

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 4  
ATLANTA FEDERAL CENTER  
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ATLANTA, GEORGIA 30303-8960

March 2, 2000

4APT-ARB

Mr. John Yntema  
Georgia Environmental Protection Division  
Air Protection Branch  
4244 International Pkwy., Suite 120  
Atlanta, GA 30354

SUBJ: Establishing Emissions Representative of Normal Source Operation for Furnace E,  
Owens-Brockway Glass Container, Inc., Atlanta, Georgia

Dear Mr. Yntema:

Thank you for your letter requesting our opinion on the use of an alternative baseline period representative of normal source operation for Furnace E at the facility operated by Owens-Brockway Glass Container, Inc. (Owens-Brockway) in Atlanta, Georgia. Owens-Brockway proposes to add electric boosting to Furnace E as has been done previously for Furnaces A, B, and D at the Atlanta plant. Both Owens-Brockway and the Georgia Environmental Protection Division (GAEPD) agree that the proposed addition constitutes a modification as defined by new source review (NSR) regulations for prevention of significant deterioration (PSD) and nonattainment area permitting. To assess whether the proposed modification is a major modification of an existing major source, potential future emissions must be compared with past actual emissions. Estimation of past actual emissions requires selection of a past period representative of normal source operation.

Owens-Brockway proposes to estimate Furnace E normal source operation emissions for nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter by applying current emission factors to production levels in existence during the period 1989 to 1990. The company is also willing to use the period November 15, 1990, to November 15, 1991, for estimation of NO<sub>x</sub> normal source operation emissions because of changes in the treatment of nonattainment area pollutants adopted by the Clean Air Act Amendments of 1990. The company's proposal is based on a change in market conditions affecting facility production. Prior to the early 1990's, the facility's client base was primarily the soft drink industry. As a result of the soft drink industry shifting away from glass containers, Furnace E production levels decreased substantially. By cultivating a new client base within the brewery industry, Owens-Brockway has gradually increased Furnace E production levels. The following table shows Furnace E production levels during the period 1989 through 1999:

Year	Production (tons)	Year	Production (tons)
1989	107,257	1995	65,078
1990	105,478	1996	74,215
1991	105,879	1997	86,586
1992	93,949	1998	87,356
1993	69,162*	1999	85,793
1994	38,891*		
*Down November 1993 through March 1994			

Region 4's opinion is that normal source operation emissions for Furnace E should be set as the average two-year actual emissions occurring during the period 1998 to 1999 provided such emissions are equal to or less than the emissions allowed by the facility's current permit or other applicable requirements. Region 4 recognizes that the Furnace E production rate was slightly lower in 1999 than in 1997 and 1998 (see table above), and we assume that 1999 emissions were also lower. We would agree with use of the average two-year actual emissions during the period 1997 to 1998 if Owens-Brockway can demonstrate that emissions during 1999 resulted from conditions not representative of normal source operation.

The basis for our opinion is discussed below.

1. EPA's proposed NSR reform rules issued in July 1996 (61 FR 38250) included a provision to establish the normal source operations level as the highest 12-month level in the past 10 years. The proposed NSR reform rules also specified that normal source operation emissions should be calculated using the highest 12-month utilization level combined with current emission factors. However, to our knowledge, EPA regional offices have not used the proposed NSR rules as the basis for setting normal source operation levels. Rather, the basis for setting normal source operation levels has been the plain language of the NSR rules currently in effect and the normal source operation discussion in EPA's 1990 draft New Source Review workshop manual. The language in these two references is as follows:
  - The NSR rules currently effective in Georgia for PSD permitting are the provisions in 40 C.F.R. §52.21(b)(21)(ii) which state the following: "In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Administrator [who is the Director of the GAEPD for Georgia projects] shall allow the use of a different time period upon a determination that it

is more representative of normal source operation.”

- The discussion on normal source operation levels in the NSR Workshop Manual appears on page A.39 and reads as follows: “A contemporaneous emissions increase occurs as the result of a physical change or change in the method of operation at the source and is creditable to the extent that the new emissions level exceeds the old emissions level. The ‘old’ emissions level for an emissions unit equals the average rate (in tons per year) at which the unit actually emitted the pollutant during the 2-year period just prior to the physical or operational change which resulted in the emissions increase. In certain limited situations where the applicant adequately demonstrates that the prior 2 years is not representative of normal source operation, a different (2 year) time period may be used upon a determination by the reviewing agency that it is more representative of normal source operation. Normal source operations may be affected by strikes, retooling, major industrial accidents and other catastrophic occurrences.”
2. In addition to reliance on these two references, we have also searched the EPA database containing a wide variety of NSR opinions for specific cases. The most relevant case we discovered is discussed in a memo dated August 11, 1992, from John Calcagni of EPA’s Air Quality Management Division to EPA Region 5. Mr. Calcagni commented on a proposal to credit emission reductions for the removal of furnaces at the Cyprus Northshore Mining Corporation Silver Bay facility. The furnaces in question had not been in operation since 1982 because of poor market conditions. Cyprus Northshore Mining proposed using actual emissions from July 1975 to July 1977 for normal source operation purposes, or, if this period was not acceptable, actual emissions for 1981-1982 just prior to the shutdown of the furnaces. The Air Quality Management Division concluded that the neither of these periods was acceptable for representation of normal source operations and stated the following: “As discussed, the Administrator’s power to use a different baseline period is limited to those circumstances where the source demonstrates that some time period other than the 2 years that precede the change is more representative of normal source operation. In general, EPA has indicated that this provision is to apply to catastrophic occurrences such as strikes and major industrial accidents (see NSR Workshop Manual, p. A.39). For example, in the WEPCO applicability determination, EPA found the fourth and fifth years prior to the proposed renovation project more representative, since the utility’s capacity was greatly reduced after that period due to a cracked drum and other severe physical problems (see 57 FR 32323).”
  3. The plain language of 40 C.F.R. §52.21(b)(21)(ii) in its definition of actual emissions incorporates the phrase “normal source operation.” With respect to the Owens-Brockway facility, our view is that current normal source operation represents the operation of the facility in response to the needs of the market sector currently served by the facility, namely, the brewery industry. When the facility’s target market shifted from the soft drink industry to the brewery industry, our opinion is that this constituted a fundamental change

in the way the facility operated such that operation directed toward the soft drink industry can not represent normal source operation under current market conditions.

4. With regard to the proposal by Owens-Brockway to couple a production level from one period of time and an emission factor from another period of time, we view this approach as inconsistent with the provision of 40 C.F.R. §52.21(b)(21)(ii) which states that “Actual emissions shall be calculated using the unit’s actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.”

For development of normal source operation opinions, EPA Region 4 intends to continue relying on the references cited above rather than on the proposed NSR reform rules. At such time as the final NSR reform rules are issued, however, we will comply with whatever policy is established by the rule revisions. Also at such time, we are willing to re-examine the approach adopted to reach the opinion presented in this letter on the Owens-Brockway Furnace E modification.

If you have any questions concerning the comments and conclusions in this letter, please contact Jim Little at (404) 562-9118 .

Sincerely,

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