



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM**

STATE ONLY NATURAL MINOR OPERATING PERMIT

Issue Date: January 25, 2024

Effective Date: January 25, 2024

Expiration Date: January 24, 2029

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated.

State Only Permit No: 23-00123

Natural Minor

Federal Tax Id - Plant Code: 46-2357327-1

Owner Information

Name: AEROAGGREGATES LLC

Mailing Address: 1500 CHESTER PIKE
EDDYSTONE, PA 19022-1338

Plant Information

Plant: AEROAGGREGATES/EDDYSTONE

Location: 23 Delaware County 23821 Eddystone Borough

SIC Code: 3999 Manufacturing - Manufacturing Industries, Nec

Responsible Official

Name: LARRY BAMFORD

Title: CHIEF OPERATING OFFICER

Phone: (610) 447 - 8900

Email: Lbamford@aeroaggregates.com

Permit Contact Person

Name: ARCHIE FILSHILL

Title: CEO

Phone: (610) 447 - 8900

Email: archie@aeroaggregates.com

[Signature] _____

JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER



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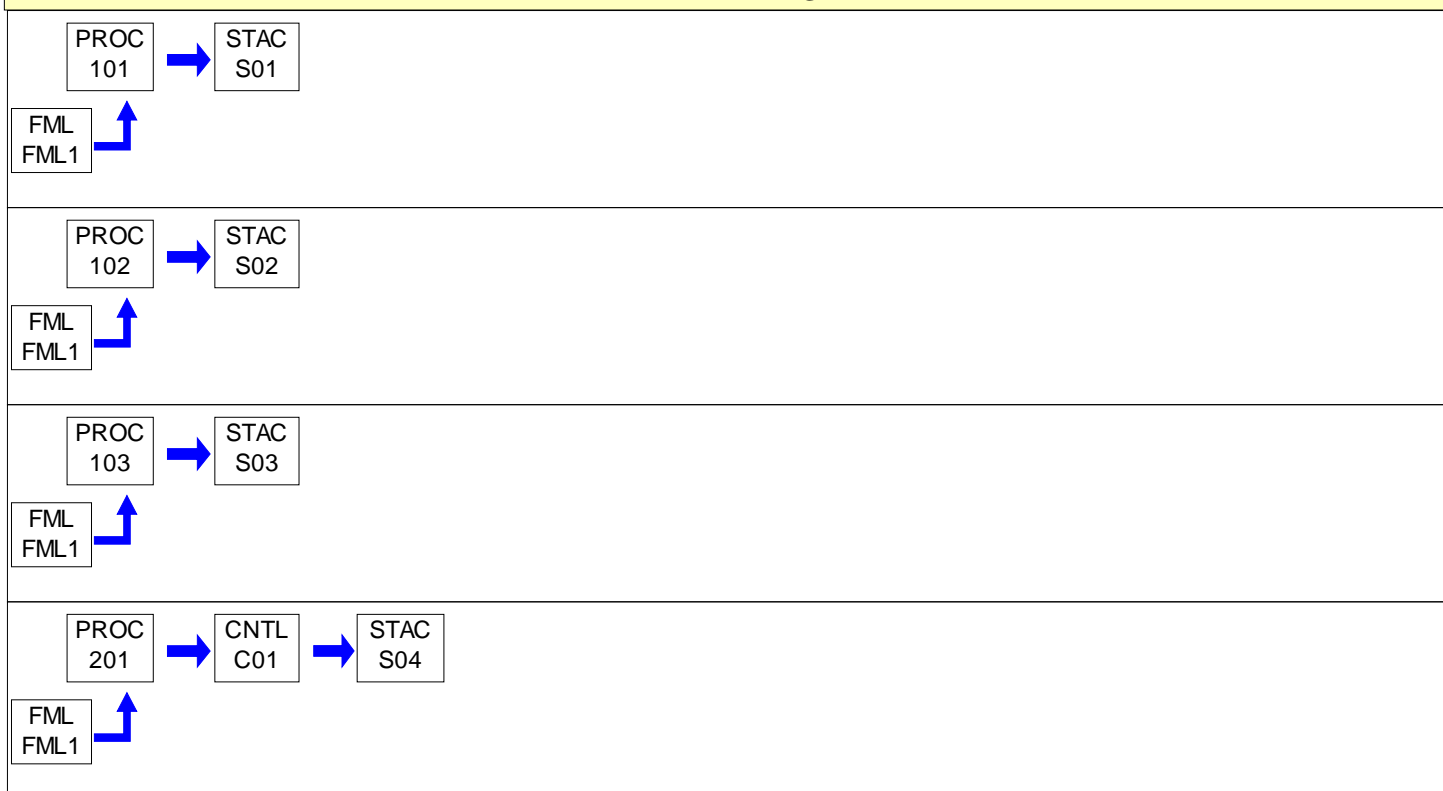
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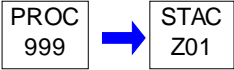
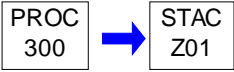
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	GLASS FOAMING TUNNEL KILN 1	6.265 MMBTU/HR	
		2.100 Tons/HR	AMORPHOUS GLASS POWDER
		6,142.000 CF/HR	Natural Gas
102	GLASS FOAMING TUNNEL KILN 2	2.100 Tons/HR	AMORPHOUS GLASS POWDER
		6,142.000 CF/HR	Natural Gas
103	GLASS FOAMING TUNNEL KILN 3	2.100 Tons/HR	AMORPHOUS GLASS POWDER
		6,142.000 CF/HR	Natural Gas
201	FLUIDIZED BED DRYER	1.706 MMBTU/HR	
		10.000 Tons/HR	RECYCLED AMORPHOUS GLASS POWDER
		1,672.500 CF/HR	Natural Gas
300	SILOS A & B	2.100 Tons/HR	AMORPHOUS GLASS POWDER
999	MISCELLANEOUS SOURCES	N/A	FOAMED AGGREGATE
C01	BAGFILTER		
FML1	NATURAL GAS PIPELINE		
S01	KILN 1 STACKS 1A & 1B		
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PERMIT MAPS



PERMIT MAPS



**SECTION B. General State Only Requirements****#001 [25 Pa. Code § 121.1]****Definitions.**

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and in 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.446]**Operating Permit Duration.**

- (a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.
- (b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)]**Permit Renewal.**

- (a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.
- (b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.
- (c) The permittee shall submit with the renewal application a fee for the processing of the application as specified in 25 Pa. Code § 127.703(b). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]**Operating Permit Fees under Subchapter I.**

- (a) The permittee shall pay the annual operating permit maintenance fee according to the following fee schedule in either paragraph (1) or (2) in accordance with 25 Pa. Code § 127.703(d) on or before December 31 of each year for the next calendar year.
- (1) For a synthetic minor facility, a fee equal to:
- (i) Four thousand dollars (\$4,000) for calendar years 2021—2025.
 - (ii) Five thousand dollars (\$5,000) for calendar years 2026—2030.
 - (iii) Six thousand three hundred dollars (\$6,300) for the calendar years beginning with 2031.

**SECTION B. General State Only Requirements**

(2) For a facility that is not a synthetic minor, a fee equal to:

- (i) Two thousand dollars (\$2,000) for calendar years 2021—2025.
- (ii) Two thousand five hundred dollars (\$2,500) for calendar years 2026—2030.
- (iii) Three thousand one hundred dollars (\$3,100) for the calendar years beginning with 2031.

(b) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]**Transfer of Operating Permits.**

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

(b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and a written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee and a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]**Inspection and Entry.**

(a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#007 [25 Pa. Code §§ 127.441 & 127.444]**Compliance Requirements.**

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:

**SECTION B. General State Only Requirements**

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]**Need to Halt or Reduce Activity Not a Defense.**

It shall not be a defense for the permittee in an enforcement action that it was necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#009 [25 Pa. Code §§ 127.442(a) & 127.461]**Duty to Provide Information.**

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#010 [25 Pa. Code § 127.461]**Revising an Operating Permit for Cause.**

This operating permit may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.
- (2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.
- (4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

#011 [25 Pa. Code §§ 127.450, 127.462, 127.465 & 127.703]**Operating Permit Modifications**

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and significant operating permit modifications, under this permit, as outlined below:

**SECTION B. General State Only Requirements**

(b) Administrative Amendments. The permittee shall submit the application for administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.

(c) Minor Operating Permit Modifications. The permittee shall submit the application for minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Significant Operating Permit Modifications. The permittee shall submit the application for significant operating permit modifications in accordance with 25 Pa. Code § 127.465.

(e) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

#012 [25 Pa. Code § 127.441]**Severability Clause.**

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#013 [25 Pa. Code § 127.449]**De Minimis Emission Increases.**

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

(b) The Department may disapprove or condition de minimis emission increases at any time.

(c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

**SECTION B. General State Only Requirements**

- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
 - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
 - (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
 - (4) Space heaters which heat by direct heat transfer.
 - (5) Laboratory equipment used exclusively for chemical or physical analysis.
 - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.
 - (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
 - (3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#014 [25 Pa. Code § 127.3]**Operational Flexibility.**

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)

**SECTION B. General State Only Requirements**

(6) Section 127.462 (relating to minor operating permit modifications)

(7) Subchapter H (relating to general plan approvals and general operating permits)

#015 [25 Pa. Code § 127.11]**Reactivation**

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#016 [25 Pa. Code § 127.36]**Health Risk-based Emission Standards and Operating Practice Requirements.**

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#017 [25 Pa. Code § 121.9]**Circumvention.**

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#018 [25 Pa. Code §§ 127.402(d) & 127.442]**Reporting Requirements.**

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

**SECTION B. General State Only Requirements**

records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

#019 [25 Pa. Code §§ 127.441(c) & 135.5]**Sampling, Testing and Monitoring Procedures.**

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

(b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

#020 [25 Pa. Code §§ 127.441(c) and 135.5]**Recordkeeping.**

(a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

#021 [25 Pa. Code § 127.441(a)]**Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privileges.

#022 [25 Pa. Code § 127.447]**Alternative Operating Scenarios.**

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

**SECTION B. General State Only Requirements****#023 [25 Pa. Code §135.3]****Reporting**

(a) If the facility is a Synthetic Minor Facility, the permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator of a Synthetic Minor Facility may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

#024 [25 Pa. Code §135.4]**Report Format**

If applicable, the emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

002 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

(a) No person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning operations, except as noted in 25 Pa. Code § 129.14.
- (7) N/A
- (8) N/A
- (9) Sources and classes of sources other than those identified in (1) -- (8) of this condition, for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (i) The emissions are of minor significance with respect to causing air pollution; and
 - (ii) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [25 Pa. Code §123.2]**Fugitive particulate matter**

No person may permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

004 [25 Pa. Code §123.31]**Limitations**

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

005 [25 Pa. Code §123.41]**Limitations**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (a) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (b) Equal to or greater than 60% at any time.

**SECTION C. Site Level Requirements****# 006 [25 Pa. Code §123.42]****Exceptions**

The opacity limits of 25 Pa. Code § 123.41 shall not apply to a visible emission in any of the following instances:

- (a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from sources specified in 25 Pa. Code § 123.1(a) (relating to prohibition of certain fugitive emissions).

007 [25 Pa. Code §129.14]**Open burning operations**

The permittee may not permit the open burning of material in the Southeast Air Basin except when the open burning results from:

- (a) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
- (b) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
- (c) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (d) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (e) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure.
- (f) A fire set solely for recreational or ceremonial purposes.
- (g) A fire set solely for cooking food.

008 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

- (a) The permittee shall ensure that the total nitrogen oxide (NO_x) emissions from the facility shall not exceed 24.9 tons per year, as a 12-month rolling sum.
- (b) The permittee shall ensure that the total volatile organic compound (VOC) emissions from the facility shall not exceed 24.9 tons per year, as a 12-month rolling sum.

009 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

- (a) The permittee shall ensure that the emissions of any single hazardous air pollutant (HAP) from all sources at this facility shall not exceed 10.0 tons per year as a 12-month rolling sum.
- (b) The permittee shall ensure that the emissions of total HAPs from all sources at this facility shall not exceed 25.0 tons per year as a 12-month rolling sum.

II. TESTING REQUIREMENTS.**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa.

**SECTION C. Site Level Requirements**

Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, the most current version of the DEP Source Testing Manual, and the EPA Clean Air Act National Stack Testing Guidance, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

011 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

Southeast Region
RA-EPSEstacktesting@pa.gov

Central Office
RA-EPstacktesting@pa.gov

(b) The following pertinent information shall be listed on the title page.

1. Test Date(s)

- a. For protocols, provide the proposed date on which testing will commence or "TBD"
- b. For reports, provide the first and last day of testing

2. Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF ID under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

3. Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

4. Testing Requirements (all that apply)

- a. Plan approval number(s)
- b. Operating permit number
- c. Applicable federal subpart(s) (i.e. 40 CFR 60, Subpart JJJJ)
- d. Special purpose(s) (Consent Order, RFD, RACT, Tier II, etc.)

(c) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

III. MONITORING REQUIREMENTS.**# 012 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

(a) A device approved by the Department and maintained to provide accurate opacity measurements; or

(b) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

**SECTION C. Site Level Requirements****# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the total amount of aggregate produced on a monthly basis and as a 12-month rolling sum.

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall monitor the total emissions of NO_x, VOCs and total particulate matter (TPM) from the facility on a monthly basis and as a 12-month rolling sum.

(b) The permittee shall monitor the emissions of the single largest hazardous air pollutant (HAP) and of the total HAPs from the facility on a monthly basis, and as a 12-month rolling sum.

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall monitor the facility, once per operating day, for the following:

- (1) odors which may be objectionable (as per 25 Pa. Code §123.31);
- (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
- (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:

- (1) be investigated;
- (2) be reported to the facility management, or individual(s) designated by the permittee;
- (3) have appropriate corrective action taken (for emissions that originate on-site); and
- (4) be recorded in a permanent written log.

(c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.

(d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.

(e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification (if applicable), complaints, monitoring results, and/or Department findings.

IV. RECORDKEEPING REQUIREMENTS.**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

- (a) Date, time, and location of the incident(s);
- (b) The cause of the event; and
- (c) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.

017 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (a) emissions increase of minor significance without notification to the Department.
- (b) de minimis increases with notification to the Department, via letter.
- (c) increases resulting from a Request for Determination (RFD) to the Department.
- (d) increases resulting from the issuance of a plan approval and subsequent operating permit.

**SECTION C. Site Level Requirements****# 018 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain records of the total amount of aggregate on a monthly basis and as a 12-month rolling sum.

019 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall calculate and maintain records of the total emissions of NO_x, VOCs and total particulate matter (TPM) from the facility on a monthly basis and as a 12-month rolling sum.

(b) The permittee shall calculate and maintain records of the emissions of the largest single hazardous air pollutant (HAP) and of the total HAPs from the facility, on a monthly basis and as a 12-month rolling sum.

V. REPORTING REQUIREMENTS.**# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR Part 68.]

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the threshold quantity at a facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:

(i) Three years after the date on which a regulated substance is first listed under §40 CFR 68.130; or,

(ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d) If this facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that this facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(e) If this facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

**SECTION C. Site Level Requirements**

(f) When this facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if the permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

021 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall submit all requests, reports, applications, submittals, and other communications to the Regional Office of the Department. The copies shall be forwarded to:

Air Quality Program Manager
PA Department of Environmental Protection
Southeast Regional
2 East Main Street
Norristown, PA 19401-4915

022 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department at 484-250-5920. A malfunction is 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. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

- (1) Name, permit or authorization number, and location of the facility;
- (2) Nature and cause of the malfunction, emergency or incident;
- (3) Date and time when the malfunction, emergency or incident was first observed;
- (4) Expected duration of excess emissions;
- (5) Estimated rate of emissions; and
- (6) Corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

**SECTION C. Site Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 023 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

A person responsible for any source specified in 25 Pa. Code § 123.1 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following

- (a) Use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (b) Application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (c) Paving and maintenance of roadways.
- (d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

024 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall ensure that the source(s) and air pollution control device(s), listed in this permit, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

025 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall immediately, upon discovery, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III, or any other applicable rule promulgated under the Clean Air Act.

026 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee may not modify any air contaminant system identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition #013(g), of Section B, of this permit.

VII. ADDITIONAL REQUIREMENTS.**# 027 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.2]****Subpart A--General Provisions****Definitions.**

AeroAggregate, LLC is an area source of hazardous air pollutants (HAP) emissions, as defined in 40 CFR Part 63.2, National Emissions Standards for Hazardous Air Pollutants. An area source of HAP emissions is a facility that emits or has the potential to emit any single HAP at a rate less than 10 tons per year or any combination of HAPs at a rate less than 25 tons per year.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: GLASS FOAMING TUNNEL KILN 1

Source Capacity/Throughput:

6.265 MMBTU/HR

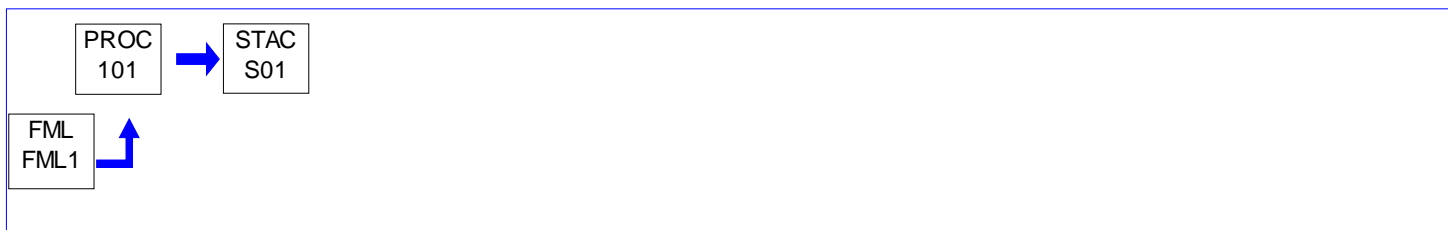
2.100 Tons/HR

AMORPHOUS GLASS POWDER

6,142.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: GRP 1

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: 102

Source Name: GLASS FOAMING TUNNEL KILN 2

Source Capacity/Throughput:

2.100 Tons/HR

AMORPHOUS GLASS POWDER

6,142.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: GRP 1

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: 103

Source Name: GLASS FOAMING TUNNEL KILN 3

Source Capacity/Throughput:

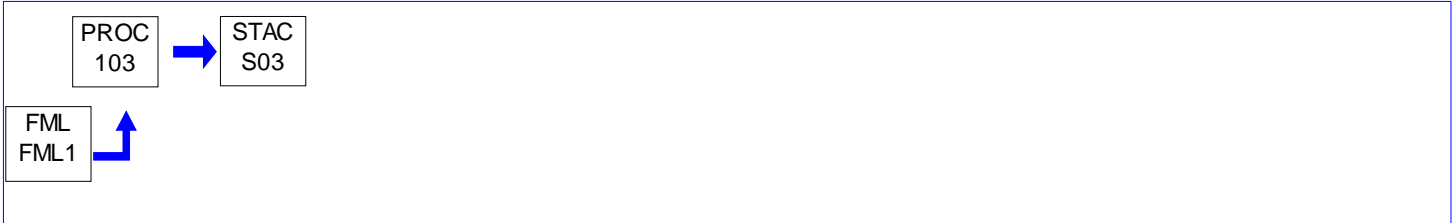
2.100 Tons/HR

AMORPHOUS GLASS POWDER

6,142.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: GRP 1

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: 201

Source Name: FLUIDIZED BED DRYER

Source Capacity/Throughput:

1.706 MMBTU/HR

10.000 Tons/HR

RECYCLED AMORPHOUS GLAS:

1,672.500 CF/HR

Natural Gas

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall ensure that the emissions of nitrogen oxides (NOx) from the Fluidized Bed Dryer (Source ID: 201) shall not exceed 0.17 lb/hr and 0.73 tpy, as a 12-month rolling sum.

(b) The permittee shall ensure that the emissions of volatile organic compounds (VOC) from the Fluidized Bed Dryer (Source ID: 201) shall not exceed 0.009 lb/hr and 0.04 tpy, as a 12-month rolling sum.

(c) The permittee shall ensure that the emissions of total particulate matter (TPM) from the Fluidized Bed Dryer (Source ID: 201) shall not exceed 0.19 lb/hr and 0.83 tpy, as a 12-month rolling sum.

Fuel Restriction(s).**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall ensure that only natural gas is burned as fuel for the Fluidized Bed Dryer (Source ID: 201).

Throughput Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall ensure that that the natural gas throughput for the Fluidized Bed Dryer (Source ID: 201) shall not exceed 1,672.5 cf/hr.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the total NOx, VOC and TPM emissions from the Fluidized Bed Dryer (Source ID: 201) on a monthly basis and as a 12-month rolling sum.

005 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall monitor the natural gas usage for the Fluidized Bed Dryer (Source ID: 201) on a daily basis, when operating.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain records of the total NO_x, VOC and TPM emissions from the Fluidized Bed Dryer (Source ID: 201) on a monthly basis and as a 12-month rolling sum.

007 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall maintain records of the natural gas usage for the Fluidized Bed Dryer (Source ID: 201) on a daily basis, when operating.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall operate and maintain the Fluidized Bed Dryer (Source ID: 201) in accordance with manufacturer recommendations and good housekeeping practices.

VII. ADDITIONAL REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Fluidized Bed Dryer (Source ID: 201) is a direct-heated natural gas-fired fluidized bed dryer, manufactured by Binder (SACMI), model number DCRVF 600x3, with a maximum rated capacity of 10 tons per hour (tph) for recycled glass. The Fluidized Bed Dryer (Source ID: 201) is equipped with a natural gas-fired process burner, manufactured by Bokma (SACMI), model number NP II 3, with a rated capacity of 1,672.5 cf/hr for natural gas.

**SECTION D. Source Level Requirements**

Source ID: 300

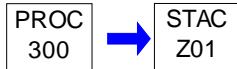
Source Name: SILOS A & B

Source Capacity/Throughput:

2.100 Tons/HR

AMORPHOUS GLASS POWDER

Conditions for this source occur in the following groups: GRP 2

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The two silos ("Silo A" and "Silo B") are manufactured by Infa-Jetron. Silo A serves Kilns #1 and #2 and has a storage capacity of 200 tons; Silo B serves Kiln #3 and has a storage capacity of 120 tons.

**SECTION D. Source Level Requirements**

Source ID: 999

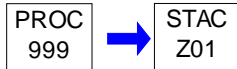
Source Name: MISCELLANEOUS SOURCES

Source Capacity/Throughput:

N/A

FOAMED AGGREGATE

Conditions for this source occur in the following groups: GRP 2

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Miscellaneous Sources (Source ID: 999) consists of the following equipment and activities:

- (1) Truck loading (i.e., front-end loading to truck dumping),
- (2) bagging station (i.e., 2-1.0 ton capacity supersacks),
- (3) portable screener (i.e., dump with conveyor transfer to pile),
- (4) portable stacker (dump with conveyor transfer to pile).

**SECTION E. Source Group Restrictions.**

Group Name: GRP 1

Group Description: Natural gas-fired foaming tunnel kilns

Sources included in this group

ID	Name
101	GLASS FOAMING TUNNEL KILN 1
102	GLASS FOAMING TUNNEL KILN 2
103	GLASS FOAMING TUNNEL KILN 3

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall ensure that the total, combined emissions of nitrogen oxides (NO_x) from the three glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) shall not exceed 1.98 pounds per hour (lb/hr) and 8.67 tons per year (tpy), as a 12-month rolling sum.

(b) The permittee shall ensure that the total, combined emissions of volatile organic compounds (VOC) from the three glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) shall not exceed 1.39 lb/ hr and 6.08 tpy, as a 12-month rolling sum.

(c) The permittee shall ensure that the total combined emissions of particulate matter (TPM) from the three glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) shall not exceed 0.66 lb/ hr and 2.89 tpy, as a 12-month rolling sum.

Fuel Restriction(s).**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall ensure that only natural gas is burned as fuel for the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103).

Throughput Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall ensure that the natural gas throughput for any one of the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) does not exceed 6,142 cubic feet per hour (cf/hr).

(b) The permittee shall ensure that the total natural gas throughput for the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) does not exceed 18,426 cf/hr.

004 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall ensure that the total throughput of foamed glass aggregate (i.e., amorphous glass powder) for the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) shall not exceed 51,000 tpy.

II. TESTING REQUIREMENTS.**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall perform a stack test on one of the three identical kilns using the Department-approved procedures, to show compliance with the emission limits set for the facility. The Source testing shall be performed within 180 days after startup of the source(s). Source testing shall be performed for the following pollutants: CO, NO_x and VOC. Performance tests shall be conducted while the source(s) is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

**SECTION E. Source Group Restrictions.**

(c) The stack test shall, at a minimum, test for the CO, NOx and VOC. Tests shall be conducted in accordance with the provisions of EPA Test Methods 10 for CO, 7E for NOx and 25A for VOC or other Department approved methodology and 25 Pa. Code Chapter 139.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the following for the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103):

(a) the total amount of foamed glass aggregate produced by the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) on a monthly basis and as a 12-month rolling sum.

(b) the total amount of each of the raw materials (e.g., glass powder, silicon carbide, kaolin) used in the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103), on a monthly and annual basis.

007 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall monitor the following for the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103), when operating:

(a) the natural gas consumption for each kiln, continuously,

(b) the combined natural gas consumption for the kilns, continuously,

(c) the hours of operation for each kiln, continuously, and;

(d) the temperature across the kiln zones, continuously.

008 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall monitor the total amount of NOx and VOC emissions from the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) on an monthly basis and as a 12-month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain the following records for the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103), when operating:

(a) the natural gas consumption for each kiln, on a daily basis,

(b) the combined natural gas consumption for the kilns, on a daily basis,

(c) the hours of operation for each kiln, on a daily basis, and;

(d) the temperature across the kiln zones, continuously.

010 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

**SECTION E. Source Group Restrictions.**

The permittee shall maintain the following records for the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103):

(a) the total amount of foamed glass aggregate produced from the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) on a monthly basis and as a 12-month rolling sum.

(b) the total amount of each of the raw materials (e.g., glass powder, silicon carbide, kaolin) used in the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103), on a monthly and annual basis.

011 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall calculate and maintain records of the total amount of NO_x, VOC and PM emissions from the three glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) on an monthly basis and as a 12-month rolling sum.

012 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall calculate and maintain records of the total amount of NO_x, VOC and PM emissions from the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) on an monthly basis and as a 12-month rolling sum.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall ensure that a normal operating temperature between 500° C (932 °F) to 950° C (1,742 °F) shall be reached and maintained prior to the initiation of the raw materials to the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103).

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall operate and maintain the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) in accordance with manufacturer recommendations and good housekeeping practices.

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall ensure that the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) shall be equipped with a gas meter to monitor the natural gas usage.

(b) The permittee shall ensure that the glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) shall be equipped with a temperature monitoring and regulation device.

VII. ADDITIONAL REQUIREMENTS.**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The glass foaming tunnel kilns (Source ID(s): 101, 102 and 103) are manufactured by Riedhammer. Each kiln is equipped with 36 natural gas-fired burners, manufactured by SACMI, model no. PL7-MAD-050 or equivalent. The burners are equipped with flame detection and automatic ignition devices and have a rated capacity of 170.61 cubic feet per hour (cf/hr) per burner of natural gas.

**SECTION E. Source Group Restrictions.**

Group Name: GRP 2

Group Description: Silos and Miscellaneous Sources

Sources included in this group

ID	Name
300	SILOS A & B
999	MISCELLANEOUS SOURCES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the total, combined particulate matter emissions from these sources on a monthly basis and as a 12-month rolling sum.

IV. RECORDKEEPING REQUIREMENTS.**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain records of the total amount of aggregate produced on a monthly basis to determine the total, combined particulate matter (TPM) emissions from these sources,

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
101	GLASS FOAMING TUNNEL KILN 1		
Emission Limit		Pollutant	
1.980	Lbs/Hr	total 3 kilns	NOX
8.670	Tons/Yr	12-month rolling sum	NOX
0.660	Lbs/Hr	total 3 kilns	TSP
2.890	Tons/Yr	12-month rolling sum	TSP
1.390	Lbs/Hr	total 3 kilns	VOC
6.080	Tons/Yr	12-month rolling sum	VOC
102	GLASS FOAMING TUNNEL KILN 2		
Emission Limit		Pollutant	
1.980	Lbs/Hr	total 3 kilns	NOX
8.670	Tons/Yr	12-month rolling sum	NOX
0.660	Lbs/Hr	total 3 kilns	TSP
2.890	Tons/Yr	12-month rolling sum	TSP
1.390	Lbs/Hr	total 3 kilns	VOC
6.080	Tons/Yr	12-month rolling sum	VOC
103	GLASS FOAMING TUNNEL KILN 3		
Emission Limit		Pollutant	
1.980	Lbs/Hr	total 3 kilns	NOX
8.670	Tons/Yr	12-month rolling sum	NOX
0.660	Lbs/Hr	total 3 kilns	TSP
2.890	Tons/Yr	12-month rolling sum	TSP
1.390	Lbs/Hr	total 3 kilns	VOC
6.080	Tons/Yr	12-month rolling sum	VOC
201	FLUIDIZED BED DRYER		
Emission Limit		Pollutant	
0.170	Lbs/Hr		NOX
0.730	Tons/Yr	12-month rolling sum	NOX
0.190	Lbs/Hr	total particulate matter	TSP
0.830	Tons/Yr	12-month rolling sum	TSP
0.040	Tons/Yr	12-month rolling sum	VOC
0.090	Lbs/Hr		VOC

Site Emission Restriction Summary

Emission Limit		Pollutant
24.900	Tons/Yr	12-month rolling sum
24.900	Tons/Yr	12-month rolling sum
10.000	Tons/Yr	any single HAP
25.000	Tons/Yr	total, combined HAPs



SECTION G. Emission Restriction Summary.

**SECTION H. Miscellaneous.**

(a) The following serve as the basis for certain terms and conditions set forth in this Permit:

- (1) RFD Application No. 5904
- (2) Plan Approval 23-0123A



***** End of Report *****
