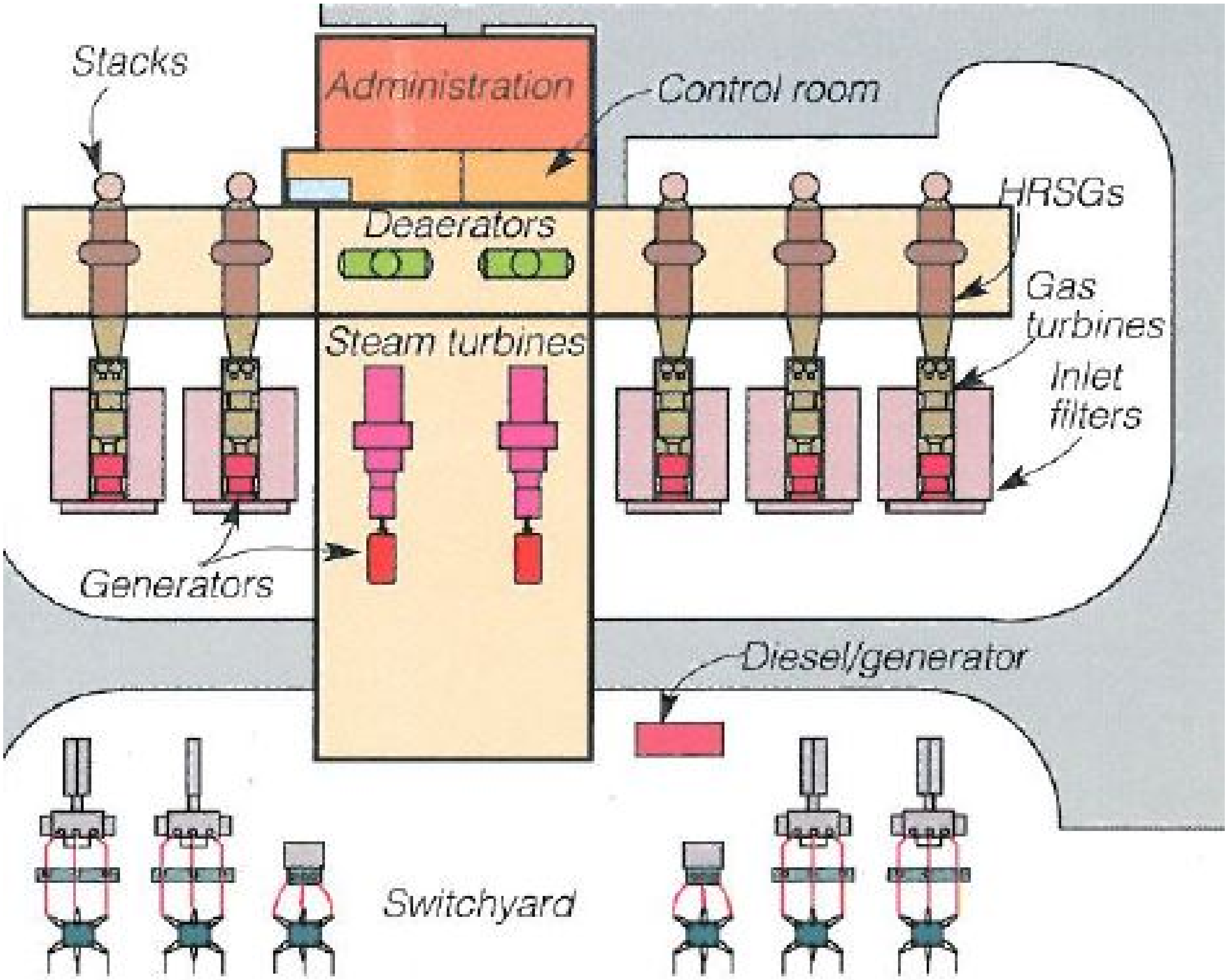

Figure 4 - JM Shafer Power Plant Building

The facility uses natural gas as its fuel source. The five gas turbines mix compressed air with natural gas and ignite the mixture into a high energy, high pressure air stream that passes through the turbine fan blades and spins the turbine shaft. The spinning shaft of the gas turbine is attached to an electrical generator which converts the spinning energy into electricity. The exhaust from each gas turbine is captured by a dual-pressure HRSG boilers equipped with supplemental duct burners. The HRSGs are in a 1x1 configuration with the gas turbines – each gas turbine exhausts into a dedicated HRSG.

The HRSG passes the captured heat from the gas turbine and passes it through the boiler's water tubes. The water tubes are supplied by the two 100,000-gallon water supply tanks from the RO system. The water in the tubes heats up and generates steam which is delivered to the two steam turbines and a generator to convert the energy into electricity. The converted electricity from the power plant is sent to the switchyard.

The waste steam is cooled with non-contact cooling water tubes originating from the cooling tower. The cooling water is pumped into a condenser contact chamber and the condensate generated from the cooled steam is collected and piped to a de-aerator tank to purge oxygen from the water. The de-aerated water is sent back to the HRSG for recovery and returned as make-up water for steam generation.

1.4 Cooling Tower

The cooling tower consists of a large horizontal cooling water basin with two chiller pumps and three circulating pumps. The cooling system pumps move the cooled water into the power generating building to dissipate heat generated in the power generation plant (Figure 5). According to supplemental information submitted on May 8, 2020, the cooling tower system contains 344,725 gallons in the basin and 186,385 gallons in the cooling water piping for a total volume of 531,110 gallons in the cooling water system. As the heat-exchanged cooling water is brought back to the cooling tower basin, water is lost from the system through evaporation. Cooling by evaporation increases the dissolved solids concentration in the water thus increasing the potential for corrosion and solids deposition. The facility performs a daily blowdown of the cooling towers to mitigate these tendencies. Makeup waster is added to the system from the incoming water supply described in Section 1.2 to replace water lost to evaporation and blowdown.

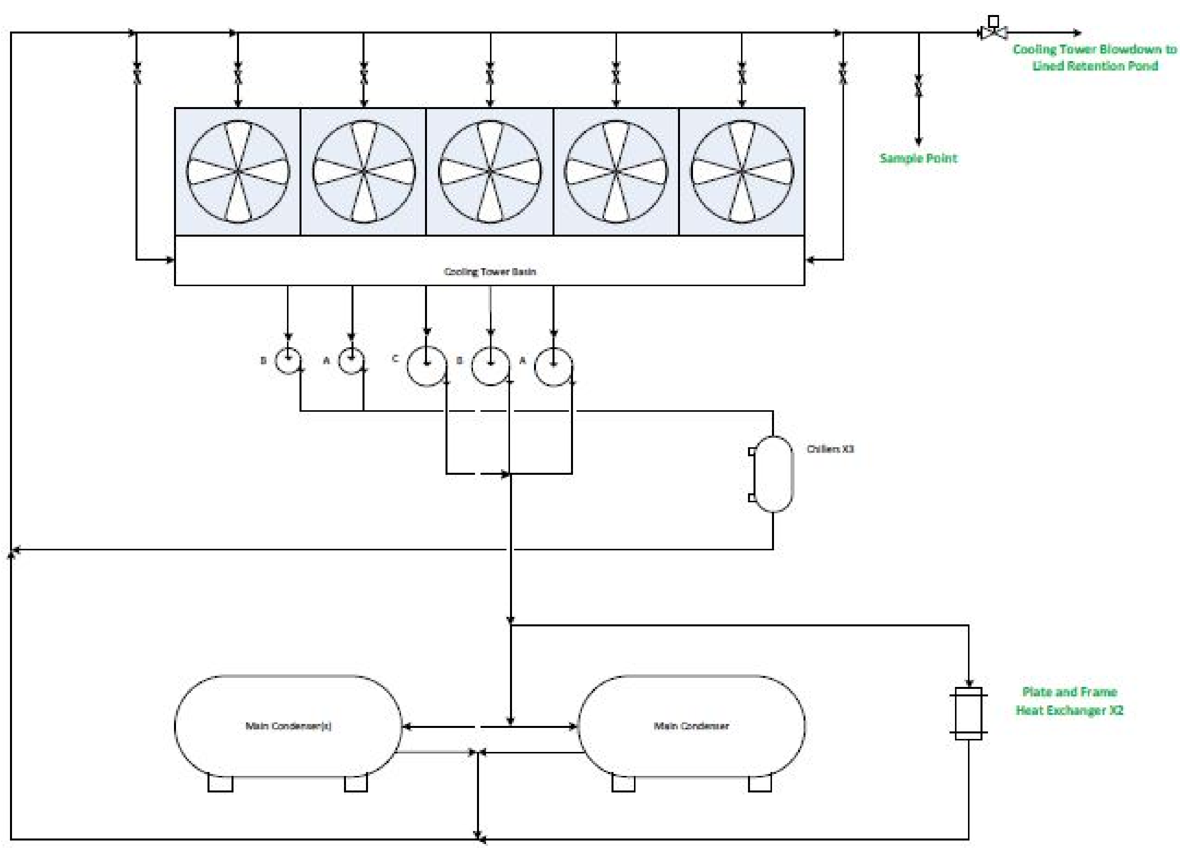

Figure 5 - JM Shafer Cooling Water System

The treatment chemicals lost through the blowdown activities are replaced. The chemicals used in the cooling tower include corrosion and scale inhibitors: Inhibitor AZ8104 (corrosion inhibitor), Gengard GN8225 (corrosion inhibitor), 10% sodium hypochlorite, 93% sulfuric acid, and a polymer to minimize biological growth as a result of retention time in the basin or absorbed into the water from the towers.

The cooling towers and basin are recirculated in the system throughout the year with seasonal rates that are at a maximum in the summer and minimum in the fall. The average annual recirculation rate of the cooling water in the basin is 28,400 gallons per minute (gpm) with an average time of volume turnover being 18.7 minutes. Based on information provided by the facility regarding the cooling tower, it appears that the water is well mixed throughout the system. The sediment that collects in the cooling basin is removed about every 12 years. About 2,000 lbs of sediment was removed from the cooling tower basin in 2019.

According to information received in the application, the cooling towers have a slip stream blow down, discharging approximately 40,000 gallons per day (gpd) through a monitoring point station (Figures 6 and 7) prior to entering a common drain directly plumbed to the facility’s lined retention pond.

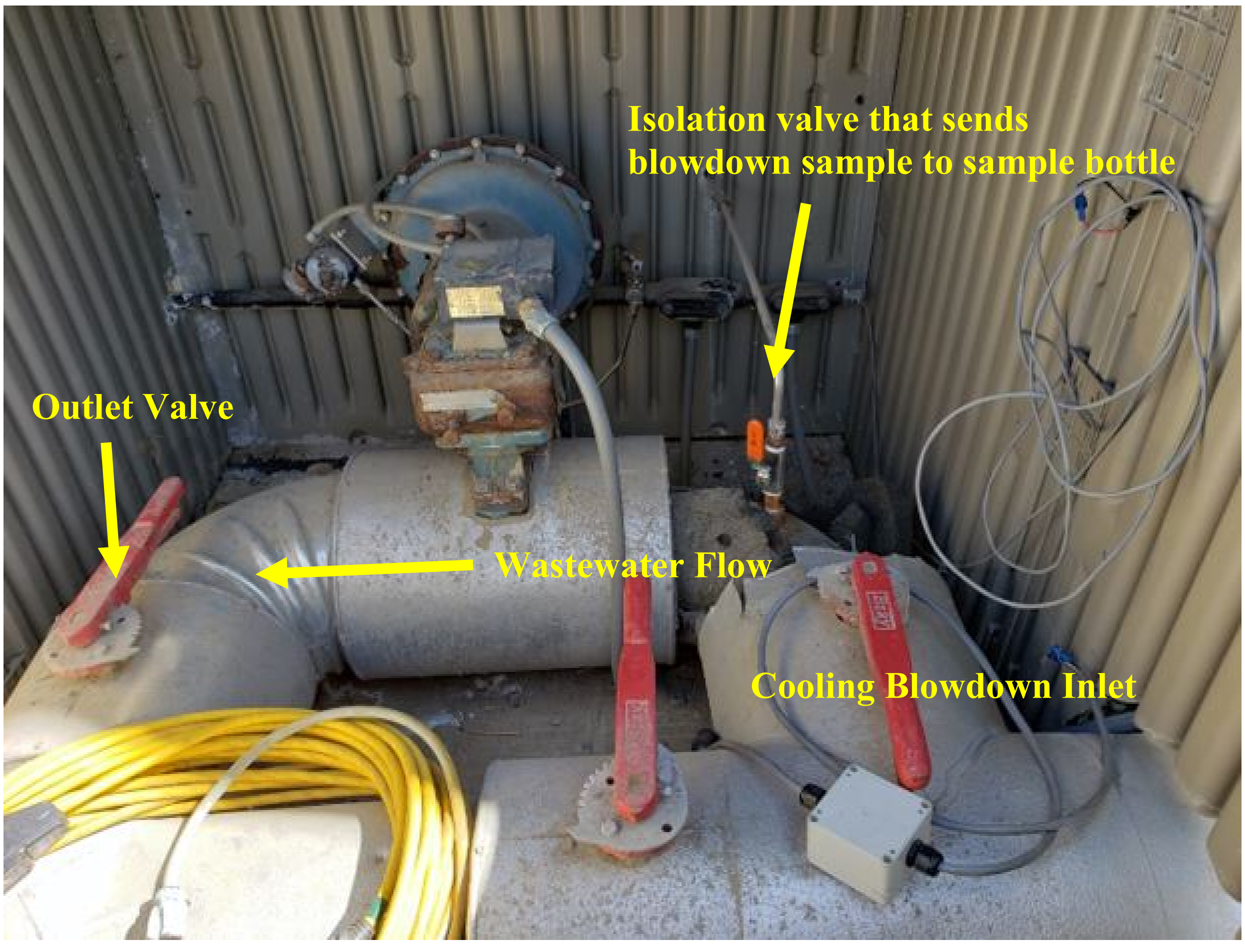

Figure 6 - Outfall 001- Cooling Tower Monitoring Point

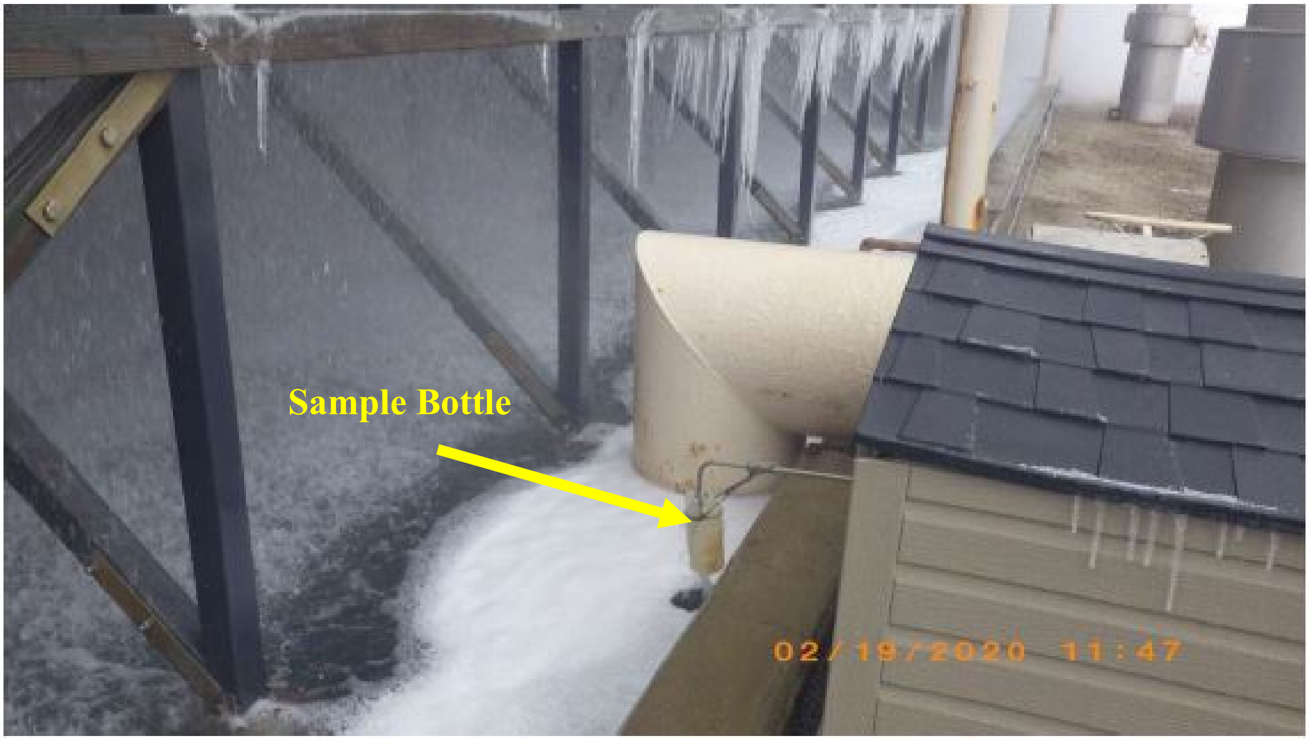

Figure 7 - Cooling Tower Basin Blowdown-Monitoring Station

1.5 Boilers

The facility's five HRSG boilers are blown down daily, generating approximately 1,000 gpd. The blowdown wastewater from the HRSG boilers is discharged into floor drains leading to a common drain that is directly plumbed to the facility's lined retention pond. The waterside or the fireside (natural gas) tubes of the HRSG boilers have never been cleaned, according to 2020 supplemental information to the permit application. The air heaters have been power-rinsed with water (no chemicals used during the cleaning) two or three times in 25 years. The wastewater generated from this event is discharged to the process floor drains leading to the retention pond.

1.6 Switchyard and Transformers

The facility has a switchyard located east of the power plant that receives electrical power from the generators, then transforms and redistributes the energy to the electric grid. The switchyard was built in 1993 with all new (no old/no reuse from other sites) equipment. The manufacture and import of PCBs was banned and no longer allowed after June of 1979. All equipment in the switchyard is PCB free.

Table 2 includes the number, type of transformers and volume of transformer oil contained within each transformer. The transformer oil provides electrical insulation between the various energized parts, acts as a protective coating layer to prevent oxidation of the metal surfaces and enhances heat dissipation. The facility has programs, policies, and procedures for the management of used oil, including used transformer oil that includes testing and recycling.

Table 2 - JM Shafer Switchyard Transformers

Type of Transformer	Transformer	Volume of Transformer Oil (gallons)
Distribution	T1	11,940
	T2	11,940
	T3	11,940
	T4	13,292
Step Down	AMF1	6,105
	AMF2	6,105
Station	ATF1	389
	ATF2	461
	ATF3	389
	ATF4	461
	ATF5	389
	ATF6	389

1.7 Process Wastewater Sources and Flows

Process wastestreams include the following. A process flow schematic is shown in Figure 8:

1. Cooling tower blowdown water – approximately 40,000 gpd
2. Boiler blowdown water – approximately 1,000 gpd
3. Reverse osmosis brine wastes discharged directly to the retention pond from floor drains in the RO room – approximately 62,000 gpd
4. The aqueous fraction of oil/water separator effluent treating wastewater received from floor drains within the power generating (turbine) and pump house building (with the exception of floor drains in the RO room). – approximately 10,000 gpd

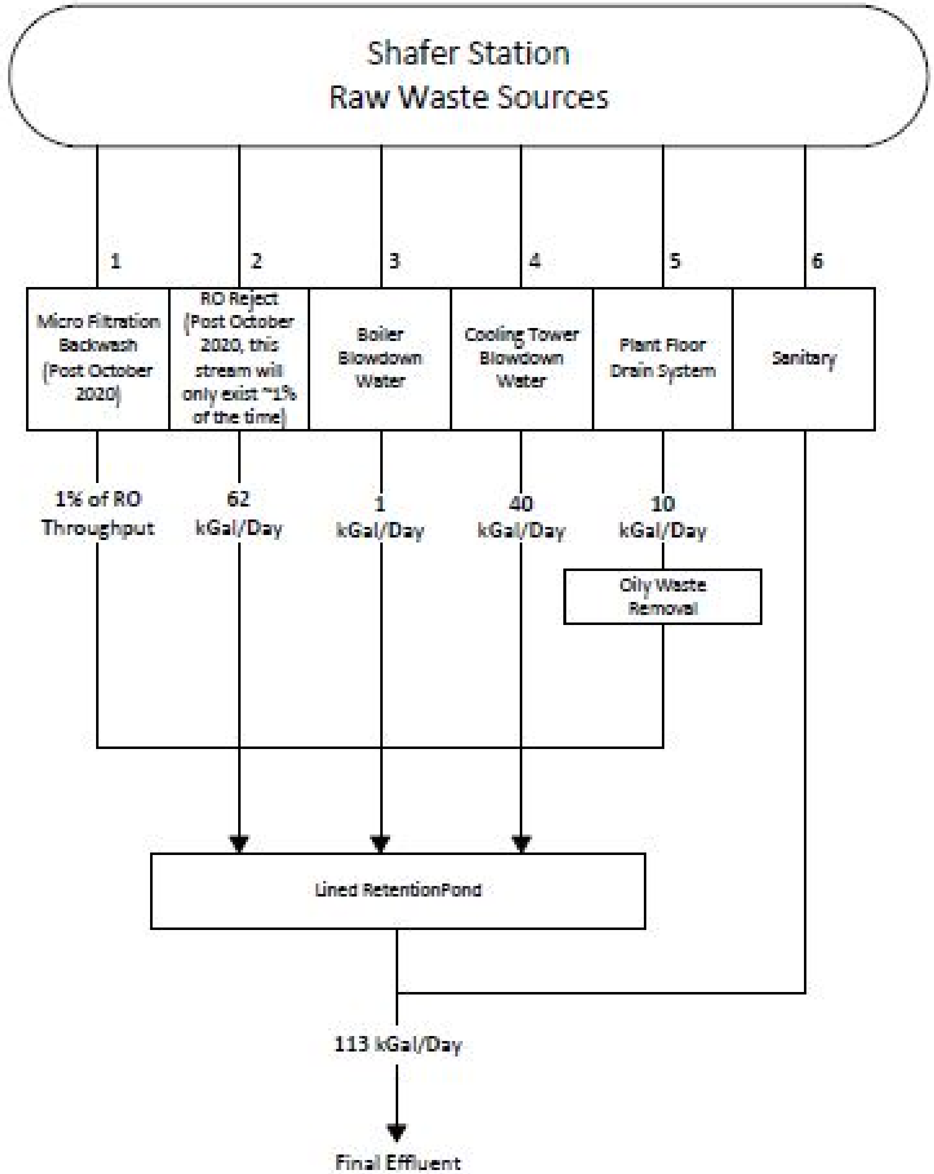

Figure 8 - JM Shafer Flow Schematic Diagram

1.8 Wastewater Treatment and Retention Pond

The floor drains located in the power plant facility, with the exception of the floor drains located in the RO room flow to a below-grade oil-water separator located on the north side of the wastewater retention pond. The oil-water separator is a five-chamber separator that is nominally rated for 144 gpm throughput for the passive separation of the oily and aqueous fractions of the wastewater (Figure 9). The five chambers of the oil-water separator are listed below:

- Oil chamber – 17 gallons
- Separator chamber
- Effluent chamber – 37 gallons

- Influent chamber
- Sludge chamber – 100 gallons

Figure 9 – JM Shafer Oil-Water Separator

The oil-water separator is inspected and maintained once per month. Oily water and sludge are removed from the oil-water separator; the recovered oil from the separator rarely exceeds five gallons, according to information received in the supplemental permit application. A level alarm in the separator is installed to indicate maintenance if needed. The alarms are continuously monitored from the control room.

The lined retention pond located on the south side of the facility's property has an approximate volume of 500,000 gallons and serves as a settling pond for process wastewater received from the facility (Figure 10). The process wastewater is discharged into the retention pond through pipes located on the north side of the pond. Water in the retention pond is released as a non-continuous discharge and is regulated with a control valve located on the northwest corner of the pond. The annexation agreement with the City of Fort Lupton limits the discharge of process water from the facility's retention pond to the POTW to a daily maximum of 430,000 gpd. At times, the facility has requested and received approval from the POTW to exceed the volume in the annexation agreement.

Figure 10 – JM Shafer Process Wastewater Retention Pond, Viewing South

Section 2 Applicable Pretreatment Regulations

The facility is subject to the Steam Electric Power Generating Point Source Category found in 40 CFR Part 423. These regulations are applicable to discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation, and whose generation of electricity results primarily from a process utilizing fossil-type fuel (coal, oil, or gas), fuel derived from fossil fuel (e.g., petroleum coke, synthesis gas), or nuclear fuel in conjunction with a thermal cycle employing the steam water system as the thermodynamic medium. This part applies to discharges associated with both the combustion turbine and steam turbine portions of a combined cycle generating unit.

The facility began operation in 1994 and the facility is determined to be a new source to the Steam Electric regulations (new source date = 10/14/1980). "New source" is defined in 40 CFR § 403.3(m)(1).

2.1 Steam Electric Regulations

The applicable Pretreatment Standards for New Sources (PSNS) are found in 40 CFR Part 423.17(a) and listed below:

(a) *1982 PSNS.* Except as provided in 40 CFR 403.7, any new source as of October 14, 1980, subject to paragraph (a) of this section, which introduces pollutants into a publicly owned treatment works, must comply with 40 CFR part 403, the following pretreatment standards for new sources, and the PSES in §423.16, established on November 3, 2015. In the case of conflict, the more stringent standards apply:

(1) *PCBs.* There shall be no discharge of polychlorinated biphenyl compounds such as those used for transformer fluid.

(2) *Chemical metal cleaning wastes.* The pollutants discharged in chemical metal cleaning wastes shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSNS
	Maximum for any 1 day (mg/L)
Copper, total	1.0

(3) [Reserved]

(4)(i) *Cooling tower blowdown.* The pollutants discharged in cooling tower blowdown shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSNS
	Maximum for any time (mg/L)
The 126 priority pollutants (appendix A) contained in chemicals added for cooling tower maintenance, except:	(1)
Chromium, total	0.2
Zinc, total	1.0

[1]No detectable amount.

(ii) At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the standards for the 126 priority pollutants in paragraph (a)(4)(i) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

(5) *Fly ash transport water.* There shall be no discharge of wastewater pollutants from fly ash transport water.

2.2 Applicability of the Steam Electric PSNS

The following determination and justification of the Steam Electric PSNS found in 40 CFR 423.17(a)(1-5) are based on the characterization of the facility in Section 1.0 of this fact sheet.

2.2.1 423.17(a) – 1982 PSNS

The facility began operations in 1994 and is subject to the PSNS found in § 423.17(a) and established on

October 14, 1980. The facility is also subject to the PSES found in 423.16. The facility is not subject to the 2015 PSNS established by the EPA and found in § 423.17(b).

"2015 PSNS. Except as provided in 40 CFR 403.7, any new source as of June 7, 2013, subject to this paragraph (b), which introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and the following pretreatment standards for new sources:"

The Steam Electric Regulations in 40 CFR Part 423 were updated by the EPA on January 4, 2016 to incorporate new technologies (e.g., gasification) and air pollution controls (e.g., flue gas desulfurization (FGD) and flue gas mercury control (FGMC)) associated with coal-fired plants. These include Pretreatment Standards for Existing Sources found in 40 CFR Part 423.16(e-i) and summarized below. These are not applicable to the facility because it uses natural gas, does not perform gasification and does not generate wastes associated with a coal-fired plant.

- A zero-discharge standard for all pollutants in fly ash transport water, bottom ash transport water, and FGMC wastewater.
- Numeric standards on mercury, arsenic, selenium, and nitrate/nitrite as N in the discharge of FGD wastewater.
- Numeric standards on mercury, arsenic, selenium and TDS in the discharge of gasification wastewater.

2.2.2 423.17(a)(1) – PCBs

The narrative prohibition in this section states "There shall be no discharge of polychlorinated biphenyl compounds such as those used for transformer fluid," which applies to this facility because they have about 76,000 gallons of transformer oil in transformers located in the switchyard. Based on information provided supplemental to the permit application on April 24, 2020, the switchyard was built with PCB-free material and the transformer oil is recycled and not discharged. Since PCBs are not present at this facility, the narrative prohibition in this section does not apply.

2.3 423.17(a)(2) – Chemical Metal Cleaning Wastes

This categorical Pretreatment Standard establishes a copper daily maximum concentration limit of 1.0 mg/L for discharges of chemical cleaning wastes. Chemical metal cleaning is defined in 40 CFR Part 423.11(c) and metal chemical cleaning waste is defined in 40 CFR Part 423.11(d):

(c) The term *chemical metal cleaning waste* means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning.

(d) The term *metal cleaning waste* means any wastewater resulting from cleaning [with or without chemical cleaning compounds] any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning.

The preamble to the 1977 amendments to the Steam Electric Point Source category found in the Federal Register, Volume 42, Number 56, March 23, 1977, pp15690 -15696 states that "metal cleaning wastes are those wastes which are derived from cleaning of metal process equipments. These equipments include, but are not limited to, boiler tube, boiler fireside, and air preheater." The associated development document to the 1977 amendments (Supplement for Pretreatment-Steam Electric Development Document

– April 1977) discusses metal cleaning only in application of the efficiency of heat transfer between the combustion products and the boiler water and states that all metallic heat transfer surfaces tend to either corrode or collect deposits. Both corrosion products and deposits reduce the efficiency of heat transfer and must therefore be removed periodically. According to the April 1977 Development Document:

> There are two main types of cleaning operations: *waterside* and *fireside*.
>
> *Waterside* cleaning consists of cleaning the inside of tubes, and other boiler water passages. Due to the inaccessibility of these surfaces, the only practical and generally accepted method of cleaning is by chemical means. The cleaning typically proceeds in three stages: a bromate soak, an acid cleaning (usually inhibited hydrochloric acid), and finally a passivation stage.
>
> *Fireside* cleaning is more mechanical, consisting of high-pressure nozzles directed against the surfaces to be cleaned. The cleaning solution often contains alkalis to dissolve oil, and grease and detergents to keep the removed material in colloidal suspension. Fireside cleaning is done on both the fireside of the boiler. Similar cleaning procedures are employed on the air preheater. Based on information found on cleanboiler.org, the fireside of the boiler includes all refractories, tubes, tube sheets and the furnace.

The pollutants discharged in chemical metal cleaning wastes shall not exceed a total Copper concentration of 1.0 mg/L. The facility does not discharge wastewaters generated by fireside or waterside boiler cleaning as discussed in the preamble to the 1977 Steam Electric amendments and the associated development document. Therefore, copper is not a pollutant of concern and the categorical Pretreatment Standard found in 423.17(a)(2) is not applicable.

2.4 423.17(a)(3)— reserved.

2.5 423.17(a)(4)(i-ii) – Cooling Tower Blowdown

The daily maximum concentration limits for total chromium at 0.2 mg/L and total zinc at 1.0 mg/L found in 40 CFR Part 423.17(a)(4)(i) are applicable to the facility's cooling tower blowdown. In addition, 40 CFR Part 423.17(a)(4)(i) establishes a limit of "no detectable amounts" for 126 priority pollutants contained in chemicals added for cooling tower maintenance, except at the permitting authority's discretion, instead of the monitoring, compliance with the standards for the 126 priority pollutants may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

The facility submitted engineering calculations for the chemicals used in the cooling system and have provided an adjustment in the calculations to address the new supply of water from the Colorado Big Thompson River (discussed in section 1.2). In addition to the engineering calculations, the facility submitted documentation from the chemical manufacturers to support the engineering calculations.

Based on the EPA's evaluation of the supporting chemical documentation and the engineering calculations, compliance with the standards have been determined by engineering calculations for the 126 priority pollutants, with the exception of mercury (Hg). The March 15, 2020 certificate of analysis prepared for the Chemtrade sulfuric acid (93%) states that Hg analysis is performed daily on the stock tank and shows a Hg concentration of 0.12mg/L with a theoretical maximum of 2.0 mg/L. The engineering calculations show that approximately 10 gallons of sulfuric acid is used daily for cooling tower additions at the facility.

Based on this information, the EPA has determined Hg is a pollutant of concern and the discharge requirements will include a Hg limit and monitoring requirements. The facility is required to provide laboratory analyses to determine compliance with the "no detectable amount" limit. With the exception of Hg, the other priority pollutants have been determined to be in compliance by engineering calculations/supporting documentation and monitoring is waived.

2.6 423.17(a)(5) – Fly Ash Transport Water

The facility does not use coal as its fuel source, therefore, there is no generation of fly ash or transport water. The narrative prohibition in this section does not apply.

2.7 pH, standard units

The specific discharge prohibition found at 40 CFR Part 403.5(b)(2) of the Pretreatment Regulations state the following:

"Pollutants which will cause corrosive structural damage to the POTW, but in no case Discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such Discharges."

Section 3 Pretreatment Requirements

The Pretreatment Regulations found in 40 CFR Part 403 impose Pretreatment Requirements on the facility and its process wastewater 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 Steam Electric Power Generating Point Source Category found in 40 CFR Part 423. The applicable effluent limits are listed in the Steam Electric pretreatment standards for new sources at 40 CFR 423.17(a).

The Pretreatment Requirements apply at outfalls 001 and 002. The Outfalls are defined as follows:

Outfall 001: Discharge of the cooling tower blowdown slip stream. The slip stream enters a small structure located on the southwest corner of the cooling tower basin for monitoring purposes, prior to flowing to the retention pond. (Shown in Figures 6 and 7)

Outfall 002: Discharge of the water in the retention pond to the City of Fort Lupton collection system through a control valve located on the northwest corner of the pond. (Shown in Figure 10)

3.1 Discharge Limitations

3.1.1 Categorical Pretreatment Standards

The Steam Electric Power Generating New Source Categorical Pretreatment Standards found in 40 CFR Section 423.17 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 1 – Steam Electric PSNS – Cooling Tower Blowdown – 40 CFR § 423.17(a)(4)(i)

Pollutant	Outfall 001 (mg/L)	Outfall 002
	Daily maximum	Instantaneous
Chromium, total (Cr)	0.2	N/A
Zinc, total, (Zn)	1.0	N/A
Mercury (Hg)	No detectable amount	N/A
126 priority pollutants (Appendix A), with the exception of Hg	No detectable amount(i)	N/A
pH, std units	N/A	pH shall be greater than 5.0 at all times

(i) At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the standards for the 126 priority pollutants, with the exception of Hg in Table 1, may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

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

3.2.1 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 JM Shafer 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 Steam Electric regulations (40 CFR § 423.17). The facility has a daily discharge that averages about 113,000 gallons per day from monitoring point 002. The EPA is requiring a quarterly monitoring frequency and corresponding reporting frequency to gather an adequate dataset and determine compliance with the Steam

Electric Categorical Pretreatment Standards. The facility is currently monitoring and reporting on a quarterly frequency.

The facility 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 3 – JM Shafer 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

3.2.2 Monitoring Requirements

40 CFR § 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 at outfall 001 is representative of the discharge for the production day. In addition, the facility is required to continuously measure for flow at outfall 001 and flow and pH at outfall 002 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.

The discharges from the facility at Outfalls 001 and 002 are subject to the following monitoring requirements, listed in Table 5.

Table 4 – JM Shafer Monitoring Frequency

Pollutant	Sample Type	Sampling Frequency
Outfall 001		
Flow	Continuously measured	Continuously recorded
Chromium (Cr), Total	Flow proportional Composite (1)	Quarterly
Mercury (Hg), Total	Flow proportional Composite (1)	Quarterly
Zinc (Zn), Total	Flow proportional Composite (1)	Quarterly
Outfall 002		

Flow	Continuously measured	Continuously recorded
pH	Twice daily, one pH sample during each shift.	grab

(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.

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 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.

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

Roy L. Vestal, P.E.
Public Works Director / City Engineer
City of Fort Lupton POTW
130 S. McKinley
Fort Lupton, CO 80621

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.

720-466-6109

Public Notice Period and Response to Comments

The proposed fact sheet and discharge requirements for the JM Shafer Generating Station were public noticed in the Fort Lupton Press on July 22, 2020. During the public notice period, EPA received public comments from the Tri-State Generation and Transmission Association, Inc. (Tri-State) on August 19, 2020. Additionally, based on a phone conversation with EPA, Tri-State provided supplemental information on August 31, 2020, in support of the previously submitted comments for the draft discharge requirements notification #CO-PF00107 and associated supporting documentation (Fact Sheet).

A summary of the Tri-State's comments on the public notice documents include the following:

1. Tri-State requests a change to the continuous pH sampling method at Outfall 002 and a waiver until EPA reviews the request.

2. Tri-State requests documentation in the NDR of the option to apply for reduced monitoring for pH at Outfall 002 after one year of sampling.

3. Tri-State disagrees with the EPA's requirement to use a 24-hr flow proportional composite sampling method for collection of the required quarterly monitoring samples at Outfall 001.

4. Clarification that mercury sampling is only focused on the concentration in chemicals used for maintenance of the cooling towers.

EPA's response to comments are provided below:

<u>Comments received during Public Notice:</u>

1. **Tri-State requests a change to the continuous pH sampling method at Outfall 002 and a waiver until EPA reviews the request.**

August 19, 2020 Comments—

Tri-State disagrees with the EPA's requirement for continuous monitoring as the sampling method for pH at Outfall 002. Discharges from the retention pond are not continuous due to the nature of how the facility is operated and the frequency of cooling tower blowdown. This would mean that much of the continuous data that is recorded may be of stagnant water or during time intervals when the sensor is not fully submerged in water which may result in non-representative data and/or false anomalies in the data records.

Further, conditions and location of the outfall would make installation and maintenance of continuous monitoring equipment problematic and costly. Any installation that would ensure that the probe is always submerged in water would also be susceptible to freezing in the winter, as regional lows can reach to minus 20°F or lower. This would damage the sensor and result in the frequent need to replace costly equipment as well as lead to gaps and/or false anomalies in the continuous data records.

The cooling tower operation is the largest water using facility process. With the completion of the new RO system (anticipated in the next month to two months after which time the new control mechanism is anticipated to go into effect), cooling tower blowdown water will represent approximately 90% of the water stream that is discharged at Outfall 002. Water in the cooling tower is typically adjusted and maintained at a narrow pH range between 7.6 and 7.8 in order to ensure the most efficient operation of the cooling tower, and water is recirculated continuously resulting in the uniform distribution of water quality characteristics in the cooling tower water system. Thus, the pH of the discharge water when flowing would be consistent with normal operational water chemistry range and would show very little daily variation. Therefore, one or two grab samples collected at Outfall 002 during a given day of operation would be representative of the daily pH of discharge water.

Tri-State proposes to conduct a monitoring study of pH at Outfall 002 in order to demonstrate that there is minimal daily variation in the pH of the discharge water at this Outfall. Grab samples will be collected using a hand-held pH meter that is calibrated prior to sampling, and the calibration will be checked after sampling to ensure accurate and valid readings. These pH readings will be maintained in a log, and the resulting data will be submitted to Al Garcia at EPA Region 8 along with a summary of the results of the study. Based on guidance from EPA, Tri-State JM Shafer Station will continue to conduct this pH study through December 31, 2020 in order to provide sufficient data to demonstrate the validity of this method of sampling for pH at Outfall 002 for the purpose of compliance with the discharge requirements in the new Discharge Requirements Notification.

Pending completion of the proposed study and concurrence from EPA of sufficient supporting data, Tri-State requests that, rather than continuous monitoring for pH, the required method for monitoring of pH at Outfall 002 should be twice daily manual grab samples using an approved hand-held pH meter, and that each individual grab sample will be collected during each of the two daily scheduled shifts. This data will be reported quarterly as measured monthly minimum and maximum, and pH data records will be submitted with the quarterly Periodic Compliance Reports as required by the Discharge Requirements Notification Part 3(B).

For the duration of the pH monitoring study and pending a decision by EPA on Tri-State's request, Tri-State requests a waiver from the requirement to conduct continuous monitoring for pH at Outfall 002 and that pH data for quarterly Periodic Compliance Reports will be derived from the twice daily grab samples that are collected for the purpose of the proposed study.

August 31, 2020 Supplemental Comments –

Tri-State disagrees with the EPA's requirement for continuous monitoring as the sampling method for pH at Outfall 002, and submitted comments on August 19, 2020 requesting a change in discharge requirements from continuous monitoring for pH at Outfall 002 to twice daily monitoring at Outfall 002 via grab samples to be conducted once during each scheduled shift. In support of this request, Tri-State provided arguments and documentation related to the uniformity of water quality characteristics in the discharge water and to the cost and challenges relative to the installation and maintenance of a continuous pH monitoring system.

In order to fully consider this request for a change in method of sampling, EPA requested that Tri-State provide supplemental information including frequency of cooling tower blowdown and details related to potential safety and cost issues related to installation and maintenance of continuous pH monitoring equipment at Outfall 002.

1a. Frequency of Cooling Tower Blowdown and Consistent Water Chemistry

As stated in the previously submitted comments, discharges from the retention pond are not continuous due to the nature of how the facility is operated and the frequency of cooling tower blowdown. Historically, pond discharge has consisted of roughly 50% cooling tower blowdown and 50% RO Reject water. As you are aware, the facility is in the process of upgrading the RO system so that nearly all of the RO reject water will flow into the cooling tower as makeup water rather than going directly to the retention pond. Installation of the new RO system will be completed in October of 2020, and following completion, the cooling tower blowdown water will represent approximately 90% of the water being discharged from the retention pond.

The included table (*JM Shafer Cooling Tower 12 Month pH-Conductivity-Blowdown Analysis*) provides hourly continuous data and demonstrates the variability of cooling tower blowdown based on plant operations over the most recent 12 months. These are hourly averages based on data collected in one-minute intervals.

In addition to frequency of blowdown, this table includes hourly pH and conductivity data in the cooling tower with corresponding power production levels. The data in this table shows significant deviations in both pH and conductivity readings during power up and power down operations. These fluctuations are based on reduced flow and/or stagnant conditions in the location of the sensors. These portions of data are outliers and are not representative of the water in the cooling tower water system but rather a reflection of conditions at the location of the sensors at times when the facility is not under normal operating/flow conditions. Tri-State would have the burden of proof for why these portions of data would need to be invalidated as non-representative. This demonstrates one of the challenges that would manifest in a continuous monitoring installation for a water system that is not flowing continuously.

However, when water in this system is flowing over the sensors during normal operating conditions, the data indicates that pH and conductivity are consistent and demonstrate minimal variation. This is due to the consistent operation of the cooling tower, the high buffering capacity of the water in the system (resistant to changes in pH), and the volume of water in the system (approximately 530,000 gallons). Any changes in pH would occur very slowly (even if chemical injection levels are adjusted) due to the time for this volume of water to overcome buffering and stabilize to a new pH reading. Significant changes in pH would not manifest within a 24-hr period, and therefore, two grab samples for pH per day taken during cooling tower blowdown and pond flow at Outfall 002 would be representative of that day's normal operation and discharge. Part 2(A) of the Notice of Discharge Requirements states that "Samples and measurements taken at Outfalls 001 and 002 shall be representative of the volume and nature of the discharge of the production day."

1b. Safety and Cost Concerns Relative to Installation and Maintenance of a Continuous Monitoring of pH at Outfall 002

There are two potential locations at Outfall 002 for installation of continuous pH monitoring equipment, the outfall pipe at the bottom of the retention pond and the vault just north of pond that provides access to the shut off valve and pipes just before they tie into the main wastewater line that flows to the Fort Lupton Wastewater Treatment Facility.

The retention pond has a synthetic liner that is very slick and navigating down to the base of the pond where the outfall pipe discharges would present a safety hazard for both installation and maintenance (calibration and troubleshooting). In addition, there is no way of providing power to that location without running cables over the liner, and that would present numerous issues associated with safety and pond integrity.

The vault that contains the shut off valve and piping is a confined space. The vault is approximately 8 ft deep and requires someone to fully enter the space. This vault is normally accessed approximately two times per year for routine maintenance on the valve. However, calibration, maintenance, and trouble-shooting of a pH sensor (especially in winter months) would potentially require entry into this confined space several times per week. There is always a safety risk in entering a confined space, so the potential exposure to our operators would exponentially increase with the increase in frequency of entry.

In addition, confined space entry protocols require two people to be present. However, during second shift, the number of people at the facility is generally limited to only two operators, and one is required to man the control room at all times. It would not be possible to troubleshoot problems with the pH sensor during second shift, so there is the potential for extended periods of time during which sensor data would be inaccurate due to pH drift or to reduced pond flow, and that would create invalid data records. Again, Tri-State would have the burden of proof for why these sections of data should be invalidated for the purpose of compliance with the control mechanism.

In addition, it would be necessary to build a structure (large enough to allow entry of two or more people) to house the meter itself that would provide secure access to equipment and enable operators to manually download data (if necessary) and do maintenance on the meter and associated equipment. Power and data cables would also need to be connected to the Control Room so that alarms can be set. This in addition to wear and tear on sensors due to extreme low temperatures in the winter would represent major expenses for the facility.

Response to Comment:

Based on the Tri-State comments and the attached *JM Shafer Cooling Tower 12 Month pH-Conductivity-Blowdown Analysis table,* it appears that the cooling tower water pH and conductivity are consistent and there does not appear to be any current additions of chemicals that may cause or contribute to a violation of the pH limit of "pH shall be greater than 5.0 at all times." In addition, because of worker health and safety issues that may arise from maintaining and calibrating a continuous pH monitoring probe at outfall 002., EPA agrees that there does not appear to be adequate justification to require continuous pH monitoring at outfall 002. Tri-State recommended that a pH study be conducted, however, this is no longer necessary. The pH monitoring at outfall 002 will be changed from continuous monitoring to twice daily. The pH monitoring shall be performed once during each shift..

Tri-State will be upgrading the RO system and re-routing nearly all of the RO reject into the cooling tower as makeup water in October 2020. EPA has concerns regarding the impact of this newly introduced makeup water on the existing consistency of pH in the cooling tower. Therefore, in lieu of the pH study, EPA will include a reporting requirement in Part III(I) of the Discharge Requirements to include a cooling tower blowdown analysis for the 1st year of the control mechanism issuance to evaluate the effect of the RO reject water on the cooling tower pH.

2. **Tri-State requests documentation in the NDR of the option to apply for reduced monitoring for pH at Outfall 002 after one year of sampling.**

August 19, 2020 Comments—

Tri-State requests that the option to apply for reduced monitoring for pH at Outfall 002 should be added to the Notification of Discharge Requirements stating that if, after one full year of monitoring for pH at Outfall 002, Tri-State JM Shafer Station demonstrates that pH at Outfall 002 never falls below a pH of 6 (one full pH unit above the lower permitted limit of 5), then the required frequency for monitoring pH at Outfall 002 would be reduced from twice daily to once monthly.

Response to Comment:

The sampling and monitoring frequencies in the notice of discharge requirements are included to gather a record of data and compliance history. EPA considers a typical permit term of 5 years to be an adequate period of data history to perform a compliance evaluation and to determine if reductions in monitoring frequency or type are warranted. Any request to reduce monitoring of pH will be evaluated after a 5-year period.

3. **Tri-State disagrees with the EPA's requirement to use a 24-hr flow proportional composite sampling method for collection of the required quarterly monitoring samples at Outfall 001.**

August 19, 2020 Comments—

Tri-State disagrees with the EPA's requirement to use a 24-hr flow proportional composite sampling method for collection of the required quarterly monitoring samples at Outfall 001 (representing only cooling tower blowdown water).

Part 2(A) of the Discharge Requirements Notice states that “Samples and measurements taken at Outfalls 001 and 002 shall be representative of the volume and nature of the discharge of the production day.” Water in the cooling tower is continuously recirculated and mixed, and the entire volume of the cooling tower water system (approximately 500,000 gallons) is turned over every ten to thirty minutes (varies by season-- see attached cooling tower water recirculation table). Water chemistry is maintained at a uniform and consistent quality to ensure the efficient operation of the cooling tower in accordance with manufacturer specifications and standard utility best practices. Therefore, a sample of cooling tower blowdown collected at any time is representative of the water in the entire cooling tower water system.

Based on supporting documentation that the water in the cooling tower water system is uniform in chemical characteristics and is representative of water that would be discharged during normal operations in a 24-hour time period, Tri-State requests that the required method of sampling for compliance monitoring in the new Discharge Requirements Notification be changed from 24-Hr composite sampling to a single quarterly individual grab sample to be collected during cooling tower blowdown while in normal operations.

Response to Comment:

EPA does not agree that a grab sample of the cooling tower blowdown at any time is representative of the water in the entire cooling tower water system. There is no cooling tower data that directly shows the levels of metals in blowdown water throughout the production day. The 24-hour flow proportional composite sampling requirement will remain in the notification of discharge requirements.

4. **Clarification that mercury sampling is only focused on the concentration in chemicals used for maintenance of the cooling towers.**

The 40 CFR 423.17(d) limits apply only to the 126 priority pollutants that are present in the cooling tower blowdown water as a result of cooling tower maintenance chemicals. The monitoring requirement for Total Mercury is listed due to engineering calculations not meeting the required proof of compliance. However, this parameter still falls under the category of the 126 priority pollutants, and therefore any detectable amounts of this pollutant that may be derived from background or any source that is not from cooling tower maintenance chemicals should not be regulated under this permit. Thus, to avoid any misunderstanding, we request that a fourth footnote be added to the Parameter “71900 – Total Mercury”, below the “Table 1 - Steam Electric Point Source Category PSNS, 40 CFR § 423.17 Discharges to Outfalls 001 and 002” which reads as follows:

The limit for Total Mercury applies to detectable amounts of this pollutant that are present in the cooling tower blowdown as a result of cooling tower maintenance chemicals.

Response to Comment:

EPA agrees and added a footnote to clarify in Table 1 of the discharge requirements that the no detectable amount limit applies to mercury present in the cooling tower blowdown water as a result of cooling tower maintenance chemicals.

5. Request effective date of the new Control Mechanism coincide with the beginning of a calendar quarter

August 31, 2020 Supplemental Comments—

JM Shafer Station is currently in administrative extension of the CDPHE Wastewater Pretreatment Permit #COP-900404 which requires monthly monitoring for chromium and zinc. Monitoring for total mercury will be a new requirement upon activation of the Notice of Discharge Requirements. There is a lead time required between when samples are collected and submitted to the certified laboratory for analysis, and when the report with the sample results is received by Tri-State. On occasion there have been delays in completion of analyses due to lab equipment maintenance issues. In the event that the Notice of Discharge Requirements is activated in the final few weeks of a calendar quarter, there would be very little time to turn around sample results for mercury and be able to meet DMR reporting deadlines. Therefore, Tri-State requests that the new Notice of Discharge Requirements become active on or after October 1, 2020 to allow sufficient time to complete the required quarterly monitoring.

Response to Comment:

The Notice of Discharge Requirements will be signed and effective on or after October 1, 2020.