



## PUBLIC SERVICES DEPARTMENT HARRISON STREET FACILITY

1415 N. Harrison Street  
Kalamazoo, MI 49007  
Ph.269.337.8701  
Fx.269.337-8699

### **Odor Task Force Meeting Minutes**

**Date: May 5, 2022, Quarter 2 Meeting**

**Time: 1:00 to 2:25 PM**

**Attendees:** Tom Olstad, Gregg Lanternier, and Steven Smock, from Graphic Packaging; Monica Brothers, from EGLE, Aaron Davenport and Alexis Kontorouisis, from Jones and Henry Engineers; Aaron Wright, from the Environmental Concerns Committee, John Curran, Chief of Staff for Senator Sean McCann, and Jim Cornell, Ryan Stoughton, Ron Janssen, Steve Helmer, and Mike Buzzo, from the City of Kalamazoo. (13 total attendees). My apologies if I missed anyone. The meeting began at 1:00 PM. It was a hybrid meeting, with 8 attendees in Conference Room "A" at the Kalamazoo Water Reclamation Plant, and the other 5 attending remotely/virtually.

**Graphic Packaging International- Project Status Update-** Gregg Lanternier said that they have been making coated paper since February. They continue to fine-tune and optimize the process, and have entered a standard operating period. They continue to finish up the project, in terms of the building, parking lots, the truck scale, and etc.

**GPI Envirosuite System Update-** Gregg said that battery life issues continue to be an issue on a couple of their units. The issue seems to be due to faulty solar chargers, and one unit was damaged when the wind blew over its solar panels. Currently they have all of their 16 units functioning, but they are working with Envirosuite to obtain a better service plan, better upgrades, and overall better results. They are currently having to manually charge the batteries, and then swap them out as needed on the 2 units that the solar chargers aren't keeping charged.

**GPI Odor Management Systems Update-** Both the hydrogen peroxide and the liquid oxygen injection systems continue to be working well. They have lowered their clarifier discharge flow to about 2.0 million gallons per day, down from about 2.5 MGD a month or two ago. Looking to get the flow under 2.0 MGD eventually. Dose rates are stable in both odor management systems.

\*Ryan asked about the larger rental unit for liquid O<sub>2</sub> addition. They said it is working well, and adding about 150# of liquid oxygen per hour. They're hoping to be able to cut back a bit on the dose on the more expensive peroxide addition system, now that the larger O<sub>2</sub> system is running. They plan on installing their own O<sub>2</sub> addition system eventually and stop renting the current system.

\*Jim asked about their new water retention tanks being used. They have one more tank to put in service, and it should cut down their total wastewater discharge to KWRP by about an additional 150,000 gallons per day.

\*Ryan asked about the GPI clarifier performance with the higher flow. They think it's working better with the increase in flow.

\*Aaron W. asked if a new clarifier was installed. Not a new clarifier, but a "Clarified Water Tank" is being used to recycle clarified GPI effluent back to the plant. Aaron asked if there is any Envirosuite data that shows any related improvement. No change, due to the fact that it's a contained tank. GPI is not noticing any recent changes, because they started out aggressively with the chemical treatment systems.

\*Aaron W. also asked about the changes in flows lately. GPI's flows have historically averaged about 0.8 million gallons per day before their expansion. Upon startup, the new flow was averaging about 2.5 million gallons per day (about a 300% increase). Currently, their flow averages about 2.0 MGD. They are hoping to get the flow down to 1.6 – 1.8 MGD in a few months (about double their historical flow). They were asked how this would affect odors by Aaron W. GPI indicated that the goal is to lessen odors as all of their changes go online.

\*Aaron asked about obtaining the Envirosuite data, if not already posted somewhere. Monica said that EGLE has not posted it, and GPI indicated that they will share the data.

**City of Kalamazoo- EnviroSuite System Update-** The City is experiencing similar problems as is GPI, in terms of reliability of the solar chargers/meters, and the service provided by EnviroSuite. Having serious issues with obtaining parts and service from them. At present, all of the City's EnviroSuite sensors are working.

**City of Kalamazoo Odor Biofilter Update-** Bids on the project will be opened next Tuesday, and will proceed accordingly. This is for the combination biofilter and carbon scrubber combo project for multiple interceptor sewers. The plan is to have it completed and in service by about summer of 2023.

**City of Kalamazoo- Reconstruction of GPI sewer line/ junction box update-** The engineering design work should take place later this year, followed by the bidding, and then the construction will begin not long after that. We may also have to adjust/delay this project around the EPA river dredging project for PCBs that is taking place in the same area as this project at that time.

**City of Kalamazoo- Additional Collection System Improvements-** Jones and Henry Engineers will be studying the issues and options for improvements to be made. First, they will be doing a study on off-gasses and odors, focusing on the Davis and Spring Valley Interceptors. A meeting was recently held with a third company on the monitoring equipment required to do the study, and to evaluate the performance of new odor control changes and new equipment that could be utilized.

**Michigan Department of Health and Human Services-** Their planned long-term health study is being delayed from January until late May or June. The contact person for that is Andrea Keatley, (517)284-1273.

**EGLE Drone Flyover Odor Study-** Will be conducted the week of May 23<sup>rd</sup>. EGLE has 2 drones with 4 or more sensors on them, and will make a 3D profile of odors over the KWRP.

Aaron W. asked about information available on websites. The new addition to the city website for EnviroSuite data is not up and running yet. The current city website that allows for public submission of odor complaints is already up and running. Jim reports receiving about 2 or 3 odor complaints from the public each month.

There was a question about new EnviroSuite sensors to be installed farther out, including on the far western side of town. Those have not been installed yet. There is a meeting scheduled with EnviroSuite next week about 5 new sensors.

Aaron asked Monica about local odor complaints received by the state. She said only about 1 or 2 have been received.

GPI asked about the possibility for the timeline on their sewer junction box upgrade project to be moved up. Ryan said we could possibly start the project earlier, if GPI can allow it based on truck traffic in their lot. Later this year, perhaps. It ultimately depends on the availability of supplies, and delays in the supply chain. We may want to wait and see how the new biofilter works, prior to proceeding with the junction chamber project. (The biomass in the biofilter needs a reliable supply of food in order to operate properly).

The meeting ended at 2:25 PM.

Thank you,

Mike Buzzo.



**Thomas J. Olstad**  
Kalamazoo Board Mill  
Resident Mill Manager  
Phone: 269-383-5215  
Email: tom.olstad@graphicpkg.com

Date: June 10, 2022

## **RE: 2022 2<sup>nd</sup> Quarter Odor Management Update**

As required in Resolution No. 20-50, provision 3, Graphic Packaging International, LLCs ("Graphic Packaging") is providing our 2<sup>nd</sup> quarter 2022 Odor Management Update to the Kalamazoo City Administration for submission to the City of Kalamazoo Commissioners. This report covers the period of March 2022 through May 2022.

Included in this update are the minutes (Graphic Packaging portion) of the recent Odor Task Force meeting, current status of the Nuisance Minimization Plan for Odors (NMP) submitted to the Michigan Department of Environment, Great Lakes, and Energy (EGLE), the clarifier and wastewater treatment plant operations update, and the Envirosuite system update.

### **Odor Task Force Meeting & Minutes**

Meeting held February 23, 2022:

Graphic Packaging International- Project Status Update- GPI started producing uncoated paper with their new machine on 2/2/22. They started producing coated paper on 2/12/22. The rest of February and all of March they will be sending sample paper out to their customers. Optimizing and fine tuning the process will continue for some time yet. There are still a couple hundred contractors on site, finishing up work on the project. There were 1,500 contractors at the peak of the project.

Ryan asked about the status of truck traffic in the area of the sewer pipe reconstruction work that is planned for odor reduction. That probably won't settle down for months, yet, so perhaps after 2022, that work can proceed.

GPI Envirosuite System Update- They have been having a few issues with the batteries going dead. Adding more solar panels to try and be more reliable. The Version 2 meters draw less power and are working better with the batteries and bigger solar panels. There is now somewhat of a problem with higher winds blowing over the larger solar panels, so they may downsize the panels again and see if the new meters still work ok. The City of Kalamazoo has been having the same issues, and has recently swapped out to the new Version 2 meters, also.

GPI Odor Management Systems Update- Both the hydrogen peroxide and the oxygen injection systems are running, and continue to be working well. They have rented a larger system now to handle the larger discharge flows currently. It's a dual system, and that system is currently being set up for the upgrade.

GPI is doing a site optimization for their flow rate. They are currently at about 2.5 MGD average discharge flow, and will try to get it under 2.0 MGD in time.

Meeting held May 4, 2022:

The minutes have not been distributed from this meeting. Agenda items discussed by Graphic Packaging International included:

GPI Project Status Update.

GPI Envirosuite System Update.

GPI Odor Management Systems Update.

Next meeting date - TBD

### **Nuisance Minimization Plan for Odors (NMP)**

Graphic Packaging had a phone conference on May 9, 2022 with EGLE to follow up on the next steps in reviewing and implementing the NMP. EGLE provided additional feedback on the NMP draft document. This feedback was incorporated into the revised draft document submitted to EGLE on May 23, 2022. EGLE is in the process of reviewing that draft and will schedule a follow-up phone conference.

### **Clarifier and Wastewater Treatment Plant Status**

Graphic Packaging continues to optimize process chemistry to further reduce the potential for nuisance odors. Primary chemistry in use includes an Oxygen Injection System to increase the dissolved oxygen levels in the wastewater clarifier, as well as liquid Hydrogen Peroxide to the Wastewater Treatment Plant. The combination of these continues to be an overall improvement to managing the potential for odors from the mill wastewater treatment plant.

### **Envirosuite Monitoring System**

Graphic Packaging continues to maintain the sixteen (16) monitor system. There have been some battery/charging issues that have caused a few sensors to be off-line for some periods of time. Graphic Packaging continues to work with Envirosuite to address these issues to keep the entire sixteen (16) sensor system on-line providing consistent data to monitor the ambient H<sub>2</sub>S levels throughout the plant site.

As outlined in the 2020 4<sup>th</sup> Quarter Odor Management Update submitted December 11, 2020, Graphic Packaging will continue to:

- Provide quarterly reports to the City of Kalamazoo summarizing our odor mitigation efforts.
- Continue to work with the community's Odor Task Force.
- Continue to remove sludge from the concrete pad along Paterson Street five to six days per week. Historically this was performed two or three days per week. This has reduced the potential for composting odors.
- Continue to add chemical treatments to the clarifier to reduce the potential for odor.
- Continue to use the Envirosuite monitoring network installed in September 2020 to monitor H<sub>2</sub>S ambient air concentrations at various locations.
- Continue to work with consultants to finalize the operational practices to minimize odors from GPI's operations.