



State of Mississippi

TATE REEVES
Governor

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHRIS WELLS, EXECUTIVE DIRECTOR
June 14, 2021

Sent via Federal Express

Honorable Shirley Sanderford
City of Hazlehurst
PO Box 549
Hazlehurst, MS 39083-0549

Re: Notice of Violation
Hazlehurst POTW, Activated Sludge
Hazlehurst, Mississippi
Copiah County
Water - NPDES Permit No. MS0023922

Dear Mayor Sanderford:

Attached is our inspection report that was completed as a result of a Compliance Evaluation Inspection (CEI) at Hazlehurst POTW, Activated Sludge on April 19, 2021. This inspection revealed the following violation(s):

1. **Water-NPDES Permit No. MS0023922, Condition T-28:** "The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit....". The treatment plant needs attention in regards to repairs (inoperable communicator, noisy aerator, flow meter, and clarifier valve), cleaning (vegetation noted in operating clarifier as well as in chlorine contact chamber) and routine housekeeping and maintenance. Records should be kept when any of these activities are performed. A checklist is recommended for preventative maintenance activities during operator visits.
2. **Water-NPDES Permit No. MS0023922, "Effluent Limitations and Monitoring Parameters":** All parameters should be monitored at least the number of times per week as required by the NPDES permit (see the above cited table). If no monitoring was performed for any parameter, results should not be reported on the DMR. During our records review, we found that sampling/monitoring was not performed at the frequency required for the following parameters: flow, pH, D.O. in Aeration Basin, and Settleability.

Agency Interest No. 13177
ENF20210001

3. **Water-NPDES Permit No. MS0023922, Permit Condition R-1:** “Recording of Results: For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including:
 - (1) The exact place, date, and time of sampling;
 - (2) The dates the analyses were performed;
 - (3) The person(s) who performed the analyses;
 - (4) The analytical techniques, procedures or methods used; and
 - (5) The results of all required analyses.” There was no data available for the D.O. in Aeration Basin for the months reviewed, although values were reported on the DMRs.
4. **Water-NPDES Permit No. MS0023922, Permit Condition T-24:** “Test procedures for the analysis of pollutants shall include those set forth in 40 CFR 136 or alternative procedures approved and/or promulgated by EPA.” The pH buffer solutions were expired on the day of our inspection and should be replaced with fresh solutions. Calibration of the meter with viable buffer solutions should be performed each day that the meter is used and records kept on file.

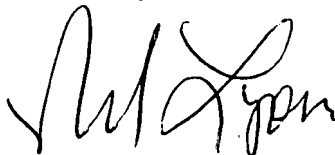
In addition to the alleged violations noted above, please submit the following documents within ten (10) days after receipt of this inspection report for review for the period of October 2020 to May 2021:

1. All laboratory analysis results and laboratory analysis final reports;
2. All chain-of-custody forms;
3. All certified operator records showing any monitoring/sampling data and maintenance with dates of onsite visits, sampling and flow monitoring;
4. Calibration logs or records that document required calibration of any field or laboratory instrument or equipment used when collecting and/or analyzing your facility's samples.

We request that you respond to these alleged violations within ten days following the receipt of this letter. This response should contain: (1) actions that have been taken to correct the violation(s), (2) a schedule for correcting the violation(s), or (3) reasons why you believe the alleged violation(s) did not exist. We will review this information before determining if further action is warranted. Failure to submit this information may result in enforcement action.

If you have any questions concerning this matter, please contact me at (601) 961-5171.

Sincerely,



Rusty Lyons, P.E., BCEE
Municipal and Private Facilities
Environmental Compliance and Enforcement Division



Mississippi Department of Environmental Quality
Office of Pollution Control
Water Compliance Inspection Report

Site Name: Hazlehurst POTW, Activated Sludge

Permit Number: Water - NPDES Permit No. MS0023922

Physical Address

1186 Nelson Drive
Hazlehurst, MS 39083
Copiah County

Mailing Address

PO Box 367
Hazlehurst, Mississippi 39083

Evaluation Type: Compliance Evaluation Inspection - NPDES

Date of Evaluation: 04/19/2021

Facility Type: Minor Municipal

Inspection Participants: Mr. Jessie Hayden, Contract Certified Operator
Mr. Peter Catching, Water & Sewer Superintendent
Mr. James Gammill, MDEQ
Mr. Rusty Lyons, MDEQ

Purpose of Inspection

The City of Hazlehurst operates a wastewater treatment facility (Facility) under NPDES Permit No. MS0023922 with a discharge to Bahala Creek. MDEQ personnel conducted an inspection on April 19, 2021, to determine the facility's compliance with the conditions of the NPDES permit.

Permit Status

The Hazlehurst POTW, Activated Sludge NPDES Permit No. MS0023922 was re-issued on November 26, 2018, and expires on October 31, 2023. The permit contains no compliance schedules and requires compliance with all limitations.

Facility Description

The City of Hazlehurst has two wastewater treatment facilities. This report is for the activated sludge facility located at the end of Nelson Drive (see Photos 1 & 2). Raw wastewater is pumped to the Facility from a pump station located at southwest corner of the property. Preliminary treatment is provided by a comminutor used to shred any large solids. The wastewater then gravity flows into one of two aeration basins. Aeration is provided by fixed mechanical rotating surface type aerators that provide oxygen and mixing. Because the normal influent flow is lower than the design flow of the basins, the second aeration basin is not used. On the influent end of the operating aeration basin, lime is fed to the basin to raise the pH. From the aeration basin, wastewater flows to one of two circular clarifiers. The clarifiers are center feed and rim discharge design. Settled solids in the clarifier are returned to the aeration basin or wasted to an old lagoon near the facility.

The supernatant from the clarifier flows through a small square concrete structure where a 90-degree v-notch weir is located for primary flow measurement. An ultrasonic sensor is mounted above the structure for continuous flow monitoring. Wastewater then goes to the chlorine contact chamber. Chlorine gas is introduced to the influent end of the chlorine contact chamber via a potable water line. The water line has backflow prevention installed onsite. At the end of the chlorine contact chamber, sulfur dioxide is used to remove the chlorine prior to discharge to the receiving stream. Cascade post aeration is used to raise the effluent dissolved oxygen concentration before discharge. There is an aerobic digester basin also onsite, but is no longer in use. In addition, there is a control/office building and an old inoperable generator.

Inspection Summary

Mr. Gammill and I arrived at the Facility and contacted the City that we were onsite, since no personnel were present. Once Mr. Catching and Mr. Hayden arrived at the site, we proceeded with the inspection. Mr. Catching left the site prior to the plant tour.

On arrival, we detected diesel odor and found that diesel fuel mixed with storm water from an underground diesel tank had flowed down a slope to a nearby small ditch (see Photo 10). The mixture was coming from an open hole flush with the ground. We were informed that the area had flooded during the previous heavy rainfall event causing the overflow of fuel and water mixture. MDEQ Emergency Response personnel went to the site later that day to investigate and assist the City.

Treatment Observations

At the time of the inspection, the communitor was out of service (see Photo 3). The drive motor had been sent out for repairs and was expected to be back in service in the next week or so. The contents of the aeration basin in use had a light brown color (see Photo 4). The three 25 horsepower aerators were operating, but one was producing a noise that could indicate a worn bearing. Lime was being fed via liquid slurry on the day of the inspection. The operator stated that the influent will experience "slugs" of low pH at times. The cause of the low pH was unknown. Mr. Hayden stated he did not know of any industrial discharges to the City's system.

Only one clarifier was in service due to a valve that would not operate. The operable clarifier needed to be cleaned (see Photo 5). Vegetation was growing in areas of the clarifier. Solids were settling, but the supernatant was slightly turbid. The solids were being returned to the aeration basin. The ultrasonic flow meter over the concrete structure containing the v-notch weir was inoperable (see Photo 6). The operator uses the run time meters on the influent pumps to calculate flow. The "Effluent Limitations and Monitoring Requirements" table of the facility's permit requires a continuous recorder. Mr. Hayden did not offer a timetable for these repairs.

The chlorine contact chamber had floating solids in the water and vegetation growing on the side walls and baffles (see Photos 7 & 8). The chlorine system appeared operable with four, 150-pound cylinders on hand. The sulfur dioxide feed for de-chlorination was also operating, and there were four, 150-pound cylinders on hand. A request was made by MDEQ personnel for the operator to check the total residual chlorine concentration, but Mr. Hayden did not have his colorimeter with him. The effluent was fairly clear as it

flowed down the cascade post aeration (see Photo 9).

Records Review

Mr. Hayden had previously been the certified operator for the facility, but returned in the fall of 2020 to resume that role. Records were not available at the time of the inspection, but Mr. Hayden emailed the requested months of laboratory data and his operator logs within a day after the inspection. Records requested for review were July 2020, January 2021 and March 2021. Discharge Monitoring Report (DMR) data was obtained from EPA's database. The March DMR data was not yet available. Waypoint Analytical collects the monthly 24-hour composite samples for the influent and effluent permitted parameters. They collect the monthly grab E coli sample and check the effluent dissolved oxygen (D.O.) concentration in the field. Waypoint also collects the annual Total Recoverable Mercury composite sample. Mr. Hayden is responsible for monitoring pH, Total Residual Chlorine (TRC), Flow, Aeration Basin D.O., and the 30-Minute Sludge Settleability Test (Settleability). These are required 5 days per week per the "Effluent Limitations and Monitoring Requirements" table in the NPDES permit for Outfall 001.

A review of the Waypoint reports showed that the chain of custody and laboratory records contained the appropriate information such as sample and analysis dates and times, signatures, sample preservatives, and analytical methods. The sample results from the laboratory reports appeared to be properly recorded on the DMRs.

A review of the certified operator's logs showed that the pH and TRC were being monitored less than the required 5 days per week. Settleability results were recorded only a few times per month for January and March, but none for July. Results were reported on the DMRs for July and January. Flow was being calculated from pump run times and this was being done less than 5 days per week. There were no readings for D.O. in the Aeration Basin shown on the operator logs; however results were reported on the DMRs. Minimum, maximum and average values were calculated using the monthly operator logs by Mr. Lyons. The values did not correspond to the data reported on the DMR, except for the January maximum pH and the January TRC average and maximum. It was also unclear what flow value was being used to calculate pounds per day reported on the DMRs. For the requested months of records, MDEQ was unable to reconcile much of effluent data calculated by the facility that was submitted on their DMRs.

Mr. Hayden did not have his colorimeter onsite at the time of the inspection, so the meter and reagents could not be inspected. Mr. Hayden uses a Hach HQ40D meter for pH; however, the probe was not with the meter. pH buffer solutions had expired and there were no calibration records available. Maintenance records observed were notes made on the operator logs.

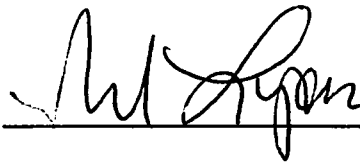
Conclusions

The following alleged violations were noted as a result of this inspection:

1. **Water-NPDES Permit No. MS0023922, Condition T-28:** "The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit....". The treatment plant needs attention in regards to repairs (inoperable communicator, noisy aerator, flow meter, and clarifier valve), cleaning (vegetation noted in operating clarifier as well as in chlorine contact chamber) and routine housekeeping and maintenance. Records should be kept when any of these activities are performed. A checklist is recommended for preventative maintenance activities during operator visits.
2. **Water-NPDES Permit No. MS0023922, "Effluent Limitations and Monitoring Parameters":** All parameters should be monitored at least the number of times per week as required by the NPDES permit (see the above cited table). If no monitoring was performed for any parameter, results should not be reported on the DMR. During our records review, we found that sampling/monitoring was not performed at the frequency required for the following parameters: flow, pH, D.O. in Aeration Basin, and Settleability.
3. **Water-NPDES Permit No. MS0023922, Permit Condition R-1:** "Recording of Results: For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including:
 - (1) The exact place, date, and time of sampling;
 - (2) The dates the analyses were performed;
 - (3) The person(s) who performed the analyses;
 - (4) The analytical techniques, procedures or methods used; and
 - (5) The results of all required analyses."There was no data available for the D.O. in Aeration Basin for the months reviewed, although values were reported on the DMRs.
4. **Water-NPDES Permit No. MS0023922, Permit Condition T-24:** "Test procedures for the analysis of pollutants shall include those set forth in 40 CFR 136 or alternative procedures approved and/or promulgated by EPA." The pH buffer solutions were expired on the day of our inspection and should be replaced with fresh solutions. Calibration of the meter with viable buffer solutions should be performed each day that the meter is used and records kept on file.

In addition to the alleged violations noted above, please submit the following documents within ten (10) days after receipt of this inspection report for review for the period of October 2020 to May 2021:

1. All laboratory analysis results and laboratory analysis final reports;
2. All chain-of-custody forms;
3. All certified operator records showing any monitoring/sampling data and maintenance with dates of onsite visits, sampling and flow monitoring;
4. Calibration logs or records that document required calibration of any field or laboratory instrument or equipment used when collecting and/or analyzing your facility's samples.

Signature:  Date: 6/14/21

Photos / Other Attachments

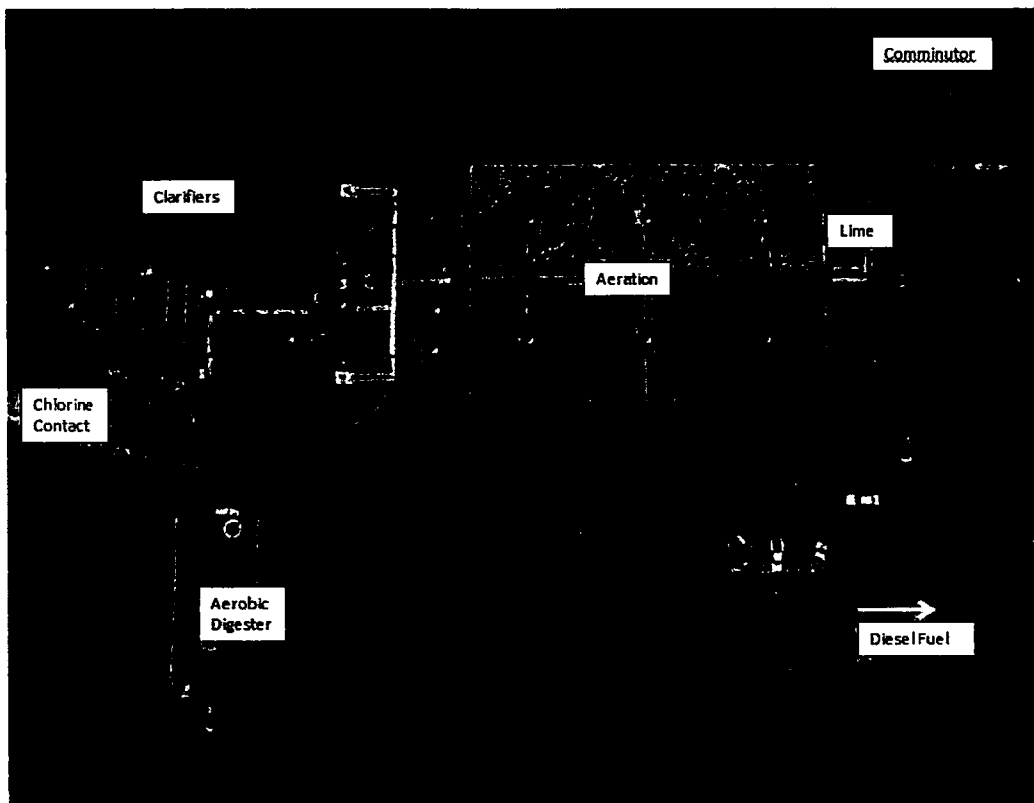


Photo 1: Aerial of Hazlehurst Activated Sludge POTW

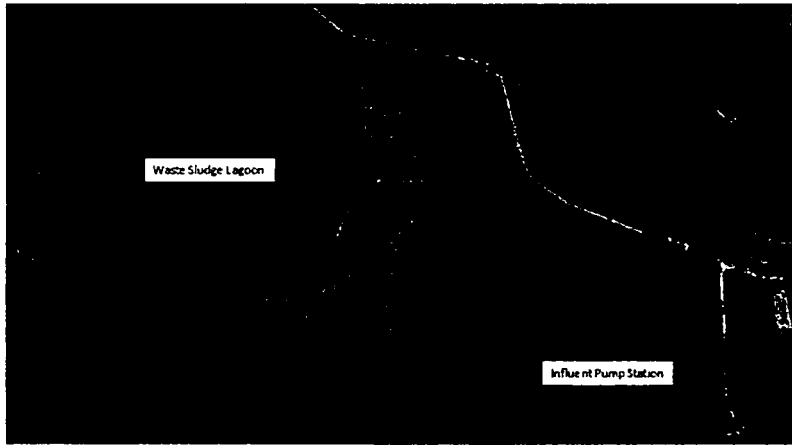


Photo 2: Aerial of Sludge Lagoon and Influent Pump Station

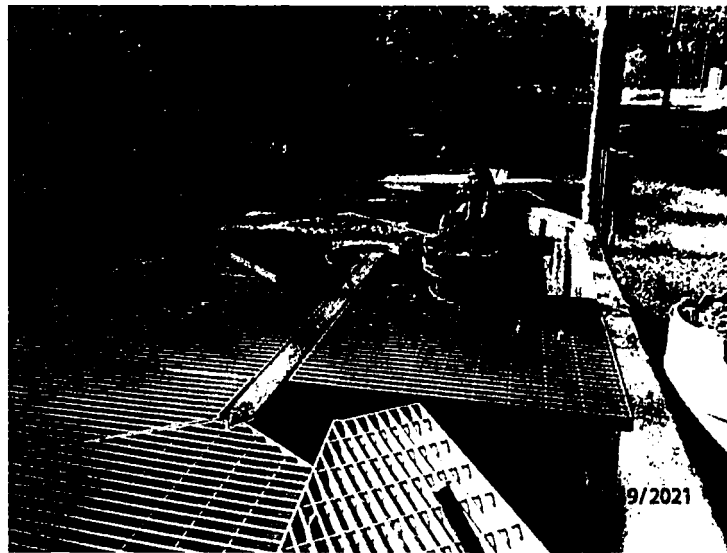


Photo 3: Out of Service Communitor



Photo 4: Aeration Basin

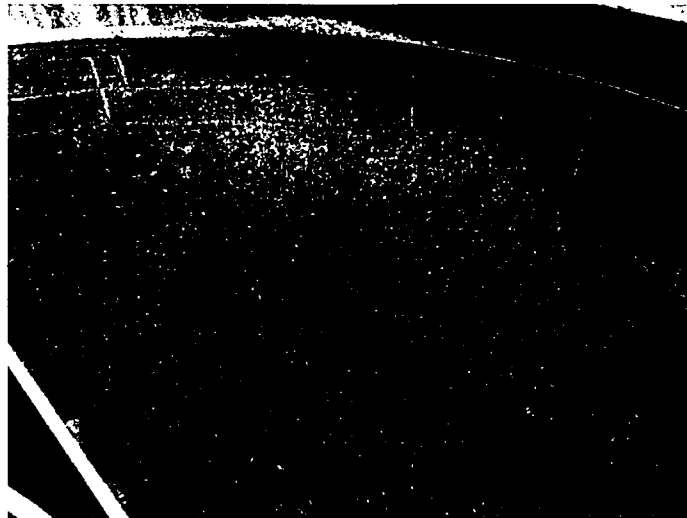


Photo 5: Operating Clarifier



Photo 6: V-notch weir with ultrasonic sensor



Photo 7: Chlorine contact chamber with floating solids & vegetation

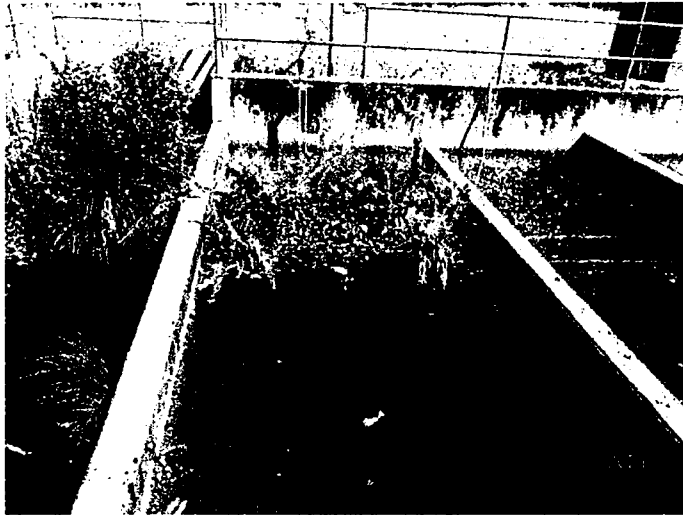


Photo 8: Vegetation in chlorine contact chamber



Photo 9: Cascade post aeration



Photo 10: Location of diesel fuel/storm water overflow