



August 5, 2021
Project No. 8006.67.01

Mr. Max Hueftle, PE, BCEE
Lane Regional Air Protection Agency
1010 Main Street
Springfield, OR 97477

Re: Timeline and Explanation for Laboratory Report Delays

Dear Mr. Hueftle:

J.H. Baxter & Co. (Baxter) owns and operates a wood preservation facility located at 3494 Roosevelt Boulevard in Eugene, Oregon 97402 (the facility). On February 11, 2021, a third-party representative from the RJ Lee Group, Inc. (RJ Lee) collected multiple raw material and process water samples at the facility. Each liquid and oil based sample was delivered to the RJ Lee analytical laboratory (lab) in Pasco, WA, with certain samples also shipped to the Cape Fear Analytical LLC (CFA) lab in Wilmington, NC.

These original samples were collected to support the development of the Cleaner Air Oregon (CAO) emissions inventory, administered by the Lane Regional Air Protection Agency (LRAPA), and to support the ongoing soil investigation led by the Oregon Department of Environmental Quality (DEQ) Cleanup program. The CFA lab conducted dioxin analyses via USEPA Test Method 1613B only. The RJ Lee lab conducted the following analyses:

- Polycyclic aromatic hydrocarbons (PAHs), PAH-derivatives, pentachlorophenol (PCP), and phenol analytes via USEPA Test Method 8270D.
- Benzene, ethylbenzene, methanol, toluene, and xylenes (mixed isomers) analytes via modified USEPA Method 8015D.
- Total metals analytes via USEPA Test Method 6020B.
- Ammonia analyte via USEPA Test Method 3580.1.
- Acetaldehyde, acrolein, formaldehyde, and propionaldehyde analytes via modified USEPA Compendium of Methods for the Determination of Toxic Organic Compounds (i.e., TO-11).

The overall purpose of this letter is to explain the reasoning for the latest lab report delay and to elaborate on the unique challenges both labs needed to overcome to complete the analyses. A timeline of important events and a summary of the challenges with analyzing the most recent liquid/oil samples are detailed below.

- On June 2 and 3, 2021, MFA personnel travelled to Baxter to collect multiple samples for re-analysis by RJ Lee using their lab preferred approach. The lab preferred approach involves different starting dilutions and cleanup techniques while also staying consistent with approved test method procedures. This approach was discussed with LRAPA prior to sample collection. Three new samples were collected at the following locations: inlet to the carbon bed, the evaporator blowdown, and the pure creosote treating solution sample. The new samples were shipped to RJ Lee (and CFA for dioxin analysis only) for subsequent analysis. Note the creosote treating solution sample was collected by Baxter personnel on March 31, 2021, and was held inside a refrigerator outside of sunlight until shipment to the RJ Lee lab.
- On June 4, 2021, RJ Lee confirmed receipt of the re-analysis and new samples.
- On June 18, 2021, CFA confirmed receipt of the three new samples (creosote treating solution, carbon filter inlet, and evaporator blowdown solution) and the re-analysis inlet to the evaporator (outlet of the carbon bed) sample.
- On July 19, 2021, CFA, via RJ Lee, provided the draft lab report for review. MFA immediately began the QA/QC data validation assessment upon receipt of this latest lab report. During this assessment, MFA uncovered the following:
 - The temperature upon receipt of the cooler containing the samples was above the method recommended limit of 6°C. As a result, the lab results are required to be qualified as estimates. However, the overall impact can be considered minimal, especially for the oil-based samples.
 - During the initial extraction of the evaporator blowdown sample, a precipitate formed and labeled surrogates had no or very little recovery (only 1 to 3% recovery, most had no recovery at all). CFA stated the evaporator blowdown sample results should be considered qualitative only and “highly” estimated. The CFA lab recommended performing re-extraction of this sample at a different starting dilution (100 milliliters instead of 1 liter) which will likely improve surrogate recovery results.
 - Other than the evaporator blowdown sample, MFA has not uncovered any other qualifiers that would lead to a rejection of the latest CFA lab results.
- On July 26, 2021, MFA directed the CFA lab to conduct the re-extraction of the evaporator blowdown sample using a smaller starting volume in an attempt to avoid a significant level of matrix-based inferences that occurred in the initial full-volume extraction. The CFA lab indicated the turnaround time would be up to three weeks from the request date due to existing workloads.

- On July 27, 2021, RJ Lee issued a partial draft lab report for review. The lab report excluded the results for aqueous-based samples due to issues with lab control samples failing acceptance criteria. Lab control samples measure the accuracy of analyte recovery, and thus, are considered critical. RJ Lee is currently re-extracting the aqueous-based samples. Results for some oil-based samples (OWSHO-01 and HOHW-02) were also not included. The cover letter of the partial draft lab report states multiple dilutions for many of the samples were required for most analytical methods, likely causing the delay of issuing the partial lab report. MFA is currently conducting the QA/QC data validation assessment and will contact the RJ Lee lab with questions and requests as necessary.

NEXT STEPS:

RJ Lee stated the draft results for the missing analytes/analyses will be issued by August 6th. MFA anticipates receiving the re-extraction results for the evaporator blowdown sample from the CFA lab by August 16th. MFA will complete the QA/QC data validation assessments of the issued lab report results and all missing results upon receipt within 7 business days.

MFA appreciates your patience as the labs work through these unique challenges and complexities of the samples detailed above. We look forward to continued collaboration with LRAPA and the DEQ. If you have any questions or comments, please contact me at 971-254-8077.

Sincerely,



Chad Darby
Principal Air Quality Consultant, MFA

cc: Georgia Baxter-Krause, (J.H. Baxter & Co.)
Brian Snuffer Zukas (Maul Foster and Alongi, Inc.)