ENGINEERING EVALUATION Owens-Brockway Glass Container, Inc. PLANT NO. 30 BANKING APPLICATION NO. 27537

BACKGROUND

Owens-Brockway Glass Container, Inc. (Owens-Brockway) has submitted this application to bank emission reduction credits (ERCs) from the permanent shutdown of the following equipment:

S-10 Glass Melting Furnace C

Owens-Brockway is shutting down their Plant 30 in Oakland California. The S-10 Glass Melting Furnace C permanently ceased operation on October 7, 2015. Owens-Brockway has applied to bank emission reduction credits of NOx from the permanent shutdown of the S-10 Glass Melting Furnace. Application 27421 will evaluate the emission reduction credits for S-11 Glass Melting Furnace which permanently ceased operating on July 8, 2015.

EMISSIONS REDUCTION CREDIT CALCULATIONS

Regulation 2, Rule 4 governs Emissions Banking. The emission calculation procedure in Section 2-4-601 refers to the emission calculation procedures in Section 605 of Regulation 2, Rule 2. Per Section 2-2-605.1, the baseline period consists of the 3-year period immediately preceding the submittal of a *complete* banking application. This application was determined to be complete on October 22, 2015. *Therefore, the baseline period for this application is October 23, 2012 through October 22, 2015.*

Per Section 2-2-605.2, the baseline throughput is the lesser of the actual average throughput during the baseline period or the average permitted throughput during the baseline period, if limited by permit condition. Condition #11930 limits annual glass pulled at S-10 to 125,000 tons in any consecutive twelve month period. The monthly production numbers for glass pulled at S-10 Glass Melting Furnace supplied by Owens Brockway do not exceed this limit. In addition, they are in agreement with the calendar year 2013 and 2014 annual throughput rates the District used to calculate annual emissions for the emissions inventory. Appendix A shows the daily production and baseline throughput calculations for glass pulled at S-10 Glass Melting Furnace. The annual throughput of S-10 Glass Melting Furnace is summarized in the following table. The actual average is less than the permit limit and will be used as the baseline throughput for calculating ERCs at S-10.

Glass Pulled at S-10 Glass Melting Furnace (tons)

	Tons of Glass	
11/23/12 to 11/22/13	117,633	
11/23/13 to 11/22/14	92,804	
11/23/14 to 11/22/15	90,396	
36 Month Total	300,833	
Baseline Throughput	100,278	

Per Section 2-2-605.3, the baseline emission rate is the average actual emission rate during the baseline period. However Section 2-2-605.5 requires that the baseline emission rate be adjusted downward to comply with the most stringent of RACT, BARCT, and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan. S-10 was subject to Regulation 9, Rule 12 which limits the NOx emission rate to 5.5 pounds of NOx per ton of glass pulled averaged over any consecutive 3 hour period excluding start-up, shutdown and idling periods. The permit condition #11930 limits NOx emissions from S-10 to an equivalent of 3.4 pounds of NOX per ton of glass pulled. Neither of these emissions rates can be used to calculate emission reduction credits because the District's 2010 Clean Air Plan establishes an emission rate of 1.5 lb NOx/ton of glass pulled to be implemented through amendments to Regulation 9-12. Therefore to determine ERC credits from the shutdown of

S-11 Glass Melting Furnace, a NOx limit of 1.5 pounds of NOx per ton of glass pulled will be considered RACT and used for the baseline emission rate to calculate ERCs.

Regulation 2-2-605.6 defines the ERCs as the difference between the adjusted baseline emission rate times the baseline throughput, and the emission cap or rate accepted by the applicant as a limiting condition. Since the equipment has been permanently shut down, there is no emission cap. ERCs are tabulated below.

Emission Reduction Credit Calculations

	Average Baseline Throughput (tons glass/yr)	Baseline Emission Rate (lb/tons glass)	Emissions (lb/yr)	Emission Reduction Credits (tons/yr)
NOx	100,278	1.50	150,417	75.208

Regulation 2-4-303.5 limits the bankable emissions reductions at facilities belonging to that companies which have received offsets from the Small Facility Bank. Once those offsets have been reimbursed, the remaining emission reductions may be banked. Owens-Brockway has not received any NOx offsets from the Small Facility Emissions Bank. Therefore, no such emission offsets are required to be repaid to the District and Owens-Brockway may bank all Emission Reduction Credits calculated above. Appendix B is a copy of the District's databank that shows Owens-Brockway's cumulative NOx increases and any contemporaneous reductions and/or offsets provided. The data displays the Banking Certificate Numbers (if any) that were used to offset any cumulative increases. No credits from the Small Facility Emissions Bank are shown.

STATEMENT OF COMPLIANCE

The ERC calculation was performed in accordance with the procedures outlined in Regulation 2-2-605. The ERCs for S-10 Glass Melting Furnace were calculated based on the pulled glass throughput over the 3-year baseline period from October 23, 2012 through October 22, 2015. The application was determined to be complete as of October 22, 2015. The bankable ERCs for NOx are calculated using an emission rate of 1.5 lb per ton of glass pulled which was determined to be RACT.

Regulation 2-2-201 Emission Reduction Credits defines ERCs to be real, quantifiable, enforceable, and permanent. Based on the information Owens-Brockway has submitted and the ERC calculations, the requirements of this section have been met.

Regulation 2-4-302.2 Bankable Reductions for Closures requires that Owens-Brockway show that the shutdown of S-10 Glass Melting Furnace does not result in the transfer of production to another source owned by the applicant within the District. In a November 20, 2015 letter to the District, the applicant asserted that the Oakland facility is the only glass container manufacturer in the Bay Area Air Quality Management District. Since the facility is permanently closing, it is not possible to transfer any banked emission credits from this closed facility to another source owned by Owens-Brockway.

Regulation 2-4-405 Publication, Public Comment and Inspection requires the District to publish a public notification of the preliminary decision before approving the banking of any emission reduction in excess of 40 tons per year of any pollutant. The ERCs for S-10 Glass Melting Furnace exceed 40 tons/yr of NOx and the application is therefore subject to this requirement. Before approving this banking application, the District must publish a notification of the preliminary decision to approve the ERCs. Following publication, there will be a 30-day public comment period, during which the District will accept written comments.

Applications to deposit emission reductions in the emissions bank pursuant to Regulation 2, Rule 4 are exempt from CEQA as stated in Regulation 2-1-312.10. Owens-Brockway has completed and signed an Appendix H Environmental Information Form to ensure that the project has no potential for causing a significant adverse impact on the environment.

CONDITIONS

Conditions are commonly imposed on banking applications when an emission reduction is permanent at the source but it is unclear whether the reduction will be replaced by an emissions increase elsewhere at the facility or within the District, or to ensure the permanency of the closure. This glass container facility has been permanently shut down and was the only remaining glass plant within the District's jurisdiction; it is clear that the reduction will not be replaced by an emission increase elsewhere and additional conditions are not necessary.

RECOMMENDATION

The District has reviewed the material contained in the permit application for the requested ERCs and has made a preliminary determination that the project is expected to comply with all applicable requirements of District, state, and federal air quality-related regulations. The preliminary recommendation is to cancel the permit for S-10 and issue the ERCs listed below. However, the ERCs for NOx exceed 40 tons per year, which triggers the public notification requirements of District Regulation 2-4-405. After the comments are received and reviewed, the District will make a final determination on the permit.

I recommend that the District initiate a public notice and consider any comments received prior to taking any final action on issuance of ERCs for the following source:

S-10 **Glass Melting Furnace C**

Proposed emission reduction credits (ERCs) to Owens-Brockway:

NOx 75.208 tons per year

Anne C. Werth December 3, 2015 The Public Notice was published in the Oakland Tribune on March 27, 2004. The comment period closed on April 29, 2004. Norman Marquis of the Stationary Source Division of the California ARB called to ask for Owens-Brockway's potential to emit of criteria pollutants at the Hayward facility. No other comments were received.