Oregon
Kate Brown, Governor

Department of Environmental Quality
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June 25, 2021

VIA EMAIL AND US MAIL

Dennis Buenger
Owens-Brockway Glass Container Inc.
9710 NE Glass Plant Road
Portland OR 97220
Dennis.Buenger@o-i.com
Walter.Tamukong@o-i.com
David.Smith@o-i.com

Re: Notice of DEQ's Intent to Reopen Title V Permit

Dear Mr. Buenger,

This letter is to inform Owens-Brockway Glass Container Inc. that the Oregon Department of Environmental Quality (DEQ) intends to reopen the Owens-Brockway's Title V Operating Permit No. 26-1876 (the Permit) to assure compliance with applicable requirements and the National Ambient Air Quality Standards (NAAQS), and to address issues raised in the May 10, 2021 order from the U.S. Environmental Protection Agency (EPA) granting and denying in part Earthjustice's February 4, 2020 petition objecting to the Permit's issuance. *See* OAR 340-218-0200(1)(c).

NAAQS

NAAQS are health based standards developed by EPA for Criteria Pollutants. DEQ is responsible for assuring state compliance with those national standards.

As you are aware, DEQ recently received a memorandum dated April 24, 2021 from Earthjustice that summarized emissions modeling of the Owens-Brockway's Portland facility. This analysis was conducted for Earthjustice by a consultant using AERMOD, an EPA-approved dispersion model. Model inputs to this analysis included emissions from the facility's recent 2019 and 2020 source test data. Other model inputs were stack parameters and other source-specific data from the Permit and the Cleaner Air Oregon (CAO) modeling protocol submitted to DEQ by Owens-Brockway. In addition, the model used meteorology based on Portland and Salem data. Model results from the Earthjustice analysis indicated the potential for the Owens-Brockway facility to exceed the NAAQS, specifically, the 1-hr SO2, 1-hr NO2, and 24-hr PM2.5 standards for furnaces A and D. Even with only Furnace D in operation, those model results predicted NAAQS exceedances of the 1-hr SO2 and 1-hr NO2 standards, and possibly PM2.5 if secondary PM2.5 were added to the model results. On May 7, 2021 DEQ provided you with a copy of Earthjustice's report.

As a result of the NAAQS exceedances reported in the Earthjustice modeling, DEQ reviewed the modeling methodology, model inputs, and the model results. This review included independent model runs by DEQ using DEQ inputs and meteorology. The goal was not to replicate the work of Earthjustice, but to determine the credibility of the analysis and the likelihood that the predicted exceedances in the report were representative. DEQ concluded that facility emissions, as documented by the 2019-2020 source tests, would likely result in modeled exceedances of the 1-hr NO2, 1-hr SO2, and 24-hr PM2.5 NAAQS, and that the Permit as it currently exists does not adequately ensure compliance with these short term national standards.

Emission Factors

The current Permit uses emission factors derived from averages of previous source test results (1983 to 2007). Based upon the recent 2019-2020 source test results, the Permit's emission factors are not representative of current emissions from the facility's glass melting furnaces. In particular, the SO2 average from the 2019-2020 source tests is 3.4 lbs of SO2 per ton of glass melted (ton glass) for Furnace A, and 2.9 lbs/ton glass for Furnace D, which on average are approximately 50% higher than the current SO2 emission factors in the Permit (2.1 lbs/ton glass for Furnaces A and D). The lead average from the 2019-2020 source test is 3.86 x 10^{-3} lbs/ton glass for Furnace A and 5.55 x 10^{-3} lbs/ton glass for Furnace D, also higher than the Permit's lead emission factors (1.65 x 10^{-3} lbs/ton glass for Furnaces A[1] and D). Total PM emissions during the 2019-2020 source tests were also consistently higher than the emission factor in the Permit for Furnace D. Emission factors are used to determine compliance with the Permit's Plant Site Emission Limits (PSELs).

Intent to Reopen

OAR 340-218-0200(1)(a) and Permit condition G24.b require DEQ to reopen the facility's Permit to assure compliance with NAAQS and with applicable requirements. Based upon the analysis conducted to date regarding Owens-Brockway's permitted and actual emissions, DEQ intends to revise the facility's Permit to assure compliance with the 1-hr SO2, 1-hr NO2, and 24-hr PM2.5 national standards and with PSELs. Additionally, the permit reopening will address the May 10, 2021 EPA Order, which you were previously provided a copy of. Through permit revisions, DEQ anticipates imposing interim requirements to reduce emissions until permanent controls can be installed or implemented.

[1] The current permit contains a typographical error denoting the emission factor for Furnace A as 1.65 x 0^{-3} lbs/ton of lead. DEQ intends to correct this error as well.

If you have additional information that you would like DEQ to consider in revising your Permit to assure compliance with NAAQS or other applicable requirements, please submit that information by July 26, 2021. If Owens-Brockway, based on its own analysis, can demonstrate modeled exceedances do not occur, it may submit such analysis to DEQ for review. This analysis must follow the DEQ Modeling Procedures document, and a modeling protocol must be approved prior to the analysis.

Sincerely,

Anzie St Clair

Anzie St. Clair
Northwest Region Air Quality Manager

Cc: George Yun, DEQ
Dave Kauth, DEQ
Matt Hoffman, DEQ
Jeffrey Stocum, DEQ
Phillip Allen, DEQ
Nina DeConcini, DEQ
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