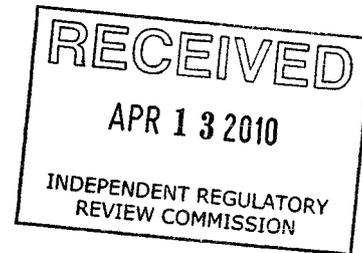


ADVANCED NOTICE OF FINAL RULMAKING
#2683
EQB #7-420
CONTROL OF NO_x EMISSIONS FROM GLASS
MELTING FURNACES


SAINT-GOBAIN
CONTAINERS

October 14, 2009

2683



Jane Mahinske
Division of Air Resource Management
Bureau of Air Quality
Rachel Carson State Office Building, 12th Floor
P.O. Box 8468, Harrisburg, PA 17101-8468
jmahinske@state.pa.us

Re: Control of NOx Emissions from Glass Melting Furnaces

Dear Ms. Mahinske:

Saint-Gobain Containers, Inc. (SGCI) operates a glass container manufacturing facility in Port Allegany, Pennsylvania. SGCI submitted comments on earlier drafts of the proposed rule for the Control of NOx Emissions from Glass Melting Furnaces (NOx Glass Rule) and provided written and oral testimony before the EQB during the public comment period. We are pleased that some of our comments resulted in revisions to the NOx Glass Rule and we offer a few additional comments on the draft final form rule, primarily addressing changes from the proposed rule as published on April 8, 2008. Before commenting further, let us express our support for those provisions which establish an achievable emission limitation for our industry (4.0 lb/ton) and which provide for compliance demonstrations using a 30-day averaging period and allowing averaging between furnaces. While we have remaining concerns related to averaging, as discussed below, this draft presents a significant improvement to the draft discussed with AQTAC several weeks ago.

Averaging Period for Emission Limitations

In the 2008 version of the NOx Glass Rule published for public comment by the EQB, compliance with the pound per ton emission limits was determined on either an ozone season basis or on an annual basis. These long averaging periods were helpful to furnace operators because they allowed for periods of maintenance and malfunction and other abnormal operating conditions without necessitating specific exemptions from the emission limitation for these extraordinary events due to the length of time of the averaging periods. Since air infiltration into the furnace can result in the formation of thermal NOx, such abnormal operating conditions can make achieving the pound per ton limitation on a short-term basis impossible at times. While the current draft of the rule changes the averaging period from annual (or seasonal) to a rolling 30-day average, we believe that for the most part a furnace can achieve compliance with a 30-day rolling average with the exception of low production periods (when the production rate makes the denominator in the pound per ton calculation abnormally low vis-à-vis the gas firing rate necessary to keep the glass molten), furnace startups (when the refractory has not fully sealed), malfunction (when holes in the refractory may develop with wear), or maintenance (when cleaning of flues can result in temporary NOx formation).

Saint-Gobain Containers

1509 South Macedonia Avenue • PO Box 4200 • Muncie, IN 47307-4200 • Tel. 765-741-7000 • Fax 765-741-7012

To account for all of these abnormal operating conditions, we urge the following change to Section 129.303(a):

“The emission requirement in §129.304 (relating to emission requirements) do not apply during periods of start-up, ~~shutdown~~, **maintenance, malfunction,** or idling as defined in §121.1 (relating to definitions), if the owner or operator complies with the requirements of §129.305, 129.306, and 129.307 (relating to start-up requirements, ~~shutdown requirements,~~ **maintenance requirements, malfunction requirements,** and idling requirements)”

Definitions

The following changes in definitions are urged:

Idling – For purposes of §129.301-129.310, the operation of a glass melting furnace at less than ~~25%~~ **35%** of the ~~permitted~~ production capacity or fuel use capacity as stated in the ~~plan approval or~~ operating permit.

Permitted production capacity – The maximum pull rate as stated in the ~~plan approval,~~ operating permit ~~or Title V permit.~~

Shutdown – [Delete this definition in its entirety.]

Start-up – For purposes of §129.301-310, the period of time, after initial construction, shutdown, or a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system, **and systems and instrumentation are brought to stabilization.**

Maintenance - Activities necessary to keep the system or equipment working in its normal operating condition.

Malfunction - Any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, but shall not include failures that are caused in part by poor Maintenance or careless operation.

Additional Comments on Section 129.303

Subsection (b) should be amended to provide that written notice is required only when the operator is claiming the exemption and the timing of that notification should not be tied to occurrence of the event. For example, a furnace may be idling, but the emission rate could be low enough that the operator does not need to claim an exemption from the 30-day rolling average due to the short duration of the idling event and the overall performance of the furnace against the emission limit during the other non-idling days in the 30-day average.

Additionally, many shutdown events are unplanned and thus advance notice is impossible. Subsection (b) should thus be amended to read as follows:

“(b) The owner or operator of a glass melting furnace claiming an exemption under subsection [(b)] (a) shall notify the Department in writing ~~at least 24 hours prior to initiating shutdown, [or] start up, OR IDLING.~~ The methods for submitting the written notice may include e-mail, hand or courier delivery, CERTIFIED mail or facsimile transmissions to the appropriate regional office described in § 121.4 (relating to regional organization of the Department). The notification must include:

- (1) The date and time of the start of the exempt operation.
- (2) The reason for performing the operation and **any effort made to minimize the condition if applicable an estimated completion date.**

[(d)] (c) The owner or operator of a glass melting furnace ~~granted~~ **claiming** an exemption

under this section shall maintain operating records or documentation, or both, necessary to support the claim for the exemption. The records shall be maintained for 5 years onsite and made available or submitted to the Department upon request.

~~[(e)] (d) The owner or operator of a glass melting furnace shall notify the Department in writing within 24 hours after completion of the operation for which the exemption is claimed.~~

Section 129.304 comments:

This section provides that the pound per ton limits in subsection (a) are applicable unless there are lower limits in a plan approval or operating permit. We are in the process of negotiating emission limitations for our Port Allegany furnaces which ultimately will result in a lower pound per ton emission limitation than the 4.0 lb/ton limit in Section 129.304. That lower limit, however, will be subject to the more flexible requirements for idling, startup, maintenance, and malfunction described above. Under the current wording of Section 129.304, the lower limit in our new permit would be enforceable under Section 129.304, which could be interpreted as providing that only the exemptions set forth in the NOx Glass Rule would apply. We think the better course of action is for the NOx Glass Rule to not apply to any furnace which is subject to a more stringent pound per ton emission rate than those set forth in § 129.304. We therefore recommend the following amendment to Section 129.302:

“This section, § 129.301 (relating to purpose) and § 129.303-129.310 apply to an owner or operator of a glass melting furnace that emits or has the potential to emit NOx at a rate greater than 50 tons per year or 20 pounds per hour **and which is not subject, pursuant to a federally enforceable operating permit or order, to a more stringent pound per ton emission limit than the otherwise applicable limit set forth in § 129.304 (a).**

The schedule of compliance, with the deletion of the CAIR allowance alternative, sets a fixed date of January 2011, with time extensions subject to Department approval after the fact. There is confusion in the language of the petition provisions, since subsection (c) refers to a furnace which is not meeting the standard on January 1, 2011 being allowed to file a petition (after the fact), while subsection (c)(3) provides that the petition must be filed before January 1, 2011. There should be a provision for the Department to act in a timely manner to approve the petition prior to the compliance date for those who know in advance that a furnace will not achieve the emission limit by the schedule in the rule. There should also be a presumptive extension until January 1, 2014 for those furnaces which cannot meet the rule by 2011 and which will not undergo a rebuild or rebricking prior to 2011. In other words, subsection (b) should read as follows:

(b) THE OWNER OR OPERATOR OF A GLASS MELTING FURNACE SHALL COMPLY WITH THE REQUIREMENTS OF SUBSECTION (a) BY JANUARY 1, 2011 UNLESS the furnace will not undergo a rebuild or rebricking between the effective date of this rule and January 1, 2011, in which case the furnace must comply with the requirements of subsection (a) no later than the date of completion of the rebuild or rebricking or by January 1, 2014, whichever date first occurs. Alternatively the owner or operator may file a petition for an alternative emission limitation or compliance schedule in accordance with subsection (c). ~~A PETITION FOR AN ALTERNATE EMISSION LIMITATION OR COMPLIANCE SCHEDULE IS APPROVED BY THE DEPARTMENT IN ACCORDANCE WITH SUBSECTION (e).~~

As referenced above, the furnace itself must be maintained and it is difficult to meet the emission limitations during such maintenance activities. Thus we urge the following amendment to §129.304(d):

(d) DURING ROUTINE MAINTENANCE OF AN ~~ADD-ON~~ EMISSION CONTROL SYSTEM OR SYSTEMS, or during maintenance of the furnace, THE OWNER OR OPERATOR OF A GLASS MELTING FURNACE SUBJECT TO THE EMISSION LIMITS SPECIFIED IN SUBSECTION (a) IS EXEMPT FROM THESE LIMITS IF:

(1) ROUTINE MAINTENANCE IN EACH CALENDAR YEAR DOES NOT EXCEED 144 HOURS TOTAL FOR ~~ADD-ON~~ emission CONTROLS and for the furnace itself.

Section 129.305 Comments

While we applaud the Department for inserting a startup exemption into the rule, the language of this section should be revised to recognize that a furnace needs a startup exemption whenever it has gone cold and needs to restart, whether it was rebuilt or merely rebricked. The purpose of the exemption is to recognize that the refractory swells as it is heated and cracks between refractory pieces can occur until the furnace fully stabilizes. Until the furnace is fully and completely sealed, air can infiltrate into the furnace causing an increase in thermal NO_x. Therefore, subsection (b) should be rewritten to read:

(b) The owner or operator of a glass melting furnace may submit a request for a start-up exemption in conjunction with the plan approval application for the construction of a new furnace, rebricking, or furnace rebuild, or in a separate petition where the rebricking or rebuild is not subject to permitting. ~~The actual length of the startup exemption, if any, will be determined by the Department at the time of the issuance of the plan approval for the furnace rebuild.~~

Section 129.306 Comments

This section, dealing with shutdown exemption, should be deleted. The shutdown exemption does not substitute an alternative emission limitation, while the idling exemption provides a daily emission limitation. The definition of shutdown, on the other hand, has a limitation of 20 days from the time the production falls below the idling threshold until the furnace is cold. There is thus confusion as to whether the idling emission limit applies during shutdown, or on the other hand, whether the 20-day limit applies to idling where the furnace is not being shutdown. To avoid this confusion, we recommend deleting the shutdown exclusion, thus allowing the idling exclusion (with its alternative daily emission limit) to govern, and eliminating the 20-day limitation.

Section 129.307 Comments

Changes consistent with the new definitions should be incorporated into this section to address maintenance and malfunction exemptions..

Section 129.308 Comments

The provisions for supplying missing data are unfairly punitive. If a CEMS reports valid data for 23 hours per day and the values are all less than the applicable limit there is no justification for using the maximum potential emission rate to fill the missing hourly data point, nor is there justification for assuming that the highest single hour should be used. Ironically, as written, it would be statistically better for a facility to have a full quarter of invalid data, since subsection (b)(2) would then allow the use of the prior quarter's actual data. We urge that if there is to be any language in the rule regarding substitution of data (which we do not believe is necessary at all) it allow the use of the average of the valid data immediately before the invalid data and the next valid reading after the invalid period. We urge the Department to review the missing data provisions found in 40 CFR §75.33(c).

Section 129.309 Comments

We question the need for quarterly reporting and suggest that annual emission reporting is sufficient. We appreciate the Department allowing for facility-wide averaging as that encourages the development of better control methods. We also appreciate the recognition of 30-day averaging in Section 129.309(d), but again urge consideration of exceptions for maintenance and malfunction, in addition to those provided for startup and idling.

Thank you for the opportunity to comment on these rules. After your review of these written comments, we would like to schedule a meeting with you and other appropriate Department personnel to explain in more detail the reasoning behind our requested revisions to the rule.

Sincerely,

A handwritten signature in black ink, appearing to read 'SBS', followed by a horizontal line extending to the right.

Steven B. Smith
Vice President, Environmental Affairs

cc: Stephen A. Segebarth, Esq.