

REPORT OF THE PRETREATMENT COMPLIANCE INSPECTION
AT

City of Saint Joseph
3500 State Route 759
Saint Joseph, Missouri 64504

NPDES Permit No.: **MO0023043**

BY

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 7

ENFORCEMENT AND COMPLIANCE ASSURANCE DIVISION (ECAD)
WATER BRANCH/DRINKING WATER & INSPECTIONS SECTION (WB/DWIS)
ON

April 30 through May 3, 2024

At the request of the Water Branch (WB), Enforcement and Compliance Assurance Division (ECAD), a Pretreatment Compliance Inspection of the Saint Joseph Approved Industrial Pretreatment Program (IPP) was conducted on April 30, May 1, 2, and 3, 2024. To direct the inspection, a checklist was used that evaluates all important elements of the Pretreatment Program. A copy of the checklist is attached to this report (Attachment 1). The inspection consisted of a discussion with the IPP personnel and file review of the IPP's program records, and visits to three of the IPP regulated industries: Mosaic Life Care-Laundry facility, the South Saint Joseph Industrial Sewer District facility, and Triumph Foods facility. In addition, I conducted a brief file review of the city's Biosolids Management Program (Sludge). This narrative report presents the findings of the inspection. Denise Eagan with the Missouri Department of Natural Resources was present during the PCI.

Participants

City of Saint Joseph IPP

- Becky McIntosh, Environmental Services Supervisor
- Eddie Leaverton, Superintendent WPF
- Billy Nolan, Operation Manager
- Kori Wilburn, Asst. Environmental Services Supervisor
- Jason Betts, Asst. Environmental Services Supervisor

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Mosaic Life Care-Laundry

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South Saint Joseph Sewer District (SSJSD)

- Chad Coleman, Plant Manager
- Tiffany Eidson, Laboratory Technician

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Triumph Foods

- Stephen McFarland, AVP & General Plant Manager
- Allen Poe, Sr. Director of Engineering
- Paul Gnomes, Lead Operator
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Missouri Department of Natural Resources KCRO

- Denise Eagan, Engineering Unit Chief

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U.S. Environmental Protection Agency (EPA), Region 7

- Naji J. Ahmad, Environmental Engineer, ECAD/WB/DWIS

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Facilities Description

The city of St. Joseph owns and operates one Water Protection Facility (WPF) located in the southern portion of the city, 5 major lift stations: Whitehead, Faraon Street, South Saint Joseph, Browns Branch, and Easton Road, 10 smaller lift stations, and the sewage system at the Rosecrans Memorial Airport consisting of: 6 lift stations, package plant with equalization basins that replaced the three-cell lagoon treatment in 2021. The wastewater conveyance system which consisted of 109 miles of pipelines and 21 lift stations, contains a combined sewer system on the west and a separated system on the east. Approximately 50% of the collection system is combined sewers.

The WPF is operating under the Missouri National Pollutant Discharge Elimination System (NPDES) Permit Number MO-0023043 permit that was last issued on December 1, 2020, and will expire on November 30, 2025. According to the permit, the WPF has a design population equivalent of 250,000, design flow of 27.0 million gallons per day (mgd), an actual flow of 12.5 mgd, and an annual design sludge production of 10,000 dry tons. According to the IPP personnel, the WPF has a design peak flow of approximately 32-35 mgd of domestic flow and it can reach 54.0 mgd with the wholesale industrial user's flow. The average actual daily flow in 2023 was 18.743 mgd. Majority of the generated biosolid from the WPF is sent to a landfill, the rest is land applied as Class A. treated effluent discharges into the Missouri River within the Independence-Sugar watershed.

It was noted during the final local limits evaluation (Attachment 2) that the WPF is seeing a reduction in the domestic influent flow discharged to the WPF due to the completion of the Blacksnake and Whitehead diversion projects. These projects separated existing creek flow from sanitary flow resulting in a decrease of flow to the WPF. The WPF is divided into two treatment trains,

Domestic Treatment Train: is the domestic waste, although it receives industrial waste from the collection system and enters the facility at the "headworks." This wastewater is screened, grit is removed, and treated with primary treatment and Biological Nutrient Removal (BNR). This train consists of: Influent pump station; two bar screen; two grit removal; Hauled Septage; three primary clarifiers; intermediate pump station; three BNR aeration basins; two final clarifiers; ultraviolet (UV) disinfection system; and high-water effluent pump station.

Influent wastewater from the diffused air floatation unit, and the supernatant from the digesters presses enters the influent pump station. Wastewater from the hauled septage is also pumped to the influent pump station after it goes through a bar screen and grinder. The flow is then split evenly between the two bar screens at the headworks. Then flow from Bar Screen #1 goes to Grit Removal #1 and Bar Screen #2 to Grit Removal #2. Then the flow is split between the three

domestic primary clarifiers. The flow from the primary clarifiers is then gravity flowed to the intermediate pump station. The intermediate pump station is also the overflow for the Wholesale Industrial Treatment Train (ITT) when it is over 5 mg and the filtrate from the belt. The flow is then pumped to the three BNR aeration basin. After the aeration basins, it is split between the two final clarifiers. The flow is pumped to the UV disinfection system where it meets with wastewater from the industrial treatment train. After disinfection, the effluent is pumped to Outfall #001.

Wholesale Industrial Treatment Train: receives the waste from three major industrial users: National Beef Leathers, Triumph Foods, and South St. Joseph Industrial Sewer District (SSJISD). Wastewater generated from the three industrial users is pretreated before being discharged to the WPF. Those three users have direct connections to the ITT. National Beef and Triumphs' influent mixes at the splitter box before entering the industrial primary clarifier. SSJISD is piped directly to the industrial primary clarifier. If the flow that leaves the SSJISD WWTF is above 5 MG, the overflow will be diverted to the intermediate pump station. The flow is then split between the three industrial BNR aeration basins. Wastewater from the domestic primary clarifiers can be pumped to the aeration basins to help with alkalinity if needed. After the aeration basins, the flow is evenly split to the final two industrial clarifiers. The wastewater is combined with the domestic wastewater at the UV disinfection. The wholesale industrial train consists of: One primary clarifiers; Three BNR aeration basins; Two final clarifiers; Mixes with domestic at UV disinfection system.

Both treatment trains undergo final clarification before being combined, disinfected, and discharged to the Missouri River. Primary and waste activated sludge generated in the treatment process are thickened and undergo both thermophilic and mesophilic anaerobic digestion and drying. The final product is Class "A" bio-solids that is given away to contractors for use as either fertilizer, unrestricted use as a soil conditioner or hauled to the landfill for disposal.

Industrial Pretreatment Program Overview

The city of Saint Joseph approved Industrial Pretreatment Program (IPP) was originally approved on February 28, 1983. The authority to enforce the IPP is listed under Chapter 29, Article IV, Division 3 of the Saint Joseph code of ordinances¹.

On June 1, 2021, the IPP submitted a written technical evaluation of the need to revise local limits to the Missouri Department of Natural Resources (MDNR) pursuant to the requirement of 40 CFR122.44(j)(2)(ii) and Special Condition #18(b) of the NPDES Permit Number MO0023043 which required the IPP to submit to the MDNR the evaluation under 40 CFR 403.5(c)(1) by June 1, 2021. The evaluation analysis included maximum daily limits for Maximum Allowable Industrial Loadings (MAIL) for pollutants of concern.

The reevaluation of Technically Based Local Limits was finalized on October 1, 2021, and approved by the MDNR on November 30, 2021 (Attachment 2). However, after the evaluation, the city elected that limits be changed from concentration-based limits (mg/L) to mass-based

1. https://library.municode.com/mo/st._joseph/codes/code_of_ordinances?nodeId=PTIICOR_CH29UT_ARTIVSESEDI_DIV3SEUSRERU

limits (pounds per day) and on April 3, 2023, the mass-based local limits were incorporated by ordinance No. 3062 under Section 29-157.

Table 1 lists local limits as MAIL and Table 2 lists the maximum permissible concentration as included in Section 29-157 of the city code of ordinances.

**Table 1, Maximum Allowable Industrial Loading (MAIL)
(In pounds per day)**

Pollutant	Daily Maximum	Pollutant	Daily Maximum
Arsenic	1.56	Cyanide	14.04
Cadmium	0.76	Nickel	14.47
Chromium	16.0	Molybdenum	2.08
Copper	36.03	Selenium	0.91
Lead	5.97	Silver	44.33
Mercury	0.37	Zinc	68.94

**Table 2, Maximum Permissible Concentration
(In milligrams per liter (mg/L))**

Pollutant	Daily Maximum	Pollutant	Daily Maximum
BOD	1000	TSS	1,200
Ammonia	100	FOG	200
Sulfide	0.5	pH	5.0-10.5 SU

The MDNR required the city to ensure all industrial users permits reflect these changes pursuant to the EPA 's Local Limits Development Guidance and amended the NPDES (Attachment 3).

The allowable mass-loading for permitted industries was allocated using the MAIL and the maximum permitted flow of the respective industry was reflected in the industrial permits. Industrial users received a site-specific loading based on data provided in the permit application as well as sampling data collected at the industrial user. Attachment 6 to this report lists the dates when industrial permits were updated by the IPP to include the new allocated mass-based local limits.

Industrial Waste Survey and Significant Industrial Users

The IPP plans is to conduct an industrial waste survey every five years. Records indicated that the last formal IWS was completed in 2020 while evaluating the local limits. IPP personnel mentioned that they send out the wastewater survey every five years and they are in constant communication with the saint Joseph Permitting Program which notifies the IPP if any new industries or restaurants are coming to town.

Currently, there are thirty-two significant industrial users (SIU) regulated and permitted by the IPP. Of those 32 SIUs, twenty industries are subject to one or more federal categorical standard (CIUs), four are zero-discharging CIUs. All SIUs, but Ultra Clean Midwest, are located within

the city limits, and all have current permit.

Ultra Clean Midwest is a categorical industry subject to the Metal Finishing Standard 40 CFR 433.15 and permitted under a Wastewater Acceptance Agreement No. STJ-A001 (Attachment 8) to haul a maximum of 2,500 gallons per month, one load per day and up to six loads per month.

The city is currently working on evaluating two new industries. Heartland Ag and Integrated Proteins. Heartland Ag is an existing facility that was operating under the wrong city code as a warehouse, but in reality, it was a production facility that is subject to the Meat and Poultry Production categorical standard 40 CFR 432. Integrated Proteins is under construction and in the process of installing a clean out to start the 90-day baseline monitoring report.

During review of the list of industrial users, I noticed the St. Joseph Landfill was dropped from list. The landfill is a city owned facility that is subject to Landfill Categorical Standard 40 CFR 445. The landfill continues to haul leachate to the WPF and send monthly report of the amount discharged. The 2012 EPA indicated that the landfill was listed as CIUs but going back to the 2021 IPP annual report the landfill was not listed. Records did not include justification on why the Saint Joseph Landfill was dropped from the list.

HPI Products, Inc.-Florence Road and HPI Products, Inc.-Sylvanie Street facilities were removed from the list and will no longer be a permitted due to the cease-and-desist order in 2020. In June 2023, the EPA Superfund Program began the removal assessment phase at the HPI facilities.

As mentioned above, the SSJISD discharge is piped directly to the WPF Industrial Train's primary clarifier with an average daily flow of 1.6 million gallons per day. The SSJISD receives flow from sixteen IUs who are located within the boundaries of the district. The Saint Joseph IPP is currently regulating nine of those sixteen IUs that discharge directly to the SSJISD. The nine SIUs/CIUs with their daily average flows are listed in Table 3 below.

Table 3, Industrial Users discharging to the SSJISD and permitted by the IPP

Facility	SIU/CIU	GPD	Facility	SIU/CIU	GPD
Ag Processing	SIU	150,000	Omnium LLC	CIU 455	17,000
Albaugh LLC	CIU 455	2,000	Silgan Containers	CIU 465.4	50,000
BHJ USA	SIU	13,000	St. Joe Express	CIU 442	3,000
Daily Premium Meats	SIU	56,000	Ventura Foods	SIU	36,000
Nestle Purina Petcare	SIU	500,000			

The SSJISD provides primary treatment of industrial wastewater. The primary treatment system consists of a gravity collection system, gravity screen, wet well, pump station, two grit basins, four sludge settling basins, an equalization basin and a Parshall flume with sampling location.

The SSJISD is also permitted by the IPP as a SIU under permit number STJ-0021(Attachment 9). The permit includes daily flow volumetric discharge limits as listed in Table 4 below, and requires semiannual self-monitoring of metals, biological oxygen demand (BOD), ammonia, oil and grease, sulfide, total suspended solids (TSS), and total kjeldahl nitrogen (TKN). Priority

Pollutants, as defined in 40 CFR §423, Appendix A, excluding asbestos shall be sampled once during permit cycle. The permit also includes a compliance schedule to install additional pretreatment or source reduction equipment to meet the sulfide daily maximum limit of 0.5 mg/L.

Table 4, SSJISD Daily Volumetric Discharge Limitations

Outfall	Parameter	Flow Rate	Sample Frequency	Flow Duration	Sample Type
#001	Flow (discharged)	5.0 MGD	Continuous	Daily	Meter
		12,000 gpm		1 Hour	
		10,000 gpm		2 Hours	
		8,000 gpm		6 Hours	
		6,000 gpm		12 Hours	
		4,000 gpm		18 Hours	
		3,472 gpm		24 Hours	

During the PCI, I pointed out to the IPP personnel that the city regulates, and issues industrial pretreatment permits to industries that don not discharge directly to the WPF. I also pointed out that since the SSJISD handles wastewater treatment of industrial process by-products that come from the sixteen industries and potentially receives a wide variety of hazardous and non-hazardous industrial wastes, it may be subject to the Centralize Waste Treatment Categorical standard 40 CFR Part 437.

IPP personnel were unable to justify why those nine industries are being regulated and permitted by the saint Joseph IPP when thy don't directly discharge to the WPF.

It should also be noted that the total flow from SSJISD was used in the TBLL analysis instead of total flows from the nine industries listed in Table 3.

Dental Offices

Pursuant to the Dental Offices (Amalgam rule) 40 CFR Part 441, in 2023 the IPP reported that they have received and reviewed the One Time Compliance Report (OTCR) from 27 dental offices during the period of 2020-2023 (Attachment 1). No new offices have been identified since.

Hauled waste

The IPP authority to regulate, issue permits, impose local limits and categorical limits, and sample hauled waste is defined under Section 29-167 of the ordinance. The WPF accepts a maximum of 6,000 gallons of FOG waste and 90 to 200 (1,000 gallons) loads of hauled waste per month of septic waste. The IPP uses the WIMS program to track hauled waste. Currently the IPP has seven permitted waste haulers. FOG/domestic waste is accepted through a septage receiving building equipped with screen and grit removal system. The WPF continues to accept leachate form the St. Joseph Landfill and industrial waste from Ultra Clean Midwest.

To ensure no hazardous waste is received at the WPF, each hauler must submit a completed

Septage Hauler Disposal Record form showing the source of the waste. Currently, no sampling is done for non-industrial hauled waste to verify the hauled waste content. However, the IPP has the authority randomly sample under Section 29-167 (c) of the SUO. Occasionally staff would visually inspect truck content.

The Septage Hauler Disposal Record Form (Attachment 14) includes the following requirement: "The septage hauler must complete the "Septage Hauler Information" section. If the source of the waste is industrial, the industry must complete the "Waste Source" section. All industrial discharges must receive prior approval from WPF before discharging. In addition, a WPF Operator must be present during any waste discharges at WPF. This form must be completed for each load pulled from each location by the septage hauler whether residential or industrial!"

The city also has the ability under Section 29-166 to control and enforce a fat, oil, and grease Program (FOG). The FOG program was established in 2012, and its implementation responsibility is delegated to Becky McIntosh, Environmental Services Supervisor/IPP Pretreatment Coordinator. The city has around 500 Food Service Establishments (FSE) and dedicated two full time inspectors that are able to inspect all FSE annually. The program is funded by sewer rates.

Permits

All industries have current permits and the IPP issue permits with durations not to exceed five-years. Section 29-190 requires permits shall be issued for a specified period not to exceed five years and the industrial user shall apply for permit reissuance a minimum of 180 calendar days prior to the expiration of the user's existing permit. Permits appeared to contain terms and conditions as described in Section 29-187 of the city code. IPP personnel indicated that the city used to issue (may continue to do so) permits with a three-year duration to CIUs, one or two-year duration permits to zero discharge facilities, and the four-year duration to other SIUs. Records indicate, however, soon after the city adopted the new mass-based local limits on April 3, 2023, the IPP modified industrial permits in October 2023 to include such limits (Attachment 6). City records also indicate that permits appeared to be issued with a five -year durations (Attachment 11).

Industrial permits include categorical and local limits (if a CIU), clearly identifies sampling location(s), monitoring and reporting frequencies, include standard conditions, and require the development of an accidental or Slug Discharge control plan. Overall, permits appeared to contain the necessary elements that should be included in an enforceable permit.

As mentioned above, the allowable mass-loadings for permitted industries were allocated using the MAIL and the maximum permitted flow of the respective industry was reflected in the industrial permits. Permits include a site-specific mass limit based on data provided in the permit application as well as sampling data collected at the industrial user.

During the file review of the Ultra Clean file, we noted that the Ultra Clean agreement is issued for one year and administratively continued for 4 years. The State has explained that permits cannot be administratively continued for more than one year? and not to exceed a total of five years.

Additionally, we were unable to verify the mass-based local limits pollutant allocation to the industry from the provided spreadsheets and the file was missing some of the documentation that was used for calculating the local limits. The spreadsheets did verify that the assigned local limit was more stringent than the categorical standard for daily maximum. The spreadsheet had the same limits as the control mechanism but not how the limits were calculated as the numbers were directly typed and not the result of a formula. The permit still uses the categorical concentration limits for monthly averages. Flows are based on one truck load of 2,500 gallons. The industry is limited to 6 truckloads per day. The permit also specifies that the conventional limits need to be sampled once per agreement cycle (5 years) and it was sampled in 2020.

Inspections, Compliance Monitoring, Self-Monitoring, and Reporting

The IPP Coordinator (PC) and two full time Assistant Environmental Services Supervisors are dedicated to conducting industrial inspections, manage industrial permitting, review semiannual reports, and conduct industrial monitoring. All regulated industries were inspected during the past 12 months. Inspections consisted of facility walkthrough, file review, and conducting compliance sampling. Inspection reports included cover letters to the industry and a 9-page checklist. Overall, inspection reports appeared adequate, but the checklist needs to have a description of the industrial process and monitoring method and evaluation of the monitoring method and verification of wastewater flow rate. Inspectors evaluated the spill/slug control plan during the inspection and included the determination in the inspection report.

Industrial users are sampled annually by the IPP. The IPP also sample major contributors daily for surcharge purposes. Self-monitoring and reporting are described in detail in the industrial permits. The IPP does not perform industrial user monitoring in lieu of industrial user self-monitoring. Sampling frequencies are daily, monthly, quarterly, and semiannually.

According to the IPP personnel, the IPP utilizes two separate systems in WIMS to enter all monitoring data. One is to enter all semi self-monitoring data and one to enter inspection report/annual compliance monitoring data (Attachment 12). WIMS flags permit parameter exceedances.

All industries that are monitored for daily for surcharge billing receive an automated nightly email by 5:00PM that sends them 90 days of effluent data report and are required to review the report and make notifications to the IPP of any exceedances from this report within 24 hours (Attachment 13). If there are no violations, they do not need to respond to the nightly email. If they do not report to the IPP, then the industry receives a non-notification penalty.

Currently the IPP monitor Hillshire, National Beef, SSJISD and Triumph (wholesalers plus Hillshire) daily for surcharge billing. ICM-South is monitored three times a week and ICM-North is monitored Monday through Friday. All other industries are monitored once per year during the annual inspection period and required to submit semi-annual compliance reports with self-monitoring data. Most of the industries monitor three days per half year with the categorical metal industries doing one day per quarter to align with tank draining's.

IPP personnel mentioned that all IUs are required to resample and submit results within 30 days following a violation (per 403.12(g)(2)) of self-monitoring sampling. The IPP however During the annual inspection/compliance monitoring, if the city samples and result comes back a violation,

they do not require the industry to resample within 30 days.

During the September 2023 PCI, the MDNR noted that the city failed to sample for all regulated parameters as required by 403.8(f)(2)(v) and required the city must submit a statement to the MDNR-KCRO indicating that they will sample for all regulated pollutants and how they plan to analyze pollutants if their on-site laboratory is not capable of analyzing for the pollutant. The IPP initiated (Attachment 6) sending off testing to a third-party testing laboratory for any pollutant they cannot process in-house. Metals are done in house, but cyanide and mercury are sent out, and pH analysis is done in the field with portable probe.

Enforcement

Section 29-217 of the city code authorizes the IPP program to take enforcement action against any user that violates the terms permit, local, state, or federal pretreatment standard or requirement as set out in Section 29-218. Section 29-218(i)(1) allows the city to impose fines between a minimum amount of \$1,000.00 per day, per occurrence up to \$37,500.00 per day per occurrence to conform with 40 CFR 403.8(f)(vi)(A) requirements. Such fines shall be assessed on a per violation, per day basis. In the case of monthly or other long-term average discharge limits, fines shall be assessed for each day during the period of violation. In 2017, the city developed a written Fine Matrix to help calculating fines (Attachment 15).

The city's current Enforcement Response Plan (ERP) was approved in 2016 (Attachment 16). The ERP appeared to be adequate and contains the necessary elements to take the proper enforcement action. The ERP requires all identified violations will be documented and initial enforcement will begin within five days of receiving information indicating a violation exists, and all required Notices of Violation (NOVs) must be sent within fifteen days of detection of a Violation. Follow up actions for continuing or reoccurring violations must be taken within 60 days of the initial enforcement response. The ERP also requires that the user respond to the NOV within fifteen calendar days with an explanation of the Violation and a plan for the satisfactory correction and prevention of repeat Violations.

Based on our file review and discussion with personnel of the IPP, it was apparent that they are well aware of the requirements of the ERP and enforcement. It was also apparent that all pretreatment coordinators are in constant contact with the WPF laboratory. In general, it takes the city approximately ten to fifteen days to determine compliance from the sample results, write the NOV, and calculate the fine. This is a significant improvement from previous EPA audits. Becky McIntosh, Environmental Services Supervisor and Billy Nolan, Operation Manager can sign the NOVs in lieu of Eddie Leaverton, Superintendent of WPF. All IPP personnel have the knowledge to calculate and determine industry compliance statutes. IPP personal will review monitoring data from the WIMS and manually calculate compliance statutes.

On March 8, 2024, the city published Ag Processing, Altec Industries, BHJ USA, Clarios DUF Assembly Plant, Gray Manufacturing, I&M Machine, SSJISD, Triumph Foods, Ultra Clean Midwest, and Mosaic Life care Laundry in the St. Joseph News-Press for being in SNC during the 2023 calendar year.

In 2023, the IPP initiated enforcement actions and issued fines to the following industries:

1. Ag Processing. Inc: 1st half SMR, NOV Monitoring Violations. Fine issued \$8,000.
2. Altec Industries: pt half SMR, NOV O&G exceedance. Fine issued \$1,500.
3. BASF: 1st half SMR, NOV reporting issues. 2nd half SMR NOV, flow exceedances.
4. BHJ: 1st half SMR, NOV reporting violations. Fine issued \$1,000. 2nd half SMR, NOV ammonia exceedances. Inspection, NOV, Ammonia exceedance.
5. Boehringer Ingelheim Animal Health: Inspection NOV, sulfide exceedance.
6. Clarios. LLC (Distribution Center): 2nd half SMR, NOV, monitoring violation. Fine issued \$500.
7. Clarios. LLC (DUF Assembly Plant): 1st half SMR, NOV, sulfide exceedance and monitoring violation. Fine issued \$2,000.
8. Dailys Premium Meats: 2nd half SMR, NOV, reporting violations. Fine issued \$1,500.
9. Gray Manufacturing Company. Inc: 1st half SMR, NOV, monitoring violations. Fine issued \$750.
10. Hillshire Brands Company: 1st half SMR, NOV, TSS exceedance. Fine issued \$500. 2nd half SMR, NOV, Ammonia & BOD exceedances. Fine issued \$2,250. Inspection, NOV, failure to submit required documents. Fine issued \$500.
11. Hillyard Industries. Inc: 1st half SMR, NOV, sampling violations. 2nd half SMR, NOV, permit violations.
12. I&M Machine and Fabrication; 1st half SMR, NOV, monitoring violations. Fine issued \$1,000. 2nd half SMR, NOV, monitoring violation. Fine issued \$1,000.
13. Mosaic Life Care: 1st half SMR, NOV, sulfide exceedances.
14. Mosaic Life Care Laundry Facility: 1st half SMR, NOV, monitoring violations. Fine issued \$28,125. 2nd half SMR, NOV, flow exceedances. Fine issued \$108,750.
15. National Beef Leathers: 1st half SMR, NOV, monitoring violations. Fine issued \$200.
16. Nestle Purina Pet Care: 1st half SMR, NOV, monitoring violation.
17. Omnium. LLC: 2nd half SMR, NOV, flow exceedances.
18. Nestle Purina Technology Center: 2nd half SMR, NOV, exceedances. Fine issued \$1,000.
19. Rite Pack: Inspection, NOV, TSS exceedance.
20. Seaboard Energy Missouri. LLC: 1st half SMR, NOV, exceedances. Fine issued \$7,750. 2nd half SMR, NOV, sulfide exceedances.
21. South St. Joseph Industrial Sewer District: 1st half SMR, NOV, sulfide exceedances. Fine issued \$1,000. 2nd half SMR, NOV, sulfide exceedances. Fine issued \$4,500.
22. Triumph Foods: 1st half SMR, NOV, exceedances. Fine issued \$16,000. 2nd half SMR, NOV, exceedances. Fine issued \$21,000.
23. Ultra Clean Midwest: 1st half SMR, NOV, nickel exceedances.

Data Management

Overall, industrial files have all the necessary documentation as recommended by the Agency checklist. Each file consisted of permit and permit renewal applications, inspection reports, monitoring reports, and correspondence between the IPP Coordinators and the industry. Records are well kept electronically and in hard copy at the IPP office at the WPF. Hard copy files are kept in a locked room. Records are maintained for more than three years and are available for public review.

Industrial Visits

Becky McIntosh, Kori Wilburn, Jason Betts, Denise Eagan, and I visited three of the regulated industries.

South St. Joseph Industrial Sewer District (SSJISD)

The industry exceeded the sulfide limit during the first and second halves of 2023. The city issued NOV(SNC) and collected \$5,500 in fines. The first half of 2022 also shows sulfide exceedance. The industry requested a variance on the sulfide. Currently the city has a project to line the force main from SSJISD to prevent any corrosion. The industry installed aerators to help with the sulfide, but it was not enough to prevent the exceedances. They had intermittent issues when sulfide.

We arrived at the SSJISD around 10:00AM. We observed a sign that say the business was established in 1963. I established the purpose of the visit and how SSJISD was a repeat significant noncompliance (SNC) on the annual report due to high sulfide and how is the industry showing that they are working to achieve compliance. We discussed how there was a possibility that the SSJISD might fall under the Centralize Waste Treatment Categorical standard 40 CFR Part 437. Mr. Chad Coleman, General Manager, stated that they had considered installing activated sludge or secondary treatment but decided against it to keep the BOD high for the WPF. They added aeration treatment and noticed a significant reduction in sulfide after the addition of aeration. The aeration was installed in the sedimentation basins. Mr. Coleman mentioned that they were considering chemical treatment (hydrogen peroxide) but he was not in favor of having chemicals stored n site.

Mr. Coleman believes that the high sulfide is due to the water supplied by Missouri American St. Joseph that is high in sulfates. Also, the received industrial waste is high in BOD causes high sulfates. SSJISD does not take consistent influent samples. They ask their industries to treat down the sulfide to 0.5 mg/L. But when it hits the treatment plant the sulfides are about 2 mg/L. They are considering redoing their agreements with their industries and considering surcharges for high strength waste for their customers. AGP, St. Joe Express, BHJ, and Ventura are the causes of the high sulfide. St. Joe express washes the semi-trucks from AGP who hauls soybean oil. SSJISD knows that their industrial users are the issue and do not want the St. Joseph IPP to enforce the high sulfide on the industries that discharge to them and are regulated by the IPP. BHJ has the highest strength waste but low flow. High sulfide, high ammonia, and TKN. Ventura foods has high sulfide (10 mg/L or greater) but has low flow. BHJ varies from 20 to 100 mg/L for sulfide. Sixteen industries discharge to SSJISD. SSJISD will redistribute fines imposed on them by the St. Joseph IPP onto their industries. Mr. Colman indicated the Board of the SSJISD is thinking of obtaining a NPDES permit from the MDNR to directly discharge to Missouri River. Mr. Colman states that he submits a sludge report to the MoDNR but was unaware that he needed to submit a sludge report to the EPA.

Ms. Tiffany Eidson, Laboratory Technician, escorted us on a facility tour. We started the tour at the mechanical bar screen. After the solids are removed the wastewater flows to a wet well where aeration is added. The wastewater is then sent to the two grit tanks where one is in operations at all times. Each grit tank is split by a baffle wall to create two parallel grit tanks. The beginning of each tank is aerated with diffusers. Then the wastewater settles in the settling basin (portion of the grit tank). Solids and scum are sent to the lagoon for additional settling before land application. They

use concrete barriers for baffling in the lagoon. Ms. Edison pointed out the composite sampler locations for their sampling and the city's sampler. We pointed out to Ms. Edison one unused grit tank had black wastewater in it. She indicated it is used for stormwater collection.

Overall, the SSJISD facility is in a very poor physical/structural condition

Mosaic - Laundry Facility

The IPP issued an NOV (SNC) for flow exceedances with fine of \$108,750.00 during the second half of 2023. The industry requested to use their influent water flow meter from Missouri American St. Joseph instead of their effluent flow meter and use their effluent flow as their verification meter. The industry is avoiding paying the fine of \$108,750.00 even though the industry previously paid a fine of \$28,125.00 for monitoring violation (SNC) during the first six months of 2023.

We met with Mr. Sean DeWeese who operates the wastewater system. I explained the purpose of the visit as why there are issues with measuring the flow leaving the facility, why the industry is avoiding paying the fines imposed by the IPP, and what is the justification for asking for another extension to the deadline to pay fine.

The visit started by Mr. DeWeese escorting us a tour of the facility which includes dirty laundry that is sorted and placed into the washing system and explained that the pretreatment system involves a screening system and a holding pit with a sump pump that is outfitted with an overflow pipe. The industry has a variance that allows them to discharge a pH of 11.0 SU.

Currently there is no other treatment besides screening and holding but they are considering the addition of pH adjustment system. The overflow from the pit includes continuous pH monitoring and continuous flow monitoring. Mr. DeWeese stated the high pH of the waste was causing issues with the flow meter including higher than normal flows and discharges when the industry is not in operation. He added that the flow meter was giving wrong readings due to the lack of calibration. He added that he doesn't believe the readings of the flow to the WPF are true and that is part of the penalty appeal. Since the first appeal, the industry calibrated the flow meter and obtained a new water meter from Missouri American St. Joseph and want to use it to document the flow leaving the industry. The water company will provide the industry with a login to a portal so they can see the amount of flow daily purchased from the water company. I mentioned to the Mr. DeWeese, that the facility should be using the actual readings from meter at the outfall not the meter that measure the incoming water. I added they can use both meters for comparison only. I also added that the IPP should include in the permit a more frequent flow meter calibrations to avoid future faulty measurements.

The industry has received notice of violation (NOV) for failure to report high flows within 24 hours of knowledge of the violation. Mr. DeWeese stated that it was his fault as he did not think the high flow was an accurate reading and was not an issue. Industry filed an appeal then for an extension due to upper management changes. The industry is trying to avoid paying the imposed fine by the IPP by having new vice president of Mosaic to discuss it with the City Manager.

Triumph Foods LLC.

The industry is in SNC and received NOV and issued fines of \$37,000 for exceedances during first and second halves of 2023.

We met with their representatives which included Mr. Stephen McFarland, Mr. Allen Poe, Mr. Paul Gnomes, and Richard Allwood. We discussed their compliance issues. Triumph representatives stated that they are in progress of installing an additional DAF which will operate in series and help with solids removal. They are working on a dewatering screw as a pilot/test unit which will take out the sludge and solids and wring out the grease and water. Afco is being used to balance the polymer to have better floc. They used a 12-hour aliquot sampler to determine the amount of disinfectant going to the wastewater and if it's affecting the wastewater. Started an awareness plan about dumping disinfectant down the drain. I recommended the city and Triumph should work on a compliance schedule with timeline to reach compliance. The industry explains what can be done and agreed to establish a timeline with the city. A couple of exceedances due to an upset. One was a pilot test with Afco where a polymer did not work and caused issues. Triumph should always need a justification as to why they are not reporting noncompliance withing the 24 hours mark. After the discussion Mr. Allwood lead us on a tour of the wastewater treatment. The process consists of Rotoshear rotary screens, DAF 1 which is used as holding, FEB 1, DAF 2, FEB 2, DAF 3A and eventually DAF 3B before leaving through the city tank. All solids and grease pulled from the system are send to rendering. Solids after the rendering process are land applied.

Sludge Quality

One function of the Pretreatment Program is to protect the city's sludge from metals contamination. As part of this inspection, the 2022 and 2023 annual biosolids reports were reviewed to determine the Pretreatment Program's effectiveness.

In 2022, the city produced 1,442.66 dmt, gave away 415.09 dmt as Class A fertilizer to contractors with percent solids of 93%, and hauled 1,027.57 dmt of Class B sludge with percent solid of 19.2% to the Saint Joseph Landfill to be used as daily cover for the municipal landfill (under 40 CFR 258).

In 2023, the city produced 2,278.52 dmt and gave away to contractors 424.79 dmt as Class A fertilized and hauled 1,902.16 dmt of Class B sludge to the landfill.

Below are the 2022 and 2023 tables that compares the city's peak observed metals level against the statutory ceiling and the city's average level against the exceptional quality (EQ) sludge level specified by the 40 C.F.R. Part 503 Sludge regulations. Because the city only sampled its sludge six times per year, the monthly average is the maximum value observed.

Table 5, 2022 St. Joseph WPF Sludge Quality (mg/kg)

Pollutant	503 Ceiling	503 EQ	Max	Mo. Avg.	Max/Ceiling	Avg./EQ
Arsenic, As	75	41	6.1	6.1	8.13%	14.88%
Cadmium, Cd	85	39	3.6	3.6	4.24%	9.23%
Copper, Cu	4300	1500	291.3	291.3	6.77%	19.42%
Lead, Pb	840	300	60.5	60.5	7.20%	20.17%
Mercury, Hg	57	17	1.1	1.1	1.93%	6.47%
Molybdenum, Mo	75	----	13.4	13.4	17.87%	
Nickel, Ni	420	420	34.4	34.4	8.19%	8.19%
Selenium, Se	100	36	8.2	8.2	8.20%	22.78%
Zinc, Zn	7500	2800	673.9	673.9	8.99%	24.07%

Table 6, 2023 St. Joseph WPF Sludge Quality (mg/kg)

Pollutant	503 Ceiling	503 EQ	Max	Mo. Avg.	Max/Ceiling	Avg./EQ
Arsenic (As)	75	41	6	6	8.00%	14.63%
Cadmium (Cd)	85	39	2.2	2.2	2.59%	5.64%
Copper (Cu)	4,300	1,500	309.3	309.3	7.19%	20.62%
Lead (Pb)	840	300	57.5	57.5	6.85%	19.17%
Mercury (Hg)	57	17	0.4	0.4	0.70%	2.35%
Molybdenum (Mo)	75	----	14.3	14.3	19.07%	
Nickel (Ni)	420	420	34.1	34.1	8.12%	8.12%
Selenium (Se)	100	36	9	9	9.00%	25.00%
Zinc (Zn)	7,500	2,800	679.6	679.6	9.06%	24.27%

As shown in the tables above, the city's sludge is well below both the ceiling and EQ levels for all metals.

Conclusion & Recommendations

Overall, Saint Joseph Industrial Pretreatment Program personnel have strong knowledge of the Pretreatment regulations and requirement. However, I pointed out the following,

1. For future industrial waste survey, the IPP should consider contacting the Missouri American St. Joseph to obtain a list of commercial accounts and consider using Reference Solutions database to help discover businesses within the city.
2. Records did not include justification on why the Saint Joseph Landfill was dropped from the list of regulated industries as CIU. The landfill continues to haul leachate to the WPF and send monthly report of the amount discharged.
3. Currently, the city regulates, and issues industrial pretreatment permits to nine significant industrial users (listed in Table 2 above) that do not discharge directly to the WPF. Those nine SIU discharge directly to the SSJISD and receive primary treatment. Treated effluent from the SSJISD is then discharged to the WPF. The city needs to investigate the reason why those nine industries are permitted by the IPP.
4. The SSJISD handles wastewater treatment of industrial process by-products that come from sixteen industries and potentially receives a wide variety of hazardous and non-hazardous industrial wastes. It may be subject to the Centralize Waste Treatment Categorical standard 40 CFR Part 437. The city needs to evaluate and investigate the categorical standard applicability.
5. To ensure no hazardous waste is received at the WPF, staff of the WPF should randomly grab sample from septage waste and FOG loads. Currently, no sampling is done for non-industrial hauled waste to verify the hauled waste content.
6. Ultra Clean Midwest agreement is issued for one year and administratively continued for four years. The MDNR has explained that permits cannot be administratively continued for more than one year and cannot exceed five years.

7. There was no calculation to verify the mass-based local limits pollutant allocation in the Ultra Clean Midwest permit. The city needs to verify the calculation and verify that the assigned mass-based local limit allocated in the permit are more stringent than the categorical standard for daily maximum.
8. Overall, inspection reports appeared adequate, but the checklist needs to have a description of the industrial process, monitoring method, evaluation of the monitoring method, and verification of wastewater flow rate. All information in the inspection report also needs to be based on what is observed at the time of the inspection and not based on information provided by the industry.
9. All IUs are required to resample and submit results within 30 days following a violation (per 403.12(g)(2)) of self-monitoring sampling. The IPP, however, during the annual inspection/compliance monitoring, if the city samples and result comes back a violation, they do not require the industry to resample within 30 days.
10. Mosaic - Laundry Facility is avoiding paying the \$108,750.00 fine imposed by the IPP for high flow exceedances during the second half of 2023. The industry admitted that they are in fault by not calibrating the effluent flowmeter. At the time of the PCI, the industry requested an extension to the initial appeal to allow Mosaic's VP to discuss the amount of the fine with the City Manager. The city should ensure that the industry pays the fine within 180 days.
11. Mosaic wanting to use their influent water flow meter from Missouri American St. Joseph instead of their effluent flow meter and use their effluent flow as their verification meter. The industry should continue using the effluent flow meter to document their discharge to the WPF. The permit should also include a requirement to frequently calibrate the effluent flow meter since the lack of maintenance and calibration of the effluent flow meter was a major contributor the current non-compliance.
12. The IPP should work closely with Triumph Foods LLC. and establish a compliance schedule with reasonable timelines to achieve compliance and avoid future noncompliance.

NAJI AHMAD
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Naji J. Ahmad
Environmental Engineer, WB/DWIS

DAVID PRATT
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PRATT
Date: 2024.08.02
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David Pratt
Acting Manager, WB

Attachments:

1. PCI Checklist
2. Technically Based Local Limits (TBLL)
3. NPDES Modifications
4. MDNR 9/12/2023 PCI
5. STIPP response to MDNR 9/12/2023 findings

6. Industrial permits modified to include (TBLL)
7. All regulated pollutant sampling by the IPP
8. Ultra Clean Midwest Wastewater Acceptance Agreement No. STJ-A001
9. SSJISD Industrial permit NO. STJ-0021
10. Hauled waste data
11. Permits duration
12. WIMS monitoring data
13. WIMS emails
14. Septage Hauler Disposal Record
15. Fine Matrix flowchart
16. Enforcement Response Plan (ERP)
17. 2022 and 2023 Sludge data



Inspection

Approved
Pretreatment Program

Date(s): April 30-May 3, 2024.

FY 2024

POTW:	CITY OF SAINT JOSEPH, MISSOURI	Date of last PCI/Audit:
Address:	3500 State Route 759 Saint Joseph, Missouri 64504-1014	9/12/2023
Contact:	Becky McIntosh	NPDES Permit No.: MO0023043
Title:	Environmental Services Supervisor/Water Protection	State Permit No.:
Phone:	816 596-8008	Expiration Date:
Fax:	e-mail Rmcintosh@stjosephmo.gov	11/30/2025

* Renewal application is under review by state

Participants

POTW: Water Protection Becky McIntosh, Environmental Services Supervisor Eddie Leaverton, Superintendent WWTP Billy Nolan, Operation Manager Kori Wilburn, Asst. Environmental Services Supervisor Jason Betts, Asst. Environmental Services Supervisor	Inspectors: Naji J. Ahmad, Environmental Engineer, EPA R7/ECAD/WB/DWIS Denise Eagan, Engineering Unit Chief MDNR KCRO
Period covered by this PCI/Audit: 2022-2023	

POTW Information

Total for ALL Treatment Plants (MGD)			
Design Daily Ave. 27.0	Actual Daily Ave. 12.5 NPDES 18.743 (2023)	Design Peak: 32-35 MGD +Industrial is 54 MGD	% Industrial Flow: 35.38%*
Number of Plants: 2	% Combined Sewers: ~ 50%	Type of Treatment at Principal Plant: Activated Sludge, Anaerobic Digester	
Sludge Disposal Method: 1,902.16 dmt to landfill 424.79 dmt Land applied as Class A		Quantity (dry/tons/Y): 2,287.52 dm	Receiving Stream: Missouri River

*Based on highest regulated flow in 2023, excluding the 9 SIUs that are regulated by the SJIPP but discharge to the SSJSD.

PART I: PROGRAM BACKGROUND INFORMATION

I.A. Approved Modifications to the Original Program

1.

Date of last NPDES permit modification: 12/1/2020	Date of original Program approval: 2/28/1983
	Date NPDES Permit originally modified to require implementation [PTIM]: 12/18/1986

2. Approved Pretreatment Program modifications:

REQUIRED MODIFICATIONS	APPROVAL DATE	OTHER APPROVED MODIFICATIONS	APPROVAL DATE
PIRT SUO Revisions	8/12/2007		
List of SIUs [403.8(f)(6)]	1/29/1992		
Enforcement Response Plan	1992	Updated	2016
DSS SUO Revisions	1992	Sections 29-132 & 29-157 ^{Note 1}	12/7/2023
LOCAL LIMITS	11/30/2021	Changed mass limits ^{Note 2}	4/3/2023

Note 1: Sections 29-131 "definitions", 29-132 "Abbreviations", and Section 29-157 "specific Prohibitive Discharges Limitations" that were approved by the city of Board on April 3, 2023.

Note 2: the city changed the November 30, 2021, approved concentration-based limits (mg/L) as maximum daily limits for Maximum Allowable Industrial Loadings (MAIL) for pollutants of concern to mass-based limits that that was allocated using the MAIL and the maximum permitted flow of the respective industry. All industrial users received a site-specific loading based on data provided in the permit.

3. Is the POTW presently working on any program modifications?

Unofficially, planning to hire consultant to evaluate the local limits and ERP.

4. Does the POTW have any program modifications currently being reviewed by the Approval Authority?

NO

I.B. Approved Program Contents

5. Authority to enforce Pretreatment Standards contained in: Chapter 29, Article IV, Division 3

6. Date enacted or adopted: 1992, 3/1/2022 and 4/3/2023 (See note 1 and 2 above under 2)

7. Approved Control Mechanism: PERMITS

8. What is the frequency required by the approved program/modifications for:

Activity	Non-categorical SIUs	Categorical SIUs*
POTW sampling of:	2/y	2/y
POTW inspection of:	N/A	N/A
SIU self-monitoring:	N/A	N/A
SIU reporting:	2/y	2/y

9. What types of enforcement options are available through the approved program:

Yes	Notice of Violation (NOV)
Yes	Administrative Order (AO)
Yes	Show Cause Hearing
Yes	Establishment of Compliance Schedules
Yes	Revocation of Permit
Yes	Injunctive Relief
Yes	Fines; Maximum \$1000/day/violation
Yes	Criminal Penalties
Yes	Termination of Service

10. COMMENTS: Penalties starts at \$1,000, and maximum of \$37,500

PART II: INTERVIEW QUESTIONS

II.A. Legal Authority and Jurisdiction

11. Have any Pretreatment modifications been made to the Sewer Use Ordinance since the last PCI/Audit that have not been approved by the Approval Authority. YES. Last modification was approved 1/1/2024. Concentration to mass limits
12. List by name and location any SIUs that discharge to the POTW from outlying jurisdictions.
Ultraclean – Have an agreement since they are outside of city limits and haul their waste here.
Subjected to 433 Metal Finishing Limits.

Indicate which of the above are not covered by a contract/agreement requiring them to abide by the POTW's legal authority.

13. Does the POTW have the authority to seek fines up to \$1000 per day? [403.8(f)(1)(vi)]
YES. Sections 29.219(b)1 and 29.218(i)1
14. If the POTW has not yet developed an Enforcement Response Plan when does the POTW feel it will complete this requirement? The city has an Enforcement Response Plan.

II. B. Control Mechanism

16.General Information:

Type: PERMITS	Issued to Noncategorical SIUs? [DSS: 403.8(f)(2)(i)]
Duration: 3-5 years	YES

SIUs that are subject to Categorical Standards are issued 3 years permits.

1 – 2 year permit – Zero discharge facility, Rightpack

Rest of the permits are 4 yrs. 364 days

17.Do all SIUs have current (unexpired) control mechanisms? {NOCM}
All permits are current.

18.List by name those that do not and indicate which ones have not had a current control mechanism for 180 days or more. {RNC/SNC} NA

II.C. Hauled Wastes

19. Does the POTW accept hauled waste? (If "no," go to question 25) Yes, accepts hauled waste.
a. if so describe (include approx. no. of loads per month):
Maximum of 3 trucks of grease/ day.
Unlimited Septage approximately 90 to 200 (1,000 gallons) loads
The city uses WIMS system to track loads and volume and to generate billing.
There are seven (7) hauled waste contractors that are permitted. Have a septage receiving building.

The city receives:

Permitted for a max of 200 mg/l O&G, max daily of 5,000 gallons. They city does not sample for oil and grease on the waste haulers. This is a violation of the local limits.

Recommendation: Consider adding high strength waste in the digesters vs at the headworks

Recommendation: Consider sampling the O&G in the septage building to verify the strength of the waste.

The FOG/domestic waste is accepted through the septage receival building.

All new industries must have third party testing and meet local limits before approved to discharge to the facility.

b. How does the POTW ensure that it does not accept hazardous waste?

Each hauler submits paperwork showing the source of the waste. No sampling is done to verify the hauled waste content. Section 29-167 (c) of the SUO, gives the authority to sample. Occasionally staff would visually inspected truck content.

20. Does the POTW have a control mechanism for regulating waste haulers, and if so describe.
Form filled out by the hauler

21. Does the POTW have a designated discharge point (or points) for waste haulers? [DSS: 403.5(b)(8)]
Describe: Septage receiving station that have a screen at headworks

22. Are all applicable Categorical standards and Local Limits applied to IUs whose wastes are hauled to the POTW? Yes, must meet all categorical standards and local limits before allowing the waste to the accepted. They have two separate processes for hauled waste. Temporary hauled wastes and permanent.

23. Describe the method used to apply local limits to hauled waste. NONE.

II.D. Industrial User Characterization

25. How often does the POTW update its Industrial Waste Survey (IWS) to identify new SIUs or changes to wastewater discharges? Send out the wastewater survey every five years and in constant communication with the city permitting who notify the WP program if any new industries or restaurants are coming into town. Partnered to city hall to get a list of business permits.

Recommendation: Contact the MO American St. Joseph to obtain a list of all businesses that buy water for more thorough list of businesses for the IWS or consider using Reference Solutions to help discover businesses.

a. When the last formal update was? In 2020.

26. What is the POTW's current industrial base?

		Last
--	--	------

Current	Industrial User Type	Reported
20	Categorical SIUs {CIUS}	20
12	Non-Categorical SIUs	
32 ^{Note 3}	Total all SIUs {SIUS}	32

NOTE 3: The SJIPP regulates 9 SIUs that discharge to the SSSJSD. Those are:

AGP average GPD: 150,000	Dailys average GPD: 56,000	Silgan average GPD: 50,000
Albaugh average GPD: 2,000	Nestle Purina Pet Care: 500,000	St. Joe Express average GPD: 3,000
BHJ average GPD: 13,000	Omnium average GPD: 17,000	Ventura average GPD: 36,000

Heartland Ag is in the construction process along with Integrated Proteins for a total of 34 industries. Heartland Ag was operating under the wrong city code (warehouse) and are actually under the meat processing categorical standard. In the process of installing a clean out to start the 90 day baseline monitoring report.

Why was the landfill removed from the SIU list? Unsure, the landfill sends a monthly report of the amount discharged. The landfill was not on the 2012 Annual report and did not list a reason why it was removed.

Follow up: Determine if the landfill needs to be added to the SIU list or why it was removed.

Hospital is required to check the manhole to prevent blockages from gloves and wipes. Does it affect a lift station? It discharges to the Farron Street pump station. Have not had any issues since 2016. The issue with the hospital has a fine for failure to report an exceedance of flow. The hospital is taking a political route to try to not pay the fine.

II.E. Local Limits

27. Does the POTW have numerical limits for metals in its NPDES permit? If so list the metals and the limits (or attach list). Section 29-157. Conventional is 29-156
Why did you change from mg/l to ppd? The pellets required stricter metals limits. PPD is based on flow so the logic was that if the flow was lower, then can be more in pollutant allocation.
28. Have there been any numerical NPDES permit violations in the last 12 months? YES
There was one geometric mean exceedance of E.coli in June of 2023, but no cause from industrial activity was determined and has since come back into compliance. The exceedance in the monthly E.coli results was due to an error being made during sample collection, causing cross contamination during collection of one of the samples. This has been corrected by additional staff training.
 - a. Were any of the numerical NPDES violations, identified above, a result of interference or pass through? NO
 1. Was the interference traceable to an industrial user? NO
 2. Was action taken that led to elimination within 90 days of the interference or pass through? {SNC} NO
 3. Was the responsible industry placed on an enforceable compliance schedule within 90 days of discovery? {SNC} If not, why? NO

29. How many times per year does the POTW regularly sample its PRINCIPAL plant for the following?

Parameter	Influent	Effluent	Sludge
Metals	12	12	6
Toxic Organics	0	1/5 years	0
Biomonitoring		3/5years	
TCLP			0

30. List below the numerical value for the local limits derived by technical analysis. If a technical analysis was performed but the limit not adopted enter DNA in the block. (Values assumed to be mg/l unless otherwise noted). {EVLL} {ADLL}

Sec. 29-157.a. (*Gen. Ord. No. 3062, § 3, 4-3-23*): The pollutant limits listed below are applicable to discharge from industrial users and are established to protect the POTW facilities from interference and pass through. The following table lists the Maximum Allowable Industrial Loading (MAIL) that can enter the POTW:

POLLUTANT	DAILY MAX ppd	POLLUTANT	DAILY MAX ppd
ARSENIC	1.56	LEAD	5.97
CADMIUM	0.76	ZINC	68.94
CHROMIUM	16.0	CYANIDE	14.04
COPPER	36.03	NICKEL	14.47
MERCURY	0.37	Molybdenum	2.08
Selenium	0.91	Silver	44.33

31. Are the POTW's BOD and TSS limits technically derived (ie. based on plant capacity)? YES

32. Are BOD and TSS violations treated as violations of technically based local limits? YES

33. If there is more than one treatment plant, were the local limits established specifically for each plant?
NO. Any sludge from the Rosecrantz plant would come through the main plant.

34. Has the POTW made any changes to its Local Limits which have not been approved, and if so provide details? [403.18] NO

35. Has the POTW granted any Net/Gross allowances under 403.15? NO

II.F. Standards and Requirements for Industrial Users

37. Does the POTW compare local limits against federal Categorical standards and apply the most stringent standards to Categorical IUs? [403.4] YES
38. Has the POTW notified its IUs of possible RCRA obligations? [40 CFR 403.8(f)(2)] YES
During the inspections, they go over RCRA. All hazardous waste generators are aware.
Recommendation: Ensure to notify all new industries of RCRA requirements.
39. Does the POTW allow Categorical users to use Solvent Management Plans/certification or surrogate test procedures to meet TTO requirements? YES
Use the TOMP: Have two industrial users that have one. Slug control plan is determined based on the inspection and part of the city code. The city generally requires that all industries have one unless they can prove that they do not need it.

II.G. POTW Compliance Monitoring and Inspections

40. What is the current frequency for:

Activity	Non-categorical SIUs	Categorical SIUs*
POTW sampling of:	1/year	1/year
POTW inspection of:	1/year	1/year
SIU self-monitoring:	12, 4, or 2/years	12, 4, or 2/years
SIU reporting:	2/year	2/year

* For Categorical pollutants

41. List exceptions: Wholesalers: Monitor daily for a few pollutants (conventional and ammonia for surcharges)
42. List those SIUs that were not sampled by the POTW within the last 12 months. [DSS: 403.8(f)(2)(v)] NONE
43. List those SIUs that were not inspected within the last 12 months. [DSS: 403.8(f)(2)(v)] NONE
44. How many industries were neither sampled nor inspected within the last 12 months. [DSS: 403.8(f)(2)(v)] {NOIN} {RNC/SNC} NONE
45. Does the POTW sample its SIUs for all regulated pollutants at least once annually? [403.8(f)(2)(v)] YES
Soon after the MDNR inspection in September 2023, they initiated sending off testing to a third-party testing laboratory for any pollutant they cannot process in-house that each industry has an effluent limitation on.
46. Sample/Analysis Procedures:

Chain-of-Custody always used? YES	Sampling method, metals: Composite
Ability to sample on short notice? YES	Sampling method, CN: Grab
In-house analysis of toxic pollutants: NO	Sampling method, O&G: Grab
Do in-house analytical methods conform to 40 CFR part 136? YES	

Metals are done in house but cyanide and mercury are sent out. Analyze pH in the field with portable probe.

47. How does the POTW document its industrial user inspections?
Inspection report, approximately 9 pages.
48. Does the POTW evaluate all SIUs at least every two years to determine the need for a slug discharge/spill control plan? [DSS: 403.8(f)(2)(v)] YES
 - a. Describe the method used by the POTW to evaluate the need for a slug control plan.
Part of the inspection questionnaire.

II.H. IU Self Monitoring and Reporting

49. Are all Categorical IUs required to self-monitor for all pollutants regulated by the respective Categorical standard at least twice per year? [403.12(e)] YES
50. Were any Baseline Monitoring Reports or 90 day Compliance Reports due within the past 12 months?.
If so, from whom? Were the reports submitted? NO
51. Are IUs required to report spills, slug discharges, etc. to the POTW? [403.12(f)] YES
52. Are IUs required to report violations within 24 hours of knowledge of the violation? [403.12(g)(2)]
YES
53. Are IUs required to resample and submit results within 30 days following a violation as per 403.12(g)(2)? YES

II.I. Data Management

54. Are files/records computerized? YES
55. Are all records maintained for at least 3 years? [403.12(o)] YES. Minimum 5 years.
56. Are program records available to the public as required by 40 CFR 403.14(b)? YES
They would need to sunshine request them. If it is not marked confidential.
57. Does the POTW have provisions to address confidential business information? [403.14(a)] YES.
1. How is compliance status calculated? Describe the procedure used in determining Significant

Noncompliance (eg. are mo. avg. violations considered as well as daily max?).
 Jason and Kori use the ERP and present to Becky then to Eddie for approval.
 SNC is determined using the federal criteria.
 Have increased penalties for consecutive days which is outlined in the city code.

II.J. Program Resources

59. What percent of the Pretreatment Coordinator's time is spent on pretreatment?
 2 FTE, Kori and Jason. They are over permitting, semiannual report reviews, inspections, and monitoring. They do not perform the lab work.
 Becky is 33%, including FOG is 66%.

60. What computer programs does the POTW use for:

Wordprocessing:	MS Word
Spreadsheet:	Excel
Database:	WIMS

61. Does the POTW believe its annual budget adequate for implementation? YES. \$1Million
- a. If not, is the level of money available for pretreatment less than that in the approved program or approved modification?

II.K. Special Questions

62. Are there any issues that the POTW would like to discuss? NO

Any SSOs incidents in the last 12 months? Yes.

Any caused by industries? : One caused by a nursing home facility which was issued a NOV for the SSO caused by wet wipes since they fall under the FOG umbrella.

In 2022: 9 SSOs and in 2023: 20 SSOs (much higher due to fiber cable installation)

When did the city establish the FOG program? 2012

How many entities? ~500

Inspect all entities once per year, two full time positions dedicated to the inspections. The inspectors are able to inspect all entities once per year.

How is the FOG program funded? Through sewer rates.

How do you initiate a violation/enforcement? What is the process?

All industries that are monitored daily; they are provided an automated nightly email that sends them 90 days of effluent data. The industry is required to monitor that report and report back to St. Joseph within 24 hours. If there are no violations, they do not need to respond to the nightly email. If they do not report to the city then the industry receives a non-notification penalty. There is no deadline for the city to notify the industry of any violations from the city's monitoring. All the data is in the WIM system. All pretreatment

coordinators are in constant contact with the individuals in the laboratory. It takes the city approximately 10-15 days to determine compliance from the sample, write the NOV, and calculate the fine. Becky and Billy are able to sign the NOVs in Eddie's place. During the inspection, if the city samples and comes back a violation, they do not require the industry to resample within 30 days. This is potentially a violation. They have resampled if the sample comes back out of compliance per requested by the industry. They do require the industries to resample within 30 days of knowledge of a violation.

Note: The start of the "knowledge" clock within 24 hours of receiving the sample results unless it's received on a Friday then you can forgive the weekend.

Below is the list of dental offices that remove and replace dental amalgams per 40 CFR 441.10, and have received and reviewed a One-Time Compliance Report (OTCR)

Dental Office	Remove and replace dental amalgams	Received OTCR
Midwest Periodontics	YES	YES
St. Joseph Endodontics	YES	YES
Ostendorf DDS, LLC	YES	YES
H. Steven Hoerath DDS General Dentistry	YES	YES
Hatcher Dental Group	YES	YES
Clark Family Dentistry	YES	YES
Affordable Dentures	YES	YES
NW MO Oral and Maxillofacial Surgery	YES	YES
South Dental Clinic	YES	YES
Western Reception Diagnostic Correctional Center	YES	YES
Northwest Family Dental	YES	YES
Foundations of Health Dental Care	YES	YES
Brooks Family Dentistry	YES	YES
Oral & Maxillofacial Surgery of St. Joseph, LLC	YES	YES
St. Joseph Family Dental	YES	YES
East Ridge Family Dentistry	YES	YES
Dental Care of St. Joseph	YES	YES
Dr. Anthony Frizzo	YES	YES
Noyce Orthodontics	YES	YES
Cook Crossing Dental Care	YES	YES
Hollingsworth Dental	YES	YES
Aspen Dental	YES	YES
Bob Ruwwe Jr. DDS PC	YES	YES
Northwest Endodontics	YES	YES
Choice Orthodontics	YES	YES
Social Welfare Board	YES	YES
Bratton Dental Group	YES	YES

PART III: FILE AND RECORDS REVIEW

Following is a table containing the POTW's Significant Industrial User inventory regulated by its Pretreatment Program. Please verify that all information in the table is correct and current. For those industries no longer regulated draw a line through the entry. Add all new industries and provide the information sought by the table. Below is a guide to the information sought by the table and suggested abbreviations.

INDUSTRY:

Provide the name of each industrial user regulated under the pretreatment program.

CAT STND:

Provide the categorical standard code number. For example, industries subject to the Metal Finishing regulation should be designated "433." For noncategorical industries indicate "NA" in this column.

REG PROCESS:

Indicate what process the industry performs to qualify for inclusion in the pretreatment program. For example, if an industry is subject to Metal Finishing regulations because it performs zinc and chromium plating indicate with "ZnCrPL" or a similar abbreviation.

TMT:

If the facility treats its wastestream(s) indicate "Y." If no treatment is provided indicate "N."

TYPE:

Indicate the type of pretreatment system (if applicable) the industry has. Suggested abbreviations: "precip" for precipitation/clarification; "precip/flt" for precipitation followed by filtration; "DAF" for dissolved air flotation; etc.

REG FLOW:

Provide the industry's average daily flow for its regulated processes in gallons per day. The abbreviation "K" stands for 1000.

TOT FLOW:

Provide the average daily total plant flow in gallons per day.

CWF:

Indicate if the industry uses the Combined Wastestream Formula to determine compliance with categorical standards. "Y" = yes, "N" = no.

COMPLIANCE STATUS FOR THE 6 MO PERIOD ENDING:

For the six month periods listed, indicate if the industry's compliance status. Use the following abbreviations:

CIn compliance with all standards: no violations.

IInfrequent noncompliance with discharge standards: the facility had some violations but not severe enough to be considered in significant noncompliance.

SNC,SIn significant noncompliance with discharge standards.

SNC,RIn significant noncompliance with reporting requirements: the industry failed by greater than 30 days to submit reports as required.

SNC,MIn significant noncompliance with self monitoring requirements: the industry did not properly

report its compliance status on its self monitoring report.
SNC,C Failure to meet a compliance schedule milestone by 90 days.

LAST INSPECTION:

Date of the last inspection performed by the

SECTION VII: SIGNIFICANT INDUSTRIAL USERS

Industry Name	Cat. Stnd.	Reg. Process	T M T	Type	Reg. Flow	Total Flow	C W F	Compliance Status for Six Month Period Ending:				Last Inspection
								Jun 22	Dec 22	Jun23	Dec23	
Ag Processing Inc.	NA	Soybean extracting and refining Methyl Estr	Y	EQ, Skim Pits, pH, adjustment	158K	290K	N	C	C	SNC-M	C	6/14/2023
Albaugh, Inc.	455.27, 455.46	Pesticide glyphosate manufacturer, Repackaging of herbicides.	Y	Activated sludge with pH neutralization and aeration basin	0	83K	N	SNC-M	SNC-M	C	C	10/19/2023
Albaugh, Inc.- North	455.27	Pesticide formulation and Packaging	N		0	250	N	C	C	C	C	10/19/2023
Altec Industries, Inc	433	Parts Washer	Y	EQ, Reaction flash mix, Clarifier, sludge thickener, Filter Press, pH	7K	68K	N	I	C	SNC-S	C	8/30/2023
BASF	NA	Bacterial soil inoculant	Y	pH adjustment, EQ	2K	2.5K	N	C	SNC-M	I	I	5/3/2023
BHJ USA, Inc.	NA	Pet food	Y	EQ, Screen, DAF	13K	18K	N	SNC-S	SNC-S	SNC-S	SNC-R	5/24/2023
Boehringer Ingelheim Animal Health	439	Vaccine	Y	Bio/Viral Heat, pH, EQ	92K	166K	N	C	C	C	C	7/11/2023
Clarios DC	461	Lead Acid Battery	Y	Precip, Floc pH, Plate Filter Press	28K	32K	N	C	C	C	I	9/27/2023
Clarios DUF	461	Lead Acid Battery	Y	Precip, Floc pH, Plate Filter Press	15K	18K	N	SNC-S	SNC-S	SNC-S	C	10/25/2023
Daily's Premium Meats	NA	Bacon	Y	Collection pit, Rotary drum screen, buffer tank, Aerated eq. tank, Plug flow reactor with coagulant & polymer addition.	56K	108K	N	C	C	C	I	7/26/2023
Gray Manufacturing	433.17	Automotive Equipment Phosphating	Y	pH Adjustment	257K	298K	N	C	C	SNC-M	C	11/17/2023
Hillshire Brands (Tyson Foods)	NA	Meat Processing	Y	Screens, Frac, DAF, EQ, pH, filter ¹⁵	530K	590K	N	C	C	I	I	6/27/2023
Hillyard Industries, Inc.	417.84 417.16 0	Cleaning/Janitorial Chemicals	Y	Containment pit. pH Adjust	12K	13K	N	C	SNC-M	I	I	6/28/2023

SECTION VII: SIGNIFICANT INDUSTRIAL USERS...Continues

Industry Name	Cat. Stnd.	Reg. Process	T M T	Type	Reg. Flow	Total Flow	C W F	Compliance Status for Six Month Period Ending:				Last Inspection
								Jun 22	Dec 22	Jun 23	Dec 23	
I & M Steel Fabrication	433.15	Phosphating	Y	pH adjustment	1K	1K	N	C	C	SNC-M	I	11/14/2023
ICM Biofuels, LLC	406.25	Corn Milling Ethanol	Y	Flow equalization, pH, Temp & COD monitoring	160K	202	N	I	I	C	C	5/31/2023
International Paper Company	NA	Corrugated Boxes	Y	Chem. Polymer, plate filter press	14K	22K	N	C	C	C	C	4/25/2023
Mosaic Life Care	460	Hospital	Y	Grinder, EQ, pH	104K	2.3M	N	I	I	I	C	11/8/2023
Mosaic Life Care (Laundry)	NA	Laundry	Y	Lint screen, EQ, Shaker	9K	10K	N	C	I-pH	SNC-S	I	11/8/2023
National Beef Leathers	425	Leather Tanning, Chrome	Y	Activated Sludge, Chrome Precip & Recovery	715K	740K	N	C	C	I	C	6/7/2023
Nestle Purina Pet Care	NA	Dog & Cat Food	Y	Screening via SSJISD	590K	1M	N	I	C	I	C	8/23/2023
Nestle Purina Product Technology Center (NPPTC)	NA	Pet Food	Y	EQ, Oil/Water Separator	24K	608K	N	C	I	I	I	9/12/2023
Nestle Purina Animal Nutrition (PAN)	406.76	Animal Food	Y	1,500 Grease interceptor Bio pit	8K	240K	N	I	C	C	C	9/21/2023
Omnium LLC	455.45	Pesticide Formulator (PFPR)	Y	750K gl. settling tank Carbon Treatment	0	18K	N	C	C	C	I	11//2023
Rite Pack, Inc.	418.76 455.47	Pesticide Packaging	N		0	150	N	NA	NA	NA	C	9/19/2023
Seaboard Energy, Missouri LLC	NA	Biodiesel	Y	ADI-ANMBRWTF Biogas	75K	2M	N	I	I	I	I	9/20/2023
Silgan Containers Corporation	465.4	Can making	N	O/W Separator, Primary treatment via SSJISD ¹⁷	50K	58K	N	C	I	C	C	10/10/2023
St. Joe Express, Inc.	442	Soybean oil tanker cleaning	Y	O/W Separator, grease trap, primary treatment via SSJISD	3.1K	3.3K	N	C	C	C	C	8/2/2023

[illegible]

III.B. Significant Industrial User Compliance Evaluation

63. From the above list of industries, how many are in Significant Noncompliance (SNC) with either discharge standards or reporting requirements based on the most recent six-month reporting period? {PSNC}

BHJ – in SNC for two years. They have ammonia exceedances. They discharge to SSJSD which helps to dilute their ammonia to an acceptable level before it reaches the St Joseph WWTP. They are currently in Phase I which will separate the system into a separate building and increase the size of their detention system and increase the size of the DAF and design a pretreatment system. Phase II is some sort of chemical treatment if Phase I is not successful. They have not paid fines as SSJSD is supposed to levy the fines. All industries who discharge to SSJSD do not get fined for numerical effluent limits unless SSJSD violates their numerical limits. BHJ is currently not on a compliance schedule, but the city would like to put them on one. They have not been placed on one as SSJSD was potentially taking over.

Clarios DUF - SNC for 2 years. They implemented upgrades to their system including a new oil and sand separator. The city made them implement new SOPs to ensure sampling does not occur at the end of the monitoring period and changed over their EHS person. Their last SMR was back in compliance and that they reported incorrectly on the 2023 annual report.

Seaboard (SEM) – Infrequent noncompliance for two years. Elemental sulfur as part of their pretreatment system which can cause issues. They had monitoring and reporting violations for the second half of 2022.

Ultra Clean Midwest (hauling waste) – precipitate their metals out, violated for molybdenum and nickel at the end of 2022. They are working with their chemical supply company to enact the best system out of two separate procedures to precipitate metals for the mass based limits. Their last SMR was back in compliance and that they reported incorrectly on the 2023 annual report.

SSJSD – Sulfide issues and requested a variant on the sulfide. Have a project to line the force main from SSJSD to prevent any corrosion. Open to the variant since the waste is direct piped and lined and won't deteriorate the collection system. Once the pipe is lined. They did install aerators to help with the sulfide but it was not enough to prevent the exceedances. They had intermittent issues when the sulfide was 4.61 mg/l and it dropped to 0.5 mg/l .due to excessive odor complaints.

64. List by name, those industries currently on a compliance schedule. Complete the table below. NO

Industry Name	Date Schedule Issued	Compliance Deadline	How Administered*
NONE			

eg. Administrative Order, Permit, etc.

65. List those industries last published in the newspaper for noncompliance and provide the date (or attach a copy of the public notice). March 8, 2024, in the St. Joseph News-Press.

Ag Processing, Altec Industries BHJ USA, Clarios DUF Assembly Plant, Gray Manufacturing, I&M Machine, SSJSD, Triumph Foods, Ultra Clean Midwest, and Mosaic Life care Laundry.

66. If an industry has been deleted from the list of Significant Industrial Users list by name below and provide the reason. HPI was removed due to a cease and desist issued in December 2022. It is now a superfund site.

67. For those industries in SNC within the last 12 months complete the following table for all written enforcement actions.

IU Name	Violation	Date of POTW knowledge	Date of Action	Enforcement Action	ERP required action

68. Provide the total number of NOV's, Administrative actions, Judicial referrals, and criminal prosecutions that occurred in the last twelve months. {FENF} {JUDI}

1. Ag Processing. Inc: 1st half SMR, NOV Monitoring Violations. Fine issued \$8,000.
2. Altec Industries: pt half SMR, NOV O&G exceedance. Fine issued \$1,500.
3. BASF: 1st half SMR, NOV reporting issues. 2nd half SMR NOV, flow exceedances.
4. BHJ: 1st half SMR, NOV reporting violations. Fine issued \$1,000. 2nd half SMR, NOV ammonia exceedances. Inspection, NOV, Ammonia exceedance.
5. Boehringer Ingelheim Animal Health: Inspection NOV, sulfide exceedance.
6. Clarios. LLC (Distribution Center): 2nd half SMR, NOV, monitoring violation. Fine issued \$500.
7. Clarios. LLC (DUF Assembly Plant): 1st half SMR, NOV, sulfide exceedance and monitoring violation. Fine issued \$2,000.
8. Dailys Premium Meats: 2nd half SMR, NOV, reporting violations. Fine issued \$1,500.
9. Gray Manufacturing Company. Inc: 1st half SMR, NOV, monitoring violations. Fine issued \$750.
10. Hillshire Brands Company: 1st half SMR, NOV, TSS exceedance. Fine issued \$500. 2nd half SMR, NOV, Ammonia & BOD exceedances. Fine issued \$2,250. Inspection, NOV, failure to submit required documents. Fine issued \$500.
11. Hillyard Industries. Inc: 1st half SMR, NOV, sampling violations. 2nd half SMR, NOV, permit violations.
12. I&M Machine and Fabrication; 1st half SMR, NOV, monitoring violations. Fine issued \$1,000. 2nd half SMR, NOV, monitoring violation. Fine issued \$1,000.
13. Mosaic Life Care: 1st half SMR, NOV, sulfide exceedances.
14. Mosaic Life Care Laundry Facility: 1st half SMR, NOV, monitoring violations. Fine issued \$28,125. 2nd half SMR, NOV, flow exceedances. Fine issued \$108,750.
15. National Beef Leathers: 1st half SMR, NOV, monitoring violations. Fine issued \$200.
16. Nestle Purina Pet Care: 1st half SMR, NOV, monitoring violation.
17. Omnium. LLC: 2nd half SMR, NOV, flow exceedances.
18. Nestle Purina Technology Center: 2nd half SMR, NOV, exceedances. Fine issued \$1,000.
19. Rite Pack: Inspection, NOV, TSS exceedance.
20. Seaboard Energy Missouri. LLC: 1st half SMR, NOV, exceedances. Fine issued \$7,750. 2nd half SMR, NOV, sulfide exceedances.
21. South St. Joseph Industrial Sewer District: 1st half SMR, NOV, sulfide exceedances. Fine issued \$1,000. 2nd half SMR, NOV, sulfide exceedances. Fine issued \$4,500.
22. Triumph Foods: 1st half SMR, NOV, exceedances. Fine issued \$16,000. 2nd half SMR, NOV, exceedances. Fine issued \$21,000.
23. Ultra Clean Midwest: 1st half SMR, NOV, nickel exceedances.

69. Were all actions taken by the POTW within 30 days of knowledge of a violation? {RNC/SNC} YES

70. Did all industries in SNC either return to compliance within 90 days, receive escalated enforcement action by the POTW within 90 days, or become placed on an enforceable compliance schedule within

90 days (of knowledge by the POTW) of the violation? {RNC/SNC} YES

III.C. Control Mechanism Evaluation

71. Do the POTWs control mechanisms: Agreement Permittee: all permits/ Ultra Clean Midwest

REQUIRED [DSS: 403.8(f)(1)(iii)]		SUGGESTED PROVISIONS	
Specify duration (no > 5 yrs.):	Note 1	Cite the POTW's legal authority:	YES
Contain the correct discharge limits:	Note 2	Identify TTO alternatives, if applicable:	YES
Specify sample type for IU self monitoring:	YES	Require notification within 24 hrs of a violation:	YES
Adequately identify sampling location:	YES	Require resample/report in 30 days of violation:	YES
Specify sampling frequency:	YES	Specify right of entry:	YES
State applicability of civil or criminal penalties:	YES	Reserve right to revoke permit:	YES
Stipulate reporting frequency:	YES	Specify immediate slug load notification:	YES
Properly require records retention:	YES	Require submission of all sampling results:	YES
Specify limited transferability:	YES		

Note 1: The agreement is issued for one year and administratively continued for 4 years. This could be a potential violation. The State has explained that permits cannot be administratively continued for more than one year? and not to exceed a total of five years. Needs to be verified in the old inspection report.

Note 2: I was unable to verify the calculation for the assigned ppd local limit and this industry (UltraClean) was missing in half of the documentation that was used for calculating the local limits. The spreadsheets did verify that the assigned local limit was more stringent than the categorical standard for daily maximum. The permit still uses the categorical concentration limits for monthly averages. Flows are based on one truck load of 2,500 gallons. The industry is limited to 6 truck loads per day. The permit also specifies that the conventional limits need to be sampled once per agreement cycle (5 years) and it was sampled in 2020. I did not verify if the city was sampling all pollutants during their inspections as this was in the electronic database.

Result of this review from the last PCI/audit:

III.D. Industrial Inspection Evaluation

72. Do the Industrial Inspection reports contain? Several

Name of Company contact:	YES	Evaluation of IU's monitoring procedures:	YES
Date of inspection:	YES	Verification of wastewater flow rates:	YES
Time of inspection:	YES	Determination of applicability of the CWF:	YES
Description of manufacturing process:	YES	Description of the chemical storage area:	YES
Description of treatment process, if any:	YES	Identification of potential spill conditions:	YES
Evaluation of IU's monitoring methods:	YES		YES
Verification of production rates that would affect production based standard:			

III.E. Slug Discharge Control Procedures

73. If the POTW has required the submittal of a Slug Control Plan does it contain: [DSS: 403.8(f)(2)(v)]

YES A description of discharge practices including non-routine batch discharges

YES A description of stored chemicals

In the agreement Procedures for immediate notification of slug discharges with written follow-up notification

YES Procedures necessary to prevent adverse effects at the POTW's treatment plant:

YES inspection and maintenance of storage areas

_____ handling and transfer of materials

_____ loading and unloading operations

YES control of plant site runoff

YES worker training

YES building of containment structures

YES _ measures for the control of toxic organics

YES measures for emergency response

74. COMMENTS

III.F. Industrial User File Review Checklists

Following are worksheets to aid in the assessment of the nature of the oversight activities and compliance status of the POTW's Significant Industrial Users. When reviewing SIU files priority should be placed on Categorical industries that either have a history of violations or that appear to be in compliance but have not installed that prescribed BAT technology to consistently meet discharge limits. While only three pages are provided the reviewer is encouraged to copy and add additional review pages for larger

POTWs.

Inspection reports need to have a description of the industrial process and monitoring method and evaluation of the monitoring method. Verification of wastewater flow rate.

Centralized waste stream categorical standard 437, Naji does not believe that the city should neglect the industries that discharge to SSJSD and treat SSJSD. Potentially only permit the categorical industries that go to SSJSD. Potentially in the agreement add that the City is treated as a contractor for services provided to SSJSD. Charges would include sampling, inspections, cleaning, force main lining?, etc.

All information in the inspection report needs to be based on what is observed at the time of the inspection and not based on information provided by the industry.

One industry is production based limits and uses the previous two year average. It is on the industry to do the calculations and it is the city's responsibility to verify the calculations. This is more protective to the city.

Day 2 File Review:
Review SSJSD, Ultra Clean, Mosiac, Triumph

Mosiac Laundry: Pre-inspection discussion - Check WW system and flow meter. Requested to use their influent water flow meter from MO American St. Joseph instead of their effluent flow meter and use their effluent flow as their verification meter. Post inspection – Sean admitted that he did not report as he did not think it was accurate. EPA is going to hold the City responsible for not collecting the fine within 180 days. Asked for an appeal then asked for an extension due to VP personnel changes and they wanted to talk to the city manager. Recommended a compliance schedule to enact changes to prevent SNC.

Triumph – Explained treatment process. Recommended a compliance schedule to enact changes to prevent SNC.

SSJSD: Pre inspection discussion- In regard to their high sulfide, they added wet well wizards to their lift stations to help with sulfide issues November 2021. They believe that AGP, St. Joe Express, BHJ, and Ventura are the causes of the high sulfide. St. Joe express washes the semi-trucks from AGP who hauls soybean oil. SSJSD knows that their industrial users are the issue and do not want the City to enforce the high sulfide on the industries that discharge. Consider bringing up that the agreement has not been agreed to for about a year now and movement needs to occur. Consider bringing up that they are a categorical industry under 437.46/437.47 Subpart D Multiple Wastestreams? Recommended a compliance schedule to enact changes to prevent SNC.

Ultra Clean – Unable to verify the local limits pollutant allocation to the industry from the provided spreadsheets. The spreadsheet had the same limits as the control mechanism but not how the limits were calculated as the numbers were directly typed and not the result of a formula. This is potentially a violation.

Note: All changes made to the program should be to the benefit to the city and all industries.

Industry Name:
Principal Pollutants:
Products:

No. of Employees:

A. Does the file system for the industrial user contain:

☐ Permit application	☐ POTW sampling results
☐ Current Permit	☐ Self-monitoring reports
☐ Correct limits in Permit	☐ Enforcement documentation
☐ Correspondence/meeting notes/phone log	☐ Solvent Management Plan
☐ Most recent inspection report	☐ Correct application of the CWF
☐ Evaluation for need for Slug control	☐ Slug Control Plan
☐ Compliance status determination	

B. Did the industry discharge any slug loads or spills to the POTW in the past 12 months?
[403.12(f)]

☐ Immediate notification by the IU	☐ Follow-up written notification
☐ POTW response	☐ Effect on the plant

C. In the last complete calendar year how many times did the POTW:

Sample the IU _____ Inspect the IU _____

D. Were all regulated pollutants analyzed by the POTW at least once in the most recent calendar year?

E. If the industry is subject to Categorical Standards did its self-monitoring reports contain analysis for all regulated pollutants at least once during every six month period during the last full calendar year?

F. Frequency in the IU's control mechanism for: Self-monitoring _____ Reporting _____

G. Did the industry comply with the sampling and reporting frequency requirements of its Control Mechanism?

H. Did the POTW identify all IU violations from:

IU Self-monitoring _____ POTW Compliance monitoring _____

I. Was the IU's compliance status (i.e. SNC, Infrequent noncompliance, Consistent compliance) determined properly?

J. Complete the following table for all violations in the last 12 months. (If this information has already been provided in Question 85, please indicate).

<u>Violation</u>	<u>Date of Violation</u>	<u>Date of POTW Knowledge</u>	<u>Date of POTW Response</u>	<u>ERP Required Response</u>	<u>POTW Response</u>
------------------	--------------------------	-------------------------------	------------------------------	------------------------------	----------------------

Industry Name:
Principal Pollutants:
Products:

No. of Employees:

A. Does the file system for the industrial user contain:

☐ Permit application	☐ POTW sampling results
☐ Current Permit	☐ Self-monitoring reports
☐ Correct limits in Permit	☐ Enforcement documentation
☐ Correspondence/meeting notes/phone log	☐ Solvent Management Plan
☐ Most recent inspection report	☐ Correct application of the CWF
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B. Did the industry discharge any slug loads or spills to the POTW in the past 12 months?
[403.12(f)]

☐ Immediate notification by the IU	☐ Follow-up written notification
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F. Frequency in the IU's control mechanism for: Self-monitoring _____ Reporting _____

G. Did the industry comply with the sampling and reporting frequency requirements of its Control Mechanism?

H. Did the POTW identify all IU violations from:

IU Self-monitoring _____ POTW Compliance monitoring _____

I. Was the IU's compliance status (i.e. SNC, Infrequent noncompliance, Consistent compliance) determined properly?

J. Complete the following table for all violations in the last 12 months. (If this information has already been provided in Question 85, please indicate).

<u>Violation</u>	<u>Date of Violation</u>	<u>Date of POTW Knowledge</u>	<u>Date of POTW Response</u>	<u>ERP Required Response</u>	<u>POTW Response</u>
------------------	--------------------------	-------------------------------	------------------------------	------------------------------	----------------------

Industry Name:
Principal Pollutants:
Products:

No. of Employees:

A. Does the file system for the industrial user contain:

☐ Permit application	☐ POTW sampling results
☐ Current Permit	☐ Self-monitoring reports
☐ Correct limits in Permit	☐ Enforcement documentation
☐ Correspondence/meeting notes/phone log	☐ Solvent Management Plan
☐ Most recent inspection report	☐ Correct application of the CWF
☐ Evaluation for need for Slug control	☐ Slug Control Plan
☐ Compliance status determination	

B. Did the industry discharge any slug loads or spills to the POTW in the past 12 months?
[403.12(f)]

☐ Immediate notification by the IU	☐ Follow-up written notification
☐ POTW response	☐ Effect on the plant

C. In the last complete calendar year how many times did the POTW:

Sample the IU _____ Inspect the IU _____

D. Were all regulated pollutants analyzed by the POTW at least once in the most recent calendar year?

E.If the industry is subject to Categorical Standards did its self-monitoring reports contain analysis for all regulated pollutants at least once during every six month period during the last full calendar year?

F. Frequency in the IU's control mechanism for: Self-monitoring _____ Reporting _____

G.Did the industry comply with the sampling and reporting frequency requirements of its Control Mechanism?

H. Did the POTW identify all IU violations from:

IU Self-monitoring _____ POTW Compliance monitoring _____

I.Was the IU's compliance status (i.e. SNC, Infrequent noncompliance, Consistent compliance) determined properly?

J. Complete the following table for all violations in the last 12 months. (If this information has already been provided in Question 85, please indicate).

<u>Violation</u>	<u>Date of Violation</u>	<u>Date of POTW Knowledge</u>	<u>Date of POTW Response</u>	<u>ERP Required Response</u>	<u>POTW Response</u>
------------------	--------------------------	-------------------------------	------------------------------	------------------------------	----------------------

Industry Name:

Principal Pollutants:

Products:

No. of Employees: 300

A. Does the file system for the industrial user contain:

☐ Permit application	☐ POTW sampling results
☐ Current Permit	☐ Self-monitoring reports
☐ Correct limits in Permit	☐ Enforcement documentation
☐ Correspondence/meeting notes/phone log	☐ Solvent Management Plan
☐ Most recent inspection report	☐ Correct application of the CWF
☐ Evaluation for need for Slug control	☐ Slug Control Plan
☐ Compliance status determination	

B. Did the industry discharge any slug loads or spills to the POTW in the past 12 months?
[403.12(f)]

☐ Immediate notification by the IU	☐ Follow-up written notification
☐ POTW response	☐ Effect on the plant

C. In the last complete calendar year how many times did the POTW:

Sample the IU _____ Inspect the IU _____

D. Were all regulated pollutants analyzed by the POTW at least once in the most recent calendar year?

E. If the industry is subject to Categorical Standards did its self-monitoring reports contain analysis for all regulated pollutants at least once during every six month period during the last full calendar year?

F. Frequency in the IU's control mechanism for: Self-monitoring _____ Reporting _____

G. Did the industry comply with the sampling and reporting frequency requirements of its Control Mechanism?

H. Did the POTW identify all IU violations from:

IU Self-monitoring _____

POTW Compliance monitoring _____

I. Was the IU's compliance status (i.e. SNC, Infrequent noncompliance, Consistent compliance) determined properly?

J. Complete the following table for all violations in the last 12 months. (If this information has already been provided in Question 85, please indicate).

<u>Violation</u>	<u>Date of Violation</u>	<u>Date of POTW Knowledge</u>	<u>Date of POTW Response</u>	<u>ERP Required Response</u>	<u>POTW Response</u>
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Industry Name:

Principal Pollutants:

Products:

No. of Employees:

A. Does the file system for the industrial user contain:

_____ Permit application	_____ POTW sampling results
_____ Current Permit	_____ Self-monitoring reports
_____ Correct limits in Permit	_____ Enforcement documentation
_____ Correspondence/meeting notes/phone log	_____ Solvent Management Plan
_____ Most recent inspection report	_____ Correct application of the CWF
_____ Evaluation for need for Slug control	_____ Slug Control Plan
_____ Compliance status determination	

B. Did the industry discharge any slug loads or spills to the POTW in the past 12 months?
[403.12(f)]

_____ Immediate notification by the IU	_____ Follow-up written notification
_____ POTW response	_____ Effect on the plant

C. In the last complete calendar year how many times did the POTW:

Sample the IU _____ Inspect the IU _____

D. Were all regulated pollutants analyzed by the POTW at least once in the most recent calendar year?

E. If the industry is subject to Categorical Standards did its self-monitoring reports contain analysis for

all regulated pollutants at least once during every six month period during the last full calendar year?

F. Frequency in the IU's control mechanism for: Self-monitoring _____ Reporting _____

G. Did the industry comply with the sampling and reporting frequency requirements of its Control Mechanism?

H. Did the POTW identify all IU violations from:

IU Self-monitoring _____

POTW Compliance monitoring _____

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<u>Violation</u>	<u>Date of Violation</u>	<u>Date of POTW Knowledge</u>	<u>Date of POTW Response</u>	<u>ERP Required Response</u>	<u>POTW Response</u>
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We arrived at the South St. Joseph Sewer district around 10am. We observed a sign that say the business was established in 1963. Naji established the purpose of the visit and how SSJSD was a repeat SNC on the annual report due to high sulfides. How is the city handling compliance and how is the industry showing that they are working to achieve compliance. We discussed how there was a possibility that the SD might fall under the categorical standard of 437. Chad Coleman, General Manager, stated that they had considered installing activated sludge or secondary treatment but decided against it to keep the BOD high for the City. They added aeration and are considering chemical treatment (hydrogen peroxide) and Chad has noticed a significant reduction in sulfide after the addition of aeration. The aeration was installed in the sedimentation basins.

Chad believes that the high sulfides is due to the water supplied by Missouri American St. Joseph is high in sulfates. Also the industrial waste with high BOD causes high sulfates. SSJSD does not take consistent influent samples. They ask the industries to treat down to 0.5 mg/l and the sulfides when it hits the treatment plant the sulfides are about 2 mg/l. They are considering redoing their agreements with their industries and considering surcharges for high strength waste for their customers. BHJ has the highest strength waste but low flow. High sulfides, high ammonia, and total k nitrogen. Ventura foods has high sulfides (10 or greater) but has low flow. BHJ varies from 20 to 100 mg/l for sulfides. 15 industries discharge to SSJSD. SSJSD will redistribute fines from the city onto the industries. Chad is waiting on an email from BHJ to say what their plan is to reduce sulfides. Chad states that he submits a sludge report to the MoDNR but was unaware that he needed to submit a sludge report to the EPA.

Tiffany Eidson, Laboratory Technician, lead the tour. We started the tour at the mechanical bar screen. After the solids are removed the wastewater flows to a wet well where aeration is added. The wastewater is this sent to the two grit tanks where one is in operations at all times. Each grit tank is split by a baffle wall to

create two parallel grit tanks. The beginning of each tank is aerated with diffusers. Then the wastewater settles in the settling basin [portion of the grit tank. Solids and scum are sent to the lagoon for additional settling before land application. They use concrete barriers for baffling in the lagoon. Tiffany pointed out the composite sampler locations for their sampling and the city's sampler. We observed that one unused grit tank had black wastewater in it. We pointed it out to Tiffany, thanked her for her time, and ended the tour. Jason finished up the inspection with Chad and collected a sample.

After SSJSD, we traveled to Mosaic – Laundry Facility. We met with Sean who operates the wastewater system. He provided a tour of the facility which includes dirty laundry that is sorted and placed into the washing system and explained that the pretreatment system involves a screening system and a holding pit with a sump pump that is outfitted with an overflow pipe. Currently there is no other treatment besides screening and holding but they are considering the addition of pH adjustment. The overflow from the pit includes continuous pH monitoring and continuous flow monitoring. Sean stated the high pH of the waste was causing issues with the meters including higher than normal flows and discharges when the industry is not in operation. The industry has a variance that allows them to discharge a pH of 11 SU. They obtained a new water meter from Missouri American St. Joseph and will be using it to verify the flow leaving the industry. The water company will provide the industry with a login to a portal so they can see the amount of flow daily purchased from the water company. The industry has received NOV's for failure to report high flows within 24 hours of knowledge of the violation. Sean stated that was his fault as he did not think the high flow was an accurate reading and was not an issue. They filed an appeal then for an extension due to upper management changes. The new vice president of Mosaic wanted to discuss the NOV with the City Manager.

After lunch we visited Triumph. We met with their representatives which included Stephen McFarland, AVP of Operations and General Plant Manager, Allen Poe, Senior Director of Engineering, Paul Gnomes, and Richard Allwood, Lead Operator, and discussed their compliance issues. Triumph representatives stated that they are in progress of installing an additional DAF which will operate in series and help with solids removal. They are working on a dewatering screw as a pilot/test unit which will take out the sludge and solids and wring out the grease and water. Afco is being used to balance the polymer to have better floc. They used a 12-hour aliquot sampler to determine the amount of disinfectant going to the wastewater and if its affecting the wastewater. Started an awareness plan about dumping disinfectant down the drain. Naji recommended the city and Triumph sit down and brainstorm improvements into a compliance schedule. The industry explains what can be done and agree to a timeline with the city. A couple of exceedances due to an upset. One was a pilot test with Afco where a polymer did not work and caused issues. Triumph should always need a justification as to why they are not reporting withing the 24 hours mark. After the discussion Richard Allwood, Lead Operator, lead a tour of the wastewater treatment. The process consists of rotoshear rotary screens, DAF 1 which is used as holding, FEB 1, DAF 2, FEB 2, DAF 3A and eventually DAF 3B before leaving through the city tank. All solids and grease pulled from the system are send to rendering. Solids after the rendering process are land applied.