

REPORT OF OVERSIGHT PRETREATMENT COMPLIANCE INSPECTION (PCI)

City of Jackson City
2230 Lee Avenue
Jackson, Missouri 63755

NPDES No.: **MO0022853**

BY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 7
ENFORCEMENT AND COMPLIANCE ASSURANCE DIVISION (ECAD)
WATER BRANCH / DRINKING WATER AND INSPECTIONS SECTION (WB/DWIS)

ON
DECEMBER 12 AND 30, 2024

At the request of the Water Branch (WB), Enforcement and Compliance Assurance Division (ECAD), an oversight pretreatment compliance inspection (PCI) was conducted of the City Jackson approved Industrial Pretreatment Program on December 12, 2024. To direct the inspection, a checklist was used that evaluates all important elements of the Oversight - PCI. A copy of the checklist is attached to this report (Attachment 1). The inspection was performed with Mr. Michael Donley from the Southeast Regional Office of the Missouri Department of Natural Resources as a tool of evaluating the effectiveness, reliability and completeness of the State's inspection procedures in the administration of their water compliance program established pursuant to Section 402 of the Clean Water Act, as amended. This narrative report presents the findings of the inspection.

PARTICIPANTS

City of Jackson IPP

- Sharon Raines, IPP Coordinator
- Kenny Gibbar, WWTP Forman

Missouri Department of Natural Resources -Water Protection Program

- Michael Donley, Environmental Engineer Assistant Michael.Donley@dnr.mo.gov

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

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

Facility Description

The City of Jackson, with an approximate population of 15,481 people (2020 census), currently operates an oxidation ditch wastewater treatment plant (WWTP) under the National Pollutant Discharge Elimination System (NPDES) permit number MO-0022853. The WWTP receives

discharges from two Significant Industrial Users (SIUs) that make up about 2% of its actual (dry weather) influent of 1.73 million gallons per day (MGD). According to the NPDES permit, the WWTP has a design dry-weather daily flow of 1.87 MGD, and a design wet-weather daily flow of 2.4 MGD. According to IPP personnel the plant has a design peak flow of 10.0 MGD. The plant discharges into Goose Creek (C)(02201). The two regulated industries, Rubbermaid and Farrow, are subject to the Metal finishing categorical standard 40 CFR 433.17.

The Jackson Industrial Pretreatment Program (IPP) was originally approved by Missouri Department of Natural Resources (MDNR) in 1984, and the NPDES permit was modified in 1986 to require the city to implement its approved IPP. Local limits, the original Sewer Use Ordinance (SUO), and the list of significant industrial users (SIUs) were originally established and approved in 1991 and 1992. The IPP incorporated EPA Streamlining rules which the State of Missouri had adopted by reference on October 30, 2012. Local limits established in the sewer use ordinance are both concentration and mass limits for a range of pollutants. The current NPDES permit became effective on January 1, 2020, and expired on December 31, 2024. A permit renewal application was received by the MDNR on June 28, 2024.

Chapter 41, Article III, DIVISION 3 of the SUO gives the city the authority to implement and enforce the IPP, such as issuing permits for a duration of five (5) years or less, the right to inspect, sample, enforce, and collect fines up to five hundred dollars (\$500).

Inspection Procedures

Prior notification of the inspection was provided by Mr. Donley to ensure timely access to the facility. I met with Mr. Donley off site for a pre-inspection meeting prior to entering the facility on December 12, 2024. During the pre-inspection meeting, Mr. Donley mentioned that he has been working for the Missouri Department of Natural Resources at Southeast Regional Office for approximately five years and has completed multiple pretreatment compliance inspections and audits.

Mr. Donley stated that he has been to the facility and has inspected it before. He added that he had reviewed available documents including the NPDES permit, previous inspection reports, and the discharge monitoring reports prior to the inspection. Mr. Donley and I then proceeded to the Jackson WWTP.

At the WWTP, we met with Ms. Sharon Raines and Mr. Kenny Gibbar. We introduced ourselves and presented our credentials. Mr. Donley explained the purpose and procedures of the PCI. After the opening conference, Mr. Donley briefly reviewed Rubbermaid's file and soon after we drove to the Rubbermaid facility to conduct a pretreatment industrial user compliance evaluation inspection (IU-CEI). After the IU-CEI we proceeded back to the WWTP to conduct the PCI by reviewing required records, then Mr. Donley conducted the formal exit meeting with IPP personnel.

After the exit briefing, I had a post-inspection meeting with Mr. Donley, in which we discussed his inspection. On December 30, 2024, I received via email a copy of Mr. Donley's inspection report that included Unsatisfactory Findings and Response Required (Attachment 2).

Inspection Observations

1. ***NPDES Permit:*** The current NPDES permit became effective on January 1, 2020, and expired on December 31, 2024. A permit renewal application was received by the MDNR on June 28, 2024. The permit requires the permittee to implement and enforce its approved pretreatment program in accordance with the requirements of 10 CSR 20-6.100.
 - a. (a) The permittee shall submit to the Department via the Electronic Discharge Monitoring Report (eDMR) Submission System on or before March 31st of each year a report briefly describing its pretreatment activities during the previous calendar year. At a minimum, the report shall include the following:
 - (1) An updated list of the permittee's industrial users, including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The permittee shall provide a brief explanation of each deletion. This list shall identify which industrial users are subject to categorical pretreatment standards and specify which standards are applicable to each industrial user. The list shall indicate which industrial users are subject to local standards that are more stringent than the categorical pretreatment standards. The permittee shall also list the industrial users that are subject only to local requirements.
 - (2) A summary of the status of industrial user compliance over the reporting period.
 - (3) A summary of compliance and enforcement activities (including inspections) conducted by the Permittee during the reporting period; and
 - (4) Any other relevant information requested by the Department.
2. ***Inspection Preparation:*** Mr. Donley was prepared for the inspection. He had the appropriate personal protective equipment, a camera, his laptop, and he had reviewed, the NPDES permit, the previous inspections, and the 2023 annual report submitted by the Jackson IPP.
3. ***Inspection Procedures:*** Upon entering the facility, we introduced ourselves and presented our credentials. During the opening conference, Mr. Donley explained the purpose and procedures of the PCI. These included completing the PCI checklist (Attachment 3), evaluating core program documents such as the SUO and the ERP, reviewing industrial files, self-monitoring and discharge records, and perform an IU-CEI at one of the regulated industries. Mr. Donley was confident and relaxed throughout the PCI. He established a good connection with the IPP personnel.

Soon after, Ms. Sharon Raines mentioned that Rubbermaid agreed to a site visit first thing in the morning and that we all should be heading there and was rushing us to go to the industry. At first, Mr. Donley agreed without reviewing Rubbermaid's file. I pointed out to Ms. Raines and Mr. Kenny Gibbar and Mr. Donley, that before we inspect the facility, we should review Rubbermaid's file to understand their processes and what required by the Rubbermaid's industrial permit (see observation #2 under conclusion).

While Mr. Donley was looking through Rubbermaid's file, he noticed that the Jackson IPP requires Rubbermaid to have an approved slug discharge control plan. Rubbermaid did submit a plan, but it was a plan for mitigating pollution from stormwater discharges of petroleum-based materials. Mr. Donley concluded that that plan which Rubbermaid

submitted to Jackson IPP does not count as a slug discharge control plan. After reviewing Rubbermaid's file, we drove there to conduct the facility inspection.

Mr. Donley conducted a very good inspection at Rubbermaid's facility and pointed out issues. There were few issues which the Jackson IPP shall require from Rubbermaid. Jackson IPP shall require Rubbermaid to work with them to develop an adequate slug discharge control plan, and to begin investigating the wastewater piping layout for proper local limits enforcement.

After arriving back to the Jackson IPP offices at the WWTP, Mr. Donley utilized an inspection checklist on his laptop to take notes throughout the PCI. Mr. Donley started reviewing industrial permits of the two regulated industrial users, Rubbermaid, and Farrow Fabricating. Both are classified as metal finishers under 40 CFR 433.17. The Jackson IPP personnel mentioned that the city does their own annual sampling in addition to the industry self-monitoring and reporting (See narrative report and checklist Attachments 2 & 3).

Mr. Donley pointed out the following issues based on his file review,

- a. Industrial permits are issued with a three-year frequency, however, the IPP was renewing them every year.
- b. Both industrial files did not include documents that both industries sampled for Total toxic organics (TTO) nor they submitted a solvent management plan in lieu of sampling for TTOs.
- c. A nickel exceedance at Farrow was found by a city sample. This exceedance was properly documented and a resample was taken which showed nickel levels had returned to compliance.
- d. Local limits established in the sewer use ordinance. There are both concentration and mass limits developed for a range of pollutants. To adequately enforce mass limits, flow rate must be measured and reported. At the time of the PCI, flow rates at the industries were not being measured and reported to the city. The Jackson IPP personnel estimated the amount of mass discharged based on equipment ratings like tank volume and pump flow rates. Mr. Donley concluded, an estimate is not sufficient for adequate limit enforcement, and industries will need to install flow meters.
- e. He recommended that Jackson IPP Coordinator review the definition of significant noncompliance (SNC) to ensure proper understanding and identification of noncompliance.

I pointed out couple of things which Mr. Donley overlooked. (1) The IPP should periodically conduct formal evaluation/update (survey is one method) to update the list of the regulated industries; (2) The inspector should evaluate the metals concentration in the sludge generated by the WWTP because one function of the pretreatment program is to protect the WWTP's sludge from metals contamination and to determine the pretreatment program's effectiveness.

4. **Inspection Report:** I reviewed a copy of the PCI report that Mr. Donley prepared. The PCI report and the checklist were well written, accurate, and identified all the issues discussed during the inspection. Mr. Donley did include his field notes (checklist) that were taken during the inspection. The Report included the unsatisfactory findings with required response.

Conclusion

1. Overall, Mr. Donley conducted an excellent PCI and was well prepared.
2. Prior to inspecting any regulated industry, inspectors should always review the industry's file and applicable requirements. In addition, inspectors can be, to a certain degree, accommodating to the regulated community during inspections. However, inspectors should always take the leading role and be directing the inspection.
3. Inspectors should evaluate the metals concentration in the sludge generated at the WWTP. Because one function of the IPP is to protect the sludge from metals contamination and to determine the pretreatment program's effectiveness. Inspectors should also detect variations in the metal's concentration.

NAJI AHMAD Digitally signed by NAJI AHMAD
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Naji J. Ahmad
Environmental Engineer

JOSEPH HEAFNER Digitally signed by JOSEPH HEAFNER
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Joe Heafner
Acting Supervisor, DWIS

ATTACHMENTS

1. Oversight Checklist
2. Jackson PCI Narrative Report
3. Jackson PCI Checklist
4. Jackson NPDES permit

OVERSIGHT WATER COMPLIANCE INSPECTION CHECKLIST

Type of Inspection: PCI OCEI OCSI

Date of Inspection/Sampling: December 12, 2024

Facility Name/Location: The City of Jackson Industrial Pretreatment Program
2230 Lee Avenue
Jackson, Missouri 63755

Facility Telephone Number: (573) 243 4290

Facility Permit Number: NPDES: MO0022853
State: MO0022853

Participants:

Affiliation

Facility: Sharon Rains, Pretreatment Coordinator
Kenny Gibber, WWTP Forman

State Agency: Missouri Department of Natural Resources -Southeast Regional Office
Michael Donley Environmental Engineer Associat 573-840-9364

US EPA: US EPA Region 7- ECAD/WB/DWIS
Naji Ahmad US EPA Environmental Engineer 913-551-7190

EVALUATION (S = Satisfactory, M = Marginal, U = Unsatisfactory, N/A = Not Applicable)

Sampling Procedures:		Inspection Procedures:	
	Sampling Design	S	Procedure for Inspection
	Sampling Equipment	S	Inspection Tools
	Sampling Methodology	S	Entry Procedures
	Field Determinations	S	Permit Verification
	Documentation	S	Records & Reports Check
	Sample Preservation & Handling	S	Permit Requirements
	Chain-of-Custody	M	Facility Inspection
	Quality Assurance	S	Documentation

SECTION I. INSPECTION PROCEDURES

A.	Preparation for Inspection	YES	NO	N/A
	1. Inspector had reviewed appropriate facility files; e.g., permits, previous inspection reports, letters, correspondence, etc.	Y		
	2. Had coordinated with EPA/other State personnel.			NA
	3. Was knowledgeable of applicable regulations.	M		
	4. Had performed previous water compliance inspections.	Y		
	5. Was overall familiar with facility.	Y		
	6. Had inspected this facility previously.	Y		

Comments: The inspector was not familiar with the 40 subprocess under 40 CFR 433.

The industry is catagorical industry subject to the Metal Fininshing standard 40 CFR 433.17.

B.	Inspection Tools	YES	NO	N/A
	1. Had adequate individual safety equipment.	YES		
	2. Had brought a camera and film (recording media).	YES		
	3. Had brought copy of applicable regulations.	YES		
	4. Had brought applicable facility files and permit.	YES		
	5. Had brought appropriate inspection forms.	YES		
	6. Had brought adequate writing material.	YES		

Comments: Inspector brought his laptop

C. Entry Procedure	YES	NO	N/A
1. Attempted to contact designated official representative.	YES		
2. If designated official was not available, inspector determined that spokesperson was authorized to speak for the facility.			NA
3. Was prior notification provided to the facility?	YES		
4. If entry was denied, did the inspector follow established State procedures?			NA
5. Did inspector present his/her credentials or other ID?	YES		
6. Did inspector establish authority for the inspection?	YES		
7. Did inspector explain reason, scope and procedure for inspection?	YES		
8. Did inspector explain facility's rights to confidentiality of information obtained during inspection?	YES		

Comments: _____

D. Permit Verification	YES	NO	N/A
1. Inspector obtained information on current processes/operations at facility?			NA
2. Identified sources and quantified waste streams.	YES		
3. Methods of treatment of wastewater and disposal of sludge were determined or verified.		NO	
4. Description of facility contained in permit/permit application was verified.	YES		
5. New or different processes/operations were noted.	YES		
6. Number and location of discharge points were verified.	YES		
7. Verified that all outfalls were permitted.	YES		
8. Verified that name and address of facility were correct.	YES		

Comments: Inspector did not check metal concentration in the sludge.

E. Records and Reports Check YES NO N/A

1. Did the inspector inspect and evaluate the following records in detail?			
a. Monitoring records	YES		
b. Calibration and maintenance records	YES		
c. Facility operating records	YES		
d. Records of contributing industries	YES		
e. Quality assurance records			NA
2. Did inspector verify that the self-monitoring records included:			
a. Date, time and location of samples collected or measurement made	YES		
b. Person collecting sample or making measurement	YES		
c. Sample analysis date	YES		
d. Individual performing sample analyses	YES		
e. Analytical methods/techniques used	YES		
f. Analytical results	YES		

Comments: _____

F. Permit Requirements YES NO N/A

1. Did inspector evaluate the following to determine adequacy:			
a. Flow measurement	YES		
b. Sampling procedures	YES		
c. Laboratory practices	YES		
d. Operation and maintenance	YES		
e. Monitoring of industrial contributors	YES		
2. Did inspector determine status of facility in meeting compliance schedule?			NA
3. Did inspector evaluate sludge management/disposal practices?	NO		
4. Did inspector evaluate industrial pre-treatment program?	YES		

Comments: The inspector did not look at sludge data to investigate metal concentration in the sludge

G. Facility Inspection YES NO N/A

1. Did inspector visually inspect and evaluate treatment facilities to verify adequacy of operation and maintenance?	YES		
2. Did inspector visually inspect and evaluate the condition of the receiving stream?		NO	
3. Did inspector verify accuracy of information on operation of facility by visual observation; 2.g., flow pattern, number and location of discharge points, bypasses?	YES		
4. Were photographs taken to document deficiencies or violations?			NA
5. Were apparent or actual operational and/or maintenance problems noted?	YES		

Comments: _____

H.	Documentation	YES	NO	N/A
	1. Did inspector take adequate notes?	YES		
	2. Did inspector obtain photocopies of specific records, reports, etc. to document deficiencies?	YES		
	3. Did inspector complete applicable inspection forms to document results of inspection?	YES		
	4. Did inspector take photographs to document observations?			NA

Comments: Inspector used his laptop to document notes.

I.	Exit Procedures and Post-Inspection Report Review	YES	NO	N/A
	1. Did inspector summarize for the facility representatives all deficiencies observed? If yes, were the deficiencies accurately and completely characterized?	YES		
	2. Did inspector articulate that a report describing the findings of the inspection would be drafted and sent to the facility?	YES		
	3. Did inspector communicate expectations for correction of any deficiencies, including a timeframe for completion?	YES		
	4. Did the state report accurately and completely capture all of the deficiencies that the inspector observed and/or recommendations that the inspector discussed with the facility representatives?	YES*		

Comments: *Very detailed report

SECTION II. SAMPLING PROCEDURES

A. Sampling Design **NA**

1. Sampling Locations	YES	NO	N/A
a. Adequate to obtain representative samples			
b. Correspond with permit to determine status with effluent limitations			
c. Consistent with objectives of inspection			
d. Adequate to segregate multiple waste streams			

2. Parameters to be Analyzed	YES	NO	N/A
a. Correspond with permit to determine compliance status with effluent limitations			
b. Adequate to meet any special objectives of the inspection; e.g., toxics, bio-monitoring, pretreatment			

3. Type of Samples	YES	NO	N/A
a. Correspond with permit for each parameter			
b. Adequate to obtain representative results			
c. Consistent with parameters to be analyzed			

4. Sampling Duration	YES	NO	N/A
a. Correspond with permit requirements for each parameter			
b. Adequate to obtain representative data			
c. Consistent with objectives of the inspection			

Comments: _____

B. Sampling Equipment

1. Sampling Personnel:	YES	NO	N/A
a. Were thoroughly familiar with function and use of equipment.			
b. Had adequate individual safety equipment; e.g., hard hat, safety shoes, safety glasses.			

2. Intermediate Sample Containers; e.g. buckets:	YES	NO	N/A
a. Had been properly cleaned prior to use.			
b. Were made of material compatible for use in collecting samples for the parameters to be analyzed; e.g. glass versus plastic.			

3. Automatic samplers:	YES	NO	N/A
a. Had been properly cleaned prior to use; e.g., tubing, compositing container(s), etc.			
b. Had been maintained in accordance with established procedures; e.g., desiccant replaced, pump tubing replaced, battery recharged.			
c. Had been checked for proper functioning prior to use.			
d. Were properly equipped to collect samples for the parameters to be analyzed; e.g., Tygon versus Teflon tubing, glass versus plastic.			
e. If the facility's automatic sampler was utilized, was the adequacy of the device verified?			

4. Sample Containers:	YES	NO	N/A
a. Were adequate to obtain sufficient volume of the parameters to be analyzed.			
b. Had been properly prepared prior to use; e.g., for fecal coliform, organics.			
c. Were made of material compatible with the parameters to be analyzed.			

Comments: _____

C. Sampling Methodology

1. Grab Sampling:	YES	NO	N/A
a. Grab sampling techniques were adequate to obtain representative samples.			
b. Samples were collected directly into sample containers, when possible.			
c. When used, intermediate sample containers were rinsed three times with waste stream prior to collecting actual sample (except for oil & grease, fecal coliform).			
d. Samples were collected at a location where there was adequate mixing in the waste stream.			
e. Samples were adequately mixed during pouring operations.			

2. Composite Sampling:	YES	NO	N/A
a. Composite sampling techniques were adequate to obtain representative samples.			
b. Intake for automatic sampler placed in well-mixed portion of waste stream; e.g., mid-channel at 0.4-0.6 depth.			
c. Intake tubing length was kept to a minimum.			
d. Sags in intake tubing were avoided.			
e. Aliquot volume was checked during setup (a minimum of 100 mL is recommended for each aliquot).			
f. Total composite sample consisted of at least 8 discrete aliquots.			
g. Samples (either each aliquot or total composite) were thoroughly mixed during pouring operations.			

Comments: _____

D. Field Determinations

1. pH:	YES	NO	N/A
a. Meter was adequate to accurately perform determinations.			
b. Meter was standardized in accordance with current accepted procedures prior to use.			
c. Determinations were performed in accordance with accepted procedure.			
d. When a measurement revealed a violation of limits, the meter was re-standardized and the measurement of the sample performed again.			

2. Temperature:	YES	NO	N/A
a. The accuracy of the thermometer had been determined prior to use.			
b. The thermometer was in good condition to yield accurate results.			
c. Measurements were performed in accordance with current accepted procedures.			

3. Dissolved Oxygen:	YES	NO	N/A
a. If a meter was used, it had been standardized in accordance with current accepted procedures prior to use.			
b. If the Winkler titration method was used, the sample was preserved properly upon collection.			
c. The determinations were performed in accordance with accepted procedures.			

4. Flow Measurement	YES	NO	N/A
a. When the facility's flow monitoring equipment was used, the accuracy and reliability of the equipment was determined and verified.			
b. When flow monitoring equipment was installed, it was installed properly.			
c. The measurement of flow corresponded with the period of composite sampling.			

Comments: _____

E.	Documentation	YES	NO	N/A
	1. The sample collection effort was adequately documented; e.g., the time/date, location and sample collector were included in the field records.			
	2. The time/date, location and analyst were recorded for all field determinations.			
	3. Accurate field notes were maintained regarding any observations and/or unusual occurrences during the sampling period.			
	4. All samples, except for those analyzed in situ, were properly identified with a sample tag/label.			
	a. The sample tag/label was moisture resistant, could withstand field conditions and was securely attached to each sample container.			
	b. Each sample tag/label indicated the discrete sample number, date/time of collection, sample collector, parameters to be analyzed and preservation.			

Comments: _____

F.	Sample Handling	YES	NO	N/A
	1. When the facility's flow monitoring equipment was used, the accuracy and reliability of the equipment was determined and verified.			
	2. When flow monitoring equipment was installed, it was installed properly.			
	3. The measurement of flow corresponded with the period of composite sampling.			

Comments: _____

G.	Chain of Custody	YES	NO	N/A
	1. An accurate written record (custody record) was maintained to document the possession of each sample from the time of collection until receipt by the lab.			
	2. The samples were in sample collector's actual possession, in sampler's view after being in physical possession, or were locked up to prevent tampering at all times.			
	3. Custody seals or tape or other secure means were used when samples were shipped via commercial means to the laboratory.			
	4. The procedures used were consistent with established State procedures.			

Comments: _____

H.	Quality Assurance	YES	NO	N/A
	1. Procedures were established to include this aspect in field sampling activities.			
	2. Duplicate samples were collected in accordance with established procedures.			
	3. Adequate documentation was maintained.			

Comments: _____
