UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 19 2013

REPLY TO THE ATTENTION OF:

Bob Bernoteit
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Dear Mr. Bernoteit:

On June 18, 2013, the U.S. Environmental Protection Agency shared with you an electronic copy of its comments on the draft Construction Permit No. 12100052 (draft permit) prepared by the Illinois Environmental Protection Agency for Saint-Gobain Containers, Inc. (SGCI). By this letter, EPA is amending Comment No. 1 as contained in the June 18, 2013 comment letter. EPA amends Comment No. 1 to read as follows:

1. EPA notes that SGCI did not adjust its baseline actual emissions "downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period" as required by 40 C.F.R. § 52.21(b)(48)(ii)(c). Section 52.21(b)(48)(ii)(c) does require sources to adjust their baseline actual emissions downward to exclude emission reductions that <u>have or will</u> result from compliance with a Consent Decree (CD) requirement. However, Paragraph 29 of SGCI's CD states that the CD is not "intended to prohibit SGCI from seeking to utilize emission reductions from the Installation of Controls required by this Consent Decree in determining whether a project on the same Furnace that includes both the Installation of Controls under this Consent Decree and other simultaneous construction that is permitted at the same time…triggers New Source Review." Although CD requirements are applicable emission limitations that the source should apply to the baseline, the SGCI CD specifies that for this project, which includes the installation of controls on each of the furnaces in question, the CD does not in and of itself as an applicable emission limitation require SGCI to adjust the baseline actual emissions of these furnaces downward to reflect post-control emission rates for purposes of evaluating whether a significant emissions increase will occur on a particular furnace. In other words, the Paragraph 29 language neither provides for any affirmative allowance on use of emission reductions nor overrides any rule in the Illinois State Implementation Plan (including § 52.21(b)(48(ii)(c)), it merely specifies the limit of the scope of the CD as an emission limitation requiring a downward

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baseline actual emissions adjustment for purposes of evaluating whether there has been a significant emissions increase on a particular furnace. However, per the language of Paragraph 29, SGCI would be required to adjust the furnace baseline actual emissions downward for purposes of evaluating whether any future projects that do not involve the installation of CD controls on those furnaces will trigger New Source Review.

If you have any questions, please contact David Ogulei, of my staff, at (312) 353-0987.

Sincerely,

John Mooney
Chief
Air Programs Branch

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Bob Bernoteit
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Dear Mr. Bernoteit:

The U.S. Environmental Protection Agency has reviewed the draft Construction Permit No. 12100052 (draft permit) prepared by the Illinois Environmental Protection Agency (Illinois EPA) for Saint-Gobain Containers, Inc. (SGCI). SGCI is proposing to modify three of its glass furnaces at its glass manufacturing facility located at 13850 Cottage Grove Avenue in Dolton, Illinois. The capacities of two of the furnaces will increase and a control system will be installed to control air emissions from all three furnaces. Several additional emissions units will be modified or newly installed. The draft permit states that the project is not a major modification under the state's nonattainment New Source Review (NSR) rules, 35 IAC Part 203, or the federal rules for Prevention of Significant Deterioration (PSD), 40 C.F.R. § 52.21. Based on a review of SGCI's application and the draft permit, EPA has the following comments:

1. EPA notes that SGCI did not adjust its baseline actual emissions "downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period" as required by 40 C.F.R. § 52.21(b)(48)(ii)(c). Please note that section 52.21(b)(48)(ii)(c) does require sources to adjust their baseline actual emissions downward to exclude emission reductions that <u>have or will</u> result from compliance with a Consent Decree (CD) requirement. However, Paragraph 29 of SGCI's CD states that the CD is not "intended to prohibit SGCI from seeking to utilize emission reductions from the Installation of Controls required by this Consent Decree in determining whether a project on the same Furnace that includes both the Installation of Controls under this Consent Decree and other simultaneous construction that is permitted at the same time…triggers New Source Review." Therefore, although CD limits are applicable requirements that the source should apply to the baseline, the SGCI CD specifies that for this project, which includes the installation of controls on each of the furnaces in question, SGCI is not required to adjust the baseline actual emissions of these furnaces downward to reflect post-control emission rates for

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purposes of evaluating whether a significant emissions increase will occur on a particular furnace. However, per the language of Paragraph 29, SGCI would be required to adjust the furnace baseline actual emissions downward for purposes of evaluating whether any future projects that do not involve the installation of CD controls on those furnaces will trigger NSR. In addition, per the regulatory requirement in § 52.21(b)(48)(ii)(c), SGCI must adjust the baseline actual emissions of any other units than the furnaces to reflect currently applicable requirements, including those found in the CD.

2. The draft permit contains emissions testing requirements for Particulate Matter (PM), PM_{10} and $PM_{2.5}$ from the affected furnaces in Condition 1.6 and Attachment 2, Section 5.c.iii. Specifically, section 5.c.iii.B, Attachment 2, requires emissions testing for filterable PM using EPA Method 5 (40 C.F.R. Part 60, Appendix A). However, the draft permit does not require emissions testing for filterable or condensable PM_{10}, filterable or condensable $PM_{2.5}$, or condensable PM emissions. Because total PM_{10} (i.e., filterable plus condensable PM_{10}), total $PM_{2.5}$ (i.e., filterable plus condensable $PM_{2.5}$) and total PM (i.e., filterable plus condensable PM) are individually limited by Condition 1.5(b)(ii)(B)[1], please either add emissions testing requirements for filterable and condensable PM_{10}, filterable and condensable $PM_{2.5}$, and condensable PM, or explain why emissions testing for filterable and condensable PM_{10}, filterable and condensable $PM_{2.5}$, or condensable PM is not necessary for this project. EPA recommends EPA Method 201A for measuring filterable PM_{10} and $PM_{2.5}$ emissions from stacks that do not have entrained moisture droplets, and EPA Method 202 for measuring condensable PM, PM_{10}, and $PM_{2.5}$ emissions.[2]

3. EPA has reviewed the emissions calculations submitted by SGCI and has the following comments:

   a. In its application, SGCI states that it developed "single" emission factors for PM, PM_{10}, $PM_{2.5}$, Nitrogen Oxides (NOx) and Sulfur Dioxide (SO_2) based on test results from the two tests conducted September 29 through October 1, 2009 and July 28-29, 2011. Since the baseline period was January 2010 through December 2011, only the 2011 emission test was conducted during the baseline period. Please clarify if SGCI used test data from the 2009 test to calculate pre-July 2011 actual emissions, and test data from the July 2011 test to calculate post-July 2011 actual emissions for PM, PM_{10}, $PM_{2.5}$, NOx and SO_2.

   b. Please verify that SGCI's reported baseline actual emissions and emissions calculation methodology are consistent with the emission rates and calculation methodology it reported in its annual emissions reports for this time period. Pursuant to 40 C.F.R. § 52.21(b)(48)(i)(d), SGCI may not use any consecutive

[1] Condition 1.5(b)(ii)(B) requires the Permittee to comply with "Annual limits in Attachment 1b." EPA has verified with the permit writer that the reference to Attachment 1b in this condition is incorrect; instead, the correct reference should be Attachment 1a, "Emission Limits for the Project (Tons/Year)."

[2] All condensable PM emissions may be assumed to be $PM_{2.5}$.

24-month period for which there is inadequate information for determining annual emissions and for adjusting this amount for non-compliant emissions if required.

c. For PM, PM_{10}, $PM_{2.5}$, SGCI assumed in its application that condensable PM is 18.7% of total PM, "based on 2010-2011 compliance test results for the group of similar regenerative Furnaces across SGCI's fleet..." Please clarify why SGCI did not use the results of the 2011 testing at the Dolton facility to derive the condensable PM emission rates. The 2011 test results suggest that the condensable PM fraction was lower than 18.7%, which implies that PM_{10} and $PM_{2.5}$ emissions during the baseline period might be lower than the values reported by SGCI in its application.[3]

d. SGCI assumed in its application that all of the condensable PM is PM_{10} and $PM_{2.5}$ and that 95% of filterable PM is filterable PM_{10} and 91% of filterable PM is filterable $PM_{2.5}$, "consistent with AP-42 Table 11.15-3." Although still widely used, the AP-42 particle size distributions cited by SGCI are now more than 25 years old and are rated "E," the lowest reliability rating for AP-42 emission factors. Please clarify whether SGCI has obtained, or sought to obtain, more recent (i.e., post 1980s) $PM_{2.5}$ and PM_{10} test data from similar emissions units in its fleet or other sources. If more recent and/or higher rated PM_{10} and $PM_{2.5}$ emission factors are not available, Illinois EPA should consider including in the draft permit a provision that requires verification of the PM_{10} and $PM_{2.5}$ emission factors through initial and periodic emissions testing of the affected emissions units.

EPA provides these comments to help ensure that the project meets all federal requirements, that the permit provides all necessary information so that it is readily accessible to the public, and that the record provides adequate support for the permit decision. We look forward to working with you to address all of our comments. If you have any questions, please feel free to contact me at (312) 353-4761 or David Ogulei, of my staff, at (312) 353-0987.

Sincerely,

Genevieve Damico
Chief
Air Permits Section

[3] This is the case because SGCI has assumed that all condensable PM is PM_{10} and $PM_{2.5}$.