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FIELD REPORT

PROJECT: Lewes QA/QC Eval. DAY: Tuesday DATE: 5/19/20

LOCATION: Lewes WWTP WEATHER: Sunny 60's

GMB NO: 170148 OBSERVER: SWG

ATTENDEES:

Darrin Gordon
Paul Peris
Scott Getchell

Lewes BPW
White Marsh
GMB

Summary of activity:

Getchell arrived at the WWTP at 9:00 AM and was greeted by Peris from White Marsh Environmental (WME). Getchell and Peris discussed the field report dated 2/18/20. Many of the concerns and suggestions from that report have been addressed. Some remain and additional areas of concern are detailed in the remainder of this report. Getchell and Peris walked through the entire plant noting improvements, deficiencies, and potential opportunities for upgrade. Mr. Gordon arrived at the facility later during the evaluation.

Summary of evaluation:

PROCESS

- a. EQ – WME and CES have cleaned out the tank. MBA completed an assessment of the tank and submitted their report to BPW, WME & GMB. MBA states the tank will need to be replaced within 5-years. GMB will work with the BPW to design a replacement once directed.
- b. Screen – There remains a concern that the room is not adequately ventilated. Pipe corrosion is visible. No change since February.
- c. Grit – Pipe corrosion is visible. No change since February.
- d. Bioreactor – Peris stated the MLSS average concentration is 13,000 mg/L and that it continues to be a struggle to keep the concentrations lower due to challenges with sludge disposal. Today's MLSS was 11,600 mg/L. GMB is designing additional drying beds.
- e. Membranes – Trains #1, 2 & 4 have been replaced with new membranes. Train #3 is in the process of being replaced right now. Peris pointed out that lighting and grating in the building need upgrading once the membrane replacements are finished. Peris pointed out the turbidity meters (4) that were replaced with new meters having better alarming features. Peris states trapped air in the meter can create some issues, but they are successful in working it out. Peris reports that the coatings in Train #3 have failed, and the airline below the liquid level came apart due to corroding bolts and flange. Peris reports the Zenon logs are up to date.
- f. Back Pulse Tank – A new HACH Solitax in situ turbidity meter was installed in the tank to provide additional alarming for membrane protection. The alarm circuit is not tied to the SCADA at this time but plans are to connect to the new Suez control panel.

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AUTUMN J. WILLIS

- g. Chemicals – The MicroC tank does not appear to have secondary containment. The Sodium Hypochlorite fill connection is located over the Citric Acid secondary containment. There is chemical (assuming citric acid) laying in the secondary containment that is damaging the concrete. There is a lot of chemical on the floor and within the secondary containment of the Caustic feed room that is damaging the concrete. Peris stated all the above will be corrected at the completion of the new chemical feed line installations that are underway. Peris stated the chemical room ventilation system and lighting have been upgraded.
- h. UV – Peris reports all bulbs and controllers are working.
- i. Generator – Peris stated the generator receives regular maintenance and is exercised weekly under load.
- j. SCADA – Peris stated the main HMI terminal in the operations building is information only and understands that it will be upgraded to a full SCADA HMI. An upgrade is in the works.
- k. Blowers – The air compressor dryer is being replaced.
- l. Other – The Final Effluent flow chart recorder was replaced. The overall upkeep of the facility is improving.

SLUDGE

- a. Drying beds – Sludge pouring was underway while onsite. Peris requests additional drying beds be constructed and covers for the existing beds. This is currently in design.
- b. Digester – Peris requested assistance from BPW in turning digester yard valves. BPW is currently assisting. The membranes in the digester have been replaced.
- c. Press – The press is currently not being used. Parts of the ceiling are falling inside the press room. The overall upkeep of the press room needs improving. No change since February.
- d. Other – Peris stated they continue to dispose of the dried sludge in Pennsylvania, but Sussex County may be an option soon.

LAB

- a. Bench Sheets – Handwritten forms are being used and are located on the operators' desk.
- b. Instruments – Portable testing equipment is used.
- c. Other – Envirocorp Lab is used for all NPDES required sampling (except pH).

PUMP STATIONS

- a. Issues – Peris reports that Pump Station #3 needs a pump replacement. He shared a proposal from Envirep dated August 2019 for a total fee of \$10,294 to replace the pump. The work has not been authorized to date.
- b. Other – No pump stations were reviewed; only questions were asked. Peris states there are no other issues to report.

COMPLIANCE DOCUMENTS

- a. MORs – The MORs are computerized.
- b. DMRs – The eDMR system is being used to submitted DMRs.
- c. Permit compliance – Peris states there have been no violations in 2020.

MAINTENANCE RECORDS

- a. Manuals – There are several manuals located inside the maintenance building that existed pre-WME. Peris received an updated manual from Suez.
- b. Logs – WME uses a computerized work order/maintenance system. Peris stated that all known equipment and their respective maintenance requirements have been entered into this system. Peris will submit maintenance and inventory records to GMB starting this month.
- c. Other – Peris has updated the spare parts inventory sheet and will submit to GMB.

STAFFING

- a. District Manager – Kyle Betts is now the District Manager and visits the facility as needed.
- b. Senior Operator – James Taylor is now the Senior Operator and visits the facility twice weekly on average.
- c. DRC – Dave Weed is the operator in direct charge and is at the facility most of the time.
- d. Others – Gloria Lefchick is a plant operator and is at the facility 1-day per week assisting with administrative tasks. Steve Hultburg is a plant operator who is at the facility 1-day per week.

BPW EQUIPMENT

- a. Working order/issues – No issues reported with BPW owned equipment.
- b. Other – WME uses all WME owned fleet vehicles. No BPW vehicles are used.

QUALITY CONTROL PROGRAM (WW/PS)

- a. WME is using “Work and Asset Management (WAM)” as their quality control program.

MAINTENANCE MANAGEMENT 90-DAY RECOMMENDATION TO BPW

- a. Peris stated WME submits a detailed status report to BPW each month and will be copying GMB.

OTHER BPW SUBMISSIONS

- a. WME submitted the MBA report for the EQ Tank inspection.
- b. WME submitted a health and safety inspection report. WME is handling all the corrective actions detailed in the report.

ANNUAL EXPENSES QUARTERLY SUBMISSION TO BPW

- a. Peris reports this is submitted with the Annual Report.

ANNUAL EVALUATION SUBMISSION TO BPW

- a. The 2019 report was submitted to BPW and GMB.

EMERGENCY PREPAREDNESS PLAN

- a. WME has developed an Emergency Response Plan.

Recommended follow-up items:

1. WME/BPW/GMB to review the potential ventilation issue in the screen and grit rooms and associated piping corrosion.
2. GMB continues to encourage WME to maintain a MLSS concentration as close to design as possible (11,000 mg/L). Additionally, GMB advises WME not to sample trains that are offline since the results misrepresent the active process.
3. WME/BPW/GMB to review deficient lighting issues throughout the facility.
4. GMB continues to encourage WME to research the need for MicroC secondary containment.
5. The Sodium Hypochlorite fill connection that is located over the Citric Acid secondary containment should be relocated over the Sodium Hypochlorite secondary containment tank.
6. All chemicals that have spilled inside the secondary containment areas and flooring should be cleaned up to prevent further concrete damage and safe conditions for operators.
7. The press room ceiling needs to be repaired/reinforced. It is currently an unsafe environment.
8. WME/BPW/GMB to review the pump replacement at Pump Station #3.
9. Continue to cleanup and organize the entire facility.
10. WME to submit the ERP to GMB.
11. WME to submit copy of maintenance and inventory records to GMB.
12. WME to submit a copy of the SUEZ updated O&M manual to GMB.
13. WME to submit the December 2019 incident reports to GMB.

END OF REPORT