



Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

**DEC 15 2017**

Ms. Nicole Opela  
EH&S Coordinator  
Pittsburgh Corning Corporation  
2700 W 16th St  
Sedalia, MO 65301

RE: New Source Review Temporary Permit – Project Number: 2017-09-021  
Installation ID Number: 159-0009  
Expiration Date: November 1, 2019  
Temporary Permit Number: **1 2 2 0 1 7 - 0 0 5**

Dear Ms. Opela:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to change the recipe in glass melting furnace Tank 4 (S-06A). Pittsburgh Corning Corporation proposes to remove

[REDACTED]. Stack testing is planned for after the [REDACTED] has occurred. The Air Pollution Control Program is hereby granting your request to conduct this operation in accordance with Missouri State Rule 10 CSR 10-6.060(3).

The project affects batch mixing, batch transport, batch unloading, and the Tank 4 melting furnace.

Tank 4 melting furnace is not equipped with an add-on particulate matter control device. Filterable particulate matter emissions from upstream raw material handling at batch mixing (S-02) and batch unloading (S-05A) are controlled by existing baghouses. The change from [REDACTED] is not expected to result in an increase of 100 tons of any pollutant from the project. Furthermore, as the raw materials are planned to be switched on a [REDACTED], and the [REDACTED], no increase in filterable particulate matter is expected. No increase in glass output design capacity is expected. Therefore, the temporary [REDACTED] meets the less than 100 tpy emission increase requirement of 10 CSR 10-6.060(3). That is one requirement of a Section (3) permit.



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A Section (3) permit also requires that the attainment or maintenance of ambient air quality standards is not threatened. Therefore, the potential [REDACTED] of manganese compounds, a HAP, should be evaluated to see if it requires ambient modeling. The permit application requests a [REDACTED] tpd limit for glass pull. The limit is proposed to keep the manganese compounds project [REDACTED] below the screening model action level (SMAL) of 0.8 tpy. The SMAL is applied on a project basis. The melting furnace and manganese emissions are subject to 40 CFR 63 Subpart SSSSSS, *National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources*. It is the permits section policy to not conduct HAP modeling for emission units subject to a MACT where the residual risk and technology review (RTR) has been completed. EPA has not completed the RTR for this MACT. Therefore, a manganese compounds potential emission [REDACTED] above the SMAL of 0.8 tpy would require ambient modeling. This permit limits the project's manganese compounds potential emissions [REDACTED] to the SMAL by using the [REDACTED] tpd limit for glass pull.

Permits 1294-007 and 1294-007A contain a manganese compound emission limit of 0.19 tpy. That limit is set at the potential emissions of that project, and isn't set at a certain regulatory threshold. The limit shows a wide margin of compliance with the manganese compound ambient impact level in place in 1994. Although not stated in those permits, operation at any manganese content is allowed as long as the 0.19 tpy limit is not exceeded. Recordkeeping is based upon the recipe at hand, not a preset emission factor. Therefore, some [REDACTED] [REDACTED] trials could be conducted with that limit applying. However, the current project is for a specific goal of [REDACTED] [REDACTED] and is separate from the 1994 permit. The current project should be evaluated separately from the 0.19 tpy limit while the temporary permit is valid.

Therefore, on days when [REDACTED] [REDACTED] trials are conducted, the 0.19 tpy limit is superseded by a limit at the current manganese compound SMAL of 0.8 tpy. This also avoids duplicate limits for the same pollutant with the same averaging time. Days without trial runs (i.e. days with only traditional recipe) that occur during this temporary permit are not part of this project and should not be allowed to emit at a level higher than the existing limit. The period of "days" was selected as a single batch change may take a little over [REDACTED] days to be fully processed through the melter and for the melter to return to a traditional recipe. Temporary permits expire, therefore the higher 0.8 tpy limit will expire. When this permit expires, the 0.19 tpy limit returns, and any manganese content is allowed as long as the emission limit is not exceeded.

Permission to conduct the temporary recipe change is granted with the following Special Conditions:

1. Existing Manganese Compound Emission Limit
  - A. The 0.19 tpy (any consecutive 12-months) manganese compound emission limit in permit 1294-007 Special Condition 1 and permit 1294-007A Attachment A is

superseded on days when any [REDACTED] [REDACTED] trial is conducted in accordance with this temporary permit. The manganese compounds emitted during those days are excluded from the 0.19 tpy limit.

B. During this temporary permit, the manganese compounds emitted on days when no [REDACTED] [REDACTED] trial is conducted are included towards the 0.19 tpy limit.

C. When this temporary permit expires, the 0.19 tpy limit is resumed in-full, and Pittsburgh Corning Corporation may run batches of any [REDACTED] content during that time; however the 0.19 tpy limit applies. Alternatively, the 0.19 tpy limit may be superseded by a future limit.

2. Project Glass Limit

Pittsburgh Corning Corporation shall not exceed [REDACTED] tpd glass pulled from Tank 4 on each day that any [REDACTED] [REDACTED] trial is conducted in accordance with this temporary permit. Pittsburgh Corning Corporation shall keep daily records onsite sufficient to demonstrate compliance with the limit.

3. Project Report

If Pittsburgh Corning Corporation wishes to permit future recipe changes of niter phase-out with manganese increase, then that future construction permit application shall contain a project report of this (project 2017-09-021) temporary recipe change. The report shall include:

- Composition (wt%) of each raw material during each trial run.
- Natural gas usage rate (MMCF) during each trial run.
- Baghouse pressure drop for S-02 and S-05A
- Baghouse MERV rating or fractional efficiency with particle sizes for S-02 and S-05A
- The start date, start time, and duration of each trial run.
- Conclusions reached concerning the long-term feasibility (e.g. product quality, effects on equipment, etc) of the recipe changes.

4. Recordkeeping and Reporting

A. Pittsburgh Corning Corporation shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all materials used.

B. Pittsburgh Corning Corporation shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by email at [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov), no later than 10 days

after the day during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

#### End of Special Conditions

Please note that if Pittsburgh Corning Corporation wishes to permit future recipe changes of [REDACTED] with [REDACTED], the following information should also be obtained:

- Tank 4 furnace emission factors for the following pollutants including but not limited to, PM filterable, PM<sub>10</sub> total, PM<sub>2.5</sub> total, SO<sub>2</sub>, SO<sub>3</sub>, sulfuric acid mist, NO<sub>x</sub>, CO, manganese compounds, and total HAPs. The emission factors are preferably developed from emission testing conducted during the temporary operation. The emission factors should include sample calculations and a full emission test report, if applicable. If testing is conducted, then please contact the Compliance/Enforcement Section at [stacktesting@dnr.mo.gov](mailto:stacktesting@dnr.mo.gov) at least 60 days prior to testing so that proposed testing methods can be preapproved and a program test observer may be present.
- Batch mixing, batch transport, and batch unloading emission factors (controlled stack factors and fugitive portion) for PM filterable, PM<sub>10</sub> total, PM<sub>2.5</sub> total, manganese compounds, and total HAPs.
- Manganese compound emission factors (controlled stack factors and fugitive portion) for all emission units downstream from Tank 4 furnace. This information is requested as the recipe change may affect these units and therefore is included in the project definition.
- Compliant ambient air quality modeling for any pollutant with a project emission increase above the respective de minimis level or SMAL. Please note, a modeled HAP concentration for the project above 4% of the respective RAL(s) may result in modeling all sources of that HAP from the entire installation and not just the project itself.

The MACT Subpart SSSSSS emission limits and all other applicable requirements remain in effect during this temporary permit. All pollutants emitted during this temporary permit should be reported in the EIQ.

Pittsburgh Corning Corporation requested confidentiality for raw material names and production rates. Confidentiality was granted. This is the redacted public permit. A confidential version is available under project 2017-09-022.

You are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, or any other applicable federal, state, or local agency regulations. Specifically, you should avoid violating 10 CSR 10-6.045 *Open Burning Requirements*, 10

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*CSR 10-6.220, Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.165 Restriction of Emission of Odors, and 10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin.*

A copy of this letter should be kept onsite and be made available to Department of Natural Resources' personnel upon request. If you have any questions regarding this determination, please do not hesitate to contact David Little at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kyra L. Moore  
Director

KLM:dlj

c: PAMS File: 2017-09-021  
Chris Wood, Compliance/Enforcement Section  
Kansas City Regional Office