

Georgia Pacific Toledo / CAO Request for Information Meeting Minutes

May 5 – 6, 2025 / Toledo, OR

This meeting was requested by Georgia-Pacific Toledo (GPT) to discuss two information request letters sent from DEQ CAO regarding the facility's CAO Emissions Inventory.



May 5, 2025, noon – 4 pm

The first day was focused on emissions from the onsite wastewater treatment plant (WWTP). Discussion references DEQ's March 24, 2025 letter to GPT relating to the WWTP (WWTP Letter).

Discussion Topic: General Comments from WWTP Letter

- GPT: What are DEQ's main concerns with the NCASI H₂S estimation method presented previously and why is DEQ not allowing GPT to use this model?
 - DEQ: One concern is that the proposed model only used results from 3 sampling locations. Given the size of the wastewater treatment area, DEQ feels that these monitors did not provide adequate coverage of the area and may not have been positioned to capture maximum concentrations of emissions from the ponds.
- GPT: Would DEQ consider additional H₂S air monitoring (with additional monitors) and a year of air monitoring instead of the liquid sampling requested by DEQ? GPT could relocate existing GPT H₂S monitors from various onsite locations as well as reach out to other Georgia Pacific facilities to obtain additional H₂S monitors.
 - DEQ: DEQ will discuss this proposal internally. Things to be considered include:
 - Analyzers and monitoring apparatus used by GPT. GPT to provide information on the H₂S analyzers (make, model) and monitoring apparatus (data logger, etc).
 - Number of monitors. GPT to provide number of monitors currently on-site. DEQ to consider the number of monitors and placement thereof around the wastewater treatment ponds.
 - QA/QC of data. GPT to provide a copy of the current QA/QC plan.

Discussion Topic: Specific Comment 1.b from WWTP Letter (Liquid Sampling for Water9)

- GPT: [Regarding the Water9 sampling request from the WWTP Letter (Specific Comment 1.b).] Due to the testing methods requested, there may be a lot of non-detect values. How would non-detect values be handled? Assuming ½ of the detection limit for all compounds, especially if never detected and not anticipated to be present, could significantly over-estimate potential emissions and risk.
 - DEQ: See CAO's Health Risk Assessment Recommended Procedures, Appendix G, for preferred method of dealing with non-detects.
https://www.oregon.gov/deq/aq/cao/Documents/CAO_HRAProcedures.pdf
 - Additionally, DEQ has discretion to require non-detects be handled differently if a compound is of particular concern and evidence suggests it may be present.

Discussion Topic: Proposed Liquid Sampling Locations from WWTP Letter

- GPT: GPT has concerns with some of the proposed sampling locations for both Water9 and H₂SSIM sampling, some of the proposed locations (especially those in the Treatment Ponds) are difficult to

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access. Additionally, it may be difficult to collect samples from all proposed locations in a single day when considering safety protocols and limited daylight hours during some periods of the year.

- DEQ:
 - DEQ provided initial proposed areas for sampling based on aerial imagery and information we could obtain from the water permit and other sources but understands that GPT will have more detailed facility information. GPT can provide alternate sampling locations for each zone in the sampling plan for DEQ to consider.
 - If sampling in one day is not feasible, please provide an alternate sampling timeline in the sampling plan. DEQ understands that GPT conducts quarterly sampling for methanol in some of the proposed sample locations. If it is easier to combine the proposed sampling with existing sampling (3 ½ days every quarter), this may be reasonable.

Discussion Topic: Specific Comment 1.c from WWTP Letter (PFAS Liquid Sampling)

- GPT: [Regarding PFAS sampling request from WWTP Letter (Specific Comment 1.c).] GPT has concerns about being asked to sample for PFAS when there are currently no regulatory thresholds for air emissions of PFAS in Oregon. Additionally, GPT asked if other facilities were being asked to sample. GPT has concerns about communications of the testing and community relations impacts if they are the only facility to have PFAS testing information. Consideration of sensitivity and interest in the topic for how and when information may be shared with the community.
 - DEQ:
 - There are a number of PFAS chemicals included in the proposed TRV update which is currently ongoing. We initially expected TRVs to go to our Commission for approval later this year but is now expected in 2026.
 - DEQ to review if any other Oregon facilities have tested or will be testing for PFAS. DEQ included a request for PFAS sampling in the WWTP Letter in anticipation of the TRV updates. Additionally, DEQ hoped that combining liquid sampling efforts would decrease the burden on GPT personnel of conducting a second sampling campaign after the TRV updates. DEQ is starting to work with facilities to look at potential impacts of the TRV updates to their Risk Assessment.
 - At GPT's request, DEQ will consider an alternate submittal deadline for PFAS analytical reports. Specifically, if submittal of the PFAS results can be delayed until after the TRVs rulemaking.
 - DEQ to send link of the proposed PFAS TRVs to GPT.
- GPT: [Regarding PFAS sampling request from WWTP Letter (Specific Comment 1.c).] How will the results of the PFAS sampling be used?
 - DEQ: Propose using Water9 to estimate emissions of PFAS (which are listed toxic air contaminants) from the different components of the WWTP. Would use representative parameters for those PFAS found at detectable levels. DEQ will review literature to ensure that the necessary inputs for Water9 are available.

Discussion Topic: Specific Comment 3.c of WWTP Letter (Water9 model for maximum daily emissions)

- GPT: [Regarding maximum daily emission estimates from Water9 (Specific Comment 3.c of WWTP Letter).] GPT has concerns with the request to model the maximum daily emissions with the maximum met data. Concerns that this would result in an overly conservative estimate of emissions. GPT would prefer that collected data be paired in time with actual meteorological data from the day of sample collection.
 - DEQ: DEQ will consider accepting a maximum daily and average annual emissions analysis for the Water9 model which similar to that outlined for the H2SSIM model (see Specific Comments 2.b and 2.c of the WWTP Letter).

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Discussion Topic: Source of meteorological data for H₂S Model and Water9

- GPT: [Regarding onsite weather station.] GPT has an onsite weather station (not a full met station), that is located in the middle of the facility footprint (on top of the elevated material transport line which crosses the river from the log yard). Wind is measured every 15 minutes.
 - DEQ: DEQ will confirm QA/QC protocols and if siting/use of the weather station is appropriate for the modeling needs of this request.



Discussion Topic: General Mill wastewater flow

- GPT: General discharge locations at the pond:
 - Paper mill and OCC is discharged to the primary clarifier which then goes to the thermal ponds
 - Pulp mill discharges to the load leveling pond
 - The foul condensate discharges to Treatment pond A

The team ended the day touring the WWTP ponds. See the attached photo log prepared by DEQ.

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May 6, 2025, 8 am – 11:30 am

The second day was focused on discussion of DEQ's March 24, 2025 letter to GPT relating to the Mill (non-WWTP) sources (Mill Letter).

Discussion Topic: Specific Comment 1 of Mill Letter (Source testing of JUNO)

- GPT: GPT discussed that plans for the AMRS (Juno) system are in flux.
 - There are conversations at the Juno company of next steps for the system and where to locate. At this point, GPT expects at most the Juno system will run 1 to 2 times per year for approximately a week.
 - This would make it difficult to do multiple batches for source testing.
 - DEQ: Requested that the facility continue with the source test plan, address the testing limitations, and be prepared to test when the Juno system is operating next.

Discussion Topic: Specific Comments 2 and 3 of Mill Letter (Source testing of the Recovery Boilers and Lime Kilns)

- GPT: EPA has indicated they will likely require GP Toledo to do source testing of these units, with many of the same test methods requested by DEQ.
 - DEQ: DEQ will consider allowing additional time to conduct the source testing so that it can align with EPA source testing. But if EPA testing is postponed then DEQ may require separate source testing. GPT anticipates hearing the final plan from EPA by July.
- GPT: Due to stack testing availability, it may not be feasible to meet all the deadlines provided in the letter.
 - DEQ: DEQ requests that alternative deadlines are proposed in the source test plan, with justification, for DEQ to review.
- GPT: The kilns have a common duct to the stack, source testing would be of the common duct, not the individual kilns.
 - DEQ: This should be acceptable, will need to apportion emissions by process data.

Discussion Topic: Specific Comment 10.c of Mill Letter (Maintenance Welding and Exempt TEUs)

- The group discussed welding emissions and DEQ's request for additional information on welding usage.
- DEQ will follow up with guidance on the when welding use may be considered an exempt TEU.
- The group also discussed welding by contractors as that would need to be accounted for as well.

Discussion Topic: Specific Comment 11 of Mill Letter (Landfill emissions)

- GPT: The emission factors requested by DEQ are for municipal solid waste (MSW) landfills. These do not represent the onsite, industrial waste landfill.
 - DEQ: GPT may propose alternative emission factors.
- GPT to research sources for landfill emissions from non-MSW landfills. Potentially NCASI has information.
- Due to space constraints only landfill a limited waste profile onsite. This includes: boiler ash, lime grits, and "rag-o-ropes" which collect contaminants from the OCC pulper (such as tape, plastic, and baling wire). Historic waste disposal may also impact landfill emissions.

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Discussion Topic: Specific Comment 14.d of Mill Letter (Leaks in LVHC lines)

- GPT: In the Inventory, GPT assumed that the NCGs have a 1% release rate as that is the maximum release rate allowed in subpart S.
 - DEQ: DEQ will confirm if this is sufficient for both maximum daily and average annual emission estimates.

The team ended the with a mill tour. The group toured three components in the plant:

- Paper machines. The team looked at the potential emission locations from these machines. The machines emit into the building and emissions are pulled to roof vents (Photo 1). A vacuum pump on the paper machines is used to pull water out of the pulp throughout the process. The vacuum pump emissions go through a pipe on the exterior of the building with a stack release point above the building roof (Photo 2).
- OCC Pulping plants (Photos 3, 4, and 5). One of the plants was offline. These units emit directly into the building. There were passive fans at the top of the building that could direct some of the emissions. Site personnel states that some of the liquids for the OCC pulping comes from the paper machines.
- Digesters and the blow tanks (Photo 7).

During the site tour, DEQ observed many instances of fugitive emissions. This included process water being stored on the facility grounds during maintenance (Photo 6). Numerous other visible indicators of gaseous and liquid leaks were observed during the site tour.

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1: Load Leveling Pond. View from SW corner near entrance. View towards Treatment Pond A.



2: Load Leveling Pond. View from East side. View towards mill in NW.



3: Load Leveling Pond. View from East side. View towards N.



4: H2S sampling monitor. North of property between Load Leveling Pond and Treatment Pond A.



5: Treatment Pond A. View looking SE towards river.



6: Treatment Pond B. View looking SE towards river.



7: Treatment Pond B. View looking SE towards river.



8: H2S sampling monitor. Near NW corner of Treatment Pond B.



9: Thermal Pond A. View from NE corner looking to SW corner.



10: Thermal Pond A. View from NE corner looking west.



11: Treatment Pond B. View looking E from berm between Treatment and Thermal Ponds.



12: Thermal Pond A. View at inlet (SE corner) looking NW towards mill.



13: Thermal Pond A. View at inlet (SE corner) looking NW towards mill.



14: Thermal Pond A. View at inlet (SE corner) looking west.



15: Thermal Pond B (SE corner). View from berm along river, looking North towards plant.



16: Thermal Pond B (SE corner). View from berm along river, looking North towards plant.
Zoom in on inlet to Pond B from Pond A.



17: Thermal Pond B (SE corner). View from berm along river, looking North towards plant.
Zoom in on inlet to Pond B from Pond A.



18: Thermal Pond B (SE corner). View from berm along river, looking North towards plant.
Zoom in on inlet to Pond B from Pond A.



19: Thermal Pond C. View from berm along river, looking North towards plant.



20: Thermal Pond C. View from berm along river, looking North towards plant.



21: H2S sampling monitor. Near SW corner of ponds (SW corner of Thermal Pond C along river).



22: H2S sampling monitor. Near SW corner of ponds (SW corner of Thermal Pond C along river). Information on sampler.

5/6/2025 Photo Log



Photo 1: View of one of the paper machines. Fans in the drop ceiling, above, pull emissions through rooftop vents.



Photo 2: Vent for the vacuum pump at the paper machine area.

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Photo 3: Bales of OCC going to the OCC Pulping area.



Photo 4: OCC pulping plant. Not operating during site visit.

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Photo 5: Building fans above the OCC pulping plant.

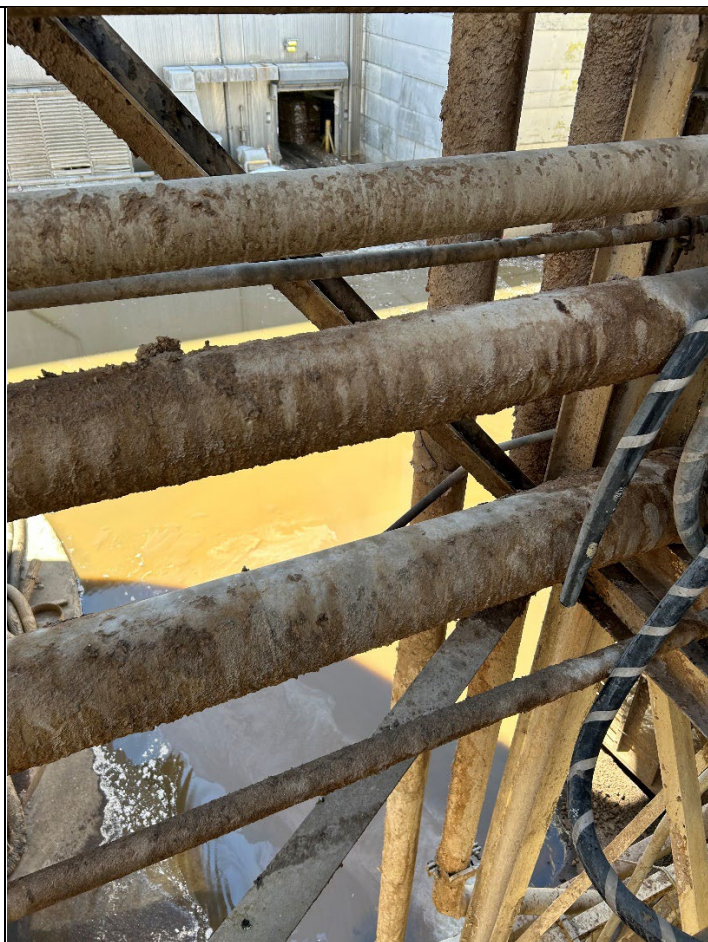


Photo 6: Process water temporary discharge during plug in lines.

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Photo 7: View of the area above the digesters. According to site personnel, the steam was not from digesters, the digester was not operating, was open, and steam was from steam vent below.

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