BONNELL
ALUMINUM

June 8,2020

Mr. Oakley Hall
Tennessee Department of Environment & Conservation
Cookeville Field Office
1221 South Willow A venue
Cookeville, Tennessee 38506
(via email)

Re: 60-Day Notification of Storm Water Benchmark Monitoring Results
Bonnell Aluminum, Inc.
Storm Water Permit No. TNR053907

Dear Mr. Hall:

The 2020 storm water analytical results at the Bonnell Aluminum, Inc. (Bonnell) facility located at Bonnell Lane in Carthage, Tennessee exceeded some yearly average benchmark parameters for aluminum, copper, zinc, and iron in multiple outfalls. This letter serves as the 60 day follow-up notification that Bonnell sampled the storm water outfalls on April 8, 2020 and received the first analytical reports on April 21, 2020, for that rain event.

Potential Causes of Exceedances:

Bonnell investigated and conducted a SWPPP meeting to review results and actions. It was concluded the changes made in previous years were improving the quality of the storm water discharge, however, Bonnell identified areas where additional improvements need to be assessed.

The focus will be on SW-06. This is the outfall for most of finishing areas and environmental operations. The issue is the unknown presence of Iron. Our investigation has revealed that most of the cause is associated with the paint line roof. There are four structural steel platforms on the paint line roof, for electric reciprocators maintenance. These structures have been in place for several years, and show signs of rusting. There is also sprinkler piping and ductwork for the air system that also are rusting. Most of these structures are not painted and it would be very difficult to paint. It seems this rusty steel would be the only source of Iron causing the benchmark exceedance. Iron also appeared elevated in SW-07, in 2019, but did not return in 2020.

Bonnell is very hopeful that the new way it handles the wastewater treatment sludge will have a positive impact on aluminum levels. The alum manufacturing company receiving Bonnell's sludge as a raw material has been in place for 10 months. The process to ship sludge to this company allows Bonnell to load trailers right from the process and haul directly to their facility. The aluminum contamination from hauling into and out of the on-site landfill is eliminated. The handling of sludge is is not the only source of aluminum contamination, but this change in sludge management should significantly reduce the aluminum levels down close to

benchmarks. Bonnell is still considering a drying system for the sludge, but project costs are significant.

Bonnell will continue to reduce the zinc containing gravel at the plant to minimize storm water impacts. Bonnell is unsure if dust drifting from the zinc facility that is 300 yards to our south has any effects on the zinc concentration. Background zinc in this area is very high due to its natural occurrence.

Samples are continuing to show reductions in concentrations of nitrate and nitrites, COD, and TSS. Bonnell believes the projects implemented are helping. Bonnell stores a lot of scrap metals outside and this outside storage may be affecting the metals analysis. Most of this scrap is on its way in or out of the plant to be recycled. Bonnell has added more roof to its aluminum storage yard, but most of the aluminum remains exposed to rain.

Actions and Improvements:

Bonnell has completed some paving of gravel areas, but much more needs to be completed. The unprotected ground allows erosion and the addition of contaminants even if not analyzed. The Landfill sedimentation pond was cleaned out last fall. This cleanout was needed and there could have been some solids passing thru the unit.

The Storm Water Pollution Prevention Team has reviewed the SWPPP, analytical data, operations, and projects. The Team determined the SWPPP does not require changes, at this time. The actions Bonnell is taking is consistent with the current plan.

Please send confirmation of receipt of this email. If you have any questions, please contact me at 615-683-2267.

Sincerely,

Barry Cohoon
Environmental Manager