



2022 June 24

Ms. Jessica Murphy
Tennessee Dept. of Environment & Conservation
Division of Water Resources
Enforcement and Compliance Section
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, TN 37243

RE: NOTICE OF VIOLATION - ARCONIC TENNESSEE, LLC (TN0067199)

Ms. Murphy:

Per the agency's May 26th correspondence, it was alleged that the North Plant facility failed to operate within permit effluent limits at outfall 001 for polychlorinated biphenyls ("PCBs") during the monitoring periods of September 2021, January 2022, and March 2022. As a result, the Division of Water Resources requested a written explanation for the exceedances within thirty (30) days of receipt of the referenced notice with an explanation of the causes of the exceedances and the corrective actions taken to avoid future exceedances.

Arconic TN Operations ("Arconic") has been conducting upstream water/sediment sampling to determine the potential source of PCBs at outfall 001. We have determined that the suspected primary source of these low-level PCB concentrations at outfall 001 are the result of historic PCB impacts in the northeast watershed area of the North Plant facility.

It must also be noted that the previously acceptable Required Reporting Limit ("RRL") level of 0.500 ppb for PCB's was removed from the TN Water Quality Standard ("WQS") when the standard was finalized in late 2019. Prior to this time, the RRL had been used by our contract labs to comply with the following permit conditions as noted in the footnote on page 8 of TN0067199, "All quantified levels of PCB's will be reported. Analytical results as "Not detected at or above the method quantification level" are considered to be in compliance with the permit, provided the method quantification level achieved is equal to less than the TN required level of 0.5 ug/l."

Upon removal of the RRL tables, the TN WQS now references that a permittee use a sufficiently sensitive methodology as noted in 40 CFR 136 to comply with the specific permit requirements. As a result, this arbitrarily subjects permittees to a lower, sliding, and often inconsistent permit limit depending on the laboratory used, the method utilized, and the laboratory's own derived (DI water) based method detection limits (which in our case, but not necessarily in the case of other permittees, is 0.100 ppb using Eurofins-TA/Pittsburgh).

Arconic has identified two (2) primary areas of focus for addressing the PCB exceedances.

First, Arconic will address suspected historic PCB impacts in the northeast areas of the facility with a focus on cleaning the outfall 001 basin as well as remediating any identified PCB sources (i.e., storm sewer conveyance, manholes, sediments, etc.) in the areas around the north and east quadrants of bldg 810 and bldg 840 (Wastewater Treatment Facility).

Secondly, Arconic will focus on the analytical methodologies, specifically laboratory method detection limits, as well as any matrix effects (chemical/colloidal) with our outfall 001 effluent. Since the detection limits of EPA 608.3 have become increasingly more sensitive over time, we need to ensure and validate the laboratory method detection limits ("MDL's") by performing additional split samples across multiple laboratories and comparing the results. Further, since each outfall matrix can potentially impact the integrity of an analytical result, we will also investigate any matrix-specific interferences from our outfall 001 effluent as noted on page 14 of TN0067199, "With regard to PCB sampling from Outfalls 001 and 007, in the event the results of tests for PCB's indicate an exceedance of the prescribed permit limits, the permittee will have the opportunity to conduct additional tests, as necessary, to establish the existence of certain matrix interferences, if they exist. Notwithstanding this condition, any excursion of the PCB limit will be considered a permit violation. The results of these tests and any conclusions drawn must be submitted to the Division within fifteen (15) days after submitting the original test results in the previous months discharge monitoring report. The Division will maintain the exclusive determination of the validity of the additional tests and any conclusions to be drawn from them regarding the possibility of matrix interferences. The decision of the Division in this matter will be final."

Lastly, Arconic believes, with the removal of these RRL tables from the TN WQS in 2019, that other permittees in the state are experiencing similar issues with PCB limits of detection at their contract labs. We ask the agency to please confirm any similar situations and share best practices that we could deploy.

Please feel free to contact Shane Strickland (EHS Manager) at shane.strickland@arconic.com or 865-977-2561 if you require additional information.

Sincerely,

Shane Strickland

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EHS Manager