FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Johns Manville

AUTHORIZING THE OPERATION OF
Cleburne Plant
Mineral Wool Manufacturing

LOCATED AT
Johnson County, Texas
Latitude 32° 23′ 13″ Longitude 97° 23′ 34″
Regulated Entity Number: RN100213719

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O1677 Issuance Date: June 29, 2022

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

    D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

    E. Emission units subject to 40 CFR Part 63, Subparts NNN and JJJJ, as identified in the attached Applicable Requirements Summary table, are subject to 30 TAC Chapter 113,

Subchapter C, §113.710 and §113.930, respectively, which incorporate the 40 CFR Part 63 Subparts by reference.

F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.302 (relating to General Provisions)

(ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)

(iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit

G. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.372 (relating to General Provisions)

(ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)

(iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

(iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC

§ 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is

determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).

5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

7. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

8. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

   A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

   B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

   C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

   D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.

   E. The permit holder shall comply with either of the following requirements for any bypass of the control device subject to CAM. If the results of the following inspections or monitoring indicate bypass of the control device, the permit holder shall promptly take necessary corrective actions and report a deviation:

      (i) Install a flow indicator that is capable of recording flow, at least once every fifteen minutes, immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or

      (ii) Once a month, the permit holder shall inspect the valves checking the position of the valves and the condition of the car seals. Identify all times when the car seal

has been broken and the valve position has been changed to allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere.

F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

9. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

10. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (including the terms, conditions, monitoring, recordkeeping, and reporting identified in registered PBRs and permits by rule identified in the PBR Supplemental Tables dated June 4, 2025 in the application for project 37210), standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

A. Are incorporated by reference into this permit as applicable requirements

B. Shall be located with this operating permit

C. Are not eligible for a permit shield

11. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

12. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

13. The permit holder shall comply with the following requirements for Air Quality Standard Permits:

A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit

B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit

C. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

14. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

15. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:

(i) For sources in the Dallas-Fort Worth Eight-Hour Nonattainment area, 30 TAC § 117.9030

B. The permit holder shall comply with the Initial Control Plan unit identification requirements in 30 TAC § 117.450(a) and (a)(1)-(7).

C. The permit holder shall comply with the requirements of 30 TAC § 117.452 for Final Control Plan Procedures for Reasonably Available Control Technology (RACT) and 30 TAC § 117.456 for Revision of Final Control Plan.

D. The permit holder shall comply with the requirements of 30 TAC § 117.454 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.456 for Revision of Final Control Plan.

E. The permit holder shall comply with the requirement in 30 TAC § 117.450(b) for identification of exempt units in the Initial Control Plan.

16. Use of Emission Credits to comply with applicable requirements:

A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) Offsets for Title 30 TAC Chapter 116

B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)

(ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

(iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

17. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

18. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-

conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

19. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

20. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
16	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
17	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
18	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
19	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
20	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5122	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F901	GLASS MANUFACTURING UNITS	N/A	60CC	40 CFR Part 60, Subpart CC	No changing attributes.
F902	WOOL FIBERGLASS MANUFACTURING	N/A	63NNN-902	40 CFR Part 63, Subpart NNN	No changing attributes.
F91A	WOOL FIBERGLASS MANUFACTURING	N/A	63NNN-F91A	40 CFR Part 63, Subpart NNN	No changing attributes.
F91B	WOOL FIBERGLASS MANUFACTURING	N/A	63NNN-F91B	40 CFR Part 63, Subpart NNN	No changing attributes.
FHFUG	PROCESS HEATERS/FURNACES	N/A	R7400	30 TAC Chapter 117, Subchapter B	No changing attributes.
GEN1	SRIC ENGINES	N/A	R7400	30 TAC Chapter 117, Subchapter B	No changing attributes.
GEN2	SRIC ENGINES	N/A	R7400	30 TAC Chapter 117, Subchapter B	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPTANK	STORAGE TANKS/VESSELS	CATLYSTNK, TANK1, TANK10, TANK11, TANK19, TANK2, TANK20, TANK21, TANK22, TANK28, TANK29, TANK3, TANK30, TANK31, TANK34, TANK35, TANK36, TANK37, TANK38, TANK4, TANK40, TANK42, TANK43, TANK45, TANK46, TANK47, TANK48, TANK49, TANK5, TANK50, TANK54, TANK55, TANK57, TANK58, TANK68, TANK69, TANK70, TANK9, TK-DOIL	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
PRO-LINE90	SURFACE COATING OPERATIONS	N/A	R5470	30 TAC Chapter 115, Subchapter E, Division 7	No changing attributes.
PRO-LINE91	WOOL FIBERGLASS INSULATION MANUFACTURING PLANTS	N/A	60PPP	40 CFR Part 60, Subpart PPP	No changing attributes.
PRO-LINE91	WOOL FIBERGLASS INSULATION MANUFACTURING PLANTS	N/A	63JJJJ	40 CFR Part 63, Subpart JJJJ	No changing attributes.
PRO-LINE91	WOOL FIBERGLASS INSULATION MANUFACTURING	N/A	63NNN	40 CFR Part 63, Subpart NNN	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	PLANTS				
PRO-LINE92	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PRO-LINE92	WOOL FIBERGLASS INSULATION MANUFACTURING PLANTS	N/A	63NNN	40 CFR Part 63, Subpart NNN	No changing attributes.
PRO-LINE93	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PRO-LINE93	WOOL FIBERGLASS INSULATION MANUFACTURING PLANTS	N/A	63NNN	40 CFR Part 63, Subpart NNN	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
16	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
17	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
18	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
19	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
20	EP	R5122	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						exempt from §115.121(a)(1) of this title.			
F901	EU	60CC	PM	40 CFR Part 60, Subpart CC	§ 60.292(a)(1) § 60.292(e) § 60.292(e)(1) § 60.292(e)(2)	No glass melting furnace, fired exclusively with either a gaseous or a liquid fuel, shall discharge PM at emission rates exceeding those specified in Table CC-1, Column 2 and Column 3, respectively.	§ 60.296(a) § 60.296(c) § 60.296(d) § 60.296(d)(1) § 60.296(d)(2) § 60.296(d)(3) ** See CAM Summary	None	§ 60.292(e)(3) § 60.296(a)
F902	EU	63NNN-902	CHROMIUM	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.5 § 63.1382(a) § 63.1382(c) § 63.1382(c)(11) [G]§ 63.1382(c)(2) [G]§ 63.1382(c)(5) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing gas-fired glass-melting furnace, limit chromium emissions to 0.00025 lb chromium compounds per ton of glass pulled.	[G]§ 63.1383(a) [G]§ 63.1383(c) § 63.1383(f) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(4) § 63.1384(a)(5) § 63.1384(c) § 63.1384(d) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(4) § 63.1384(a)(5) [G]§ 63.1386(c) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(ii) § 63.1386(d)(2)(ix) § 63.1386(d)(2)(xi) [G]§ 63.1389(f)	[G]§ 63.1386(a) [G]§ 63.1386(c) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)
F902	EU	63NNN-902	HF/HCL	40 CFR Part 63, Subpart NNN	[G]§ 63.1382(b) § 63.1387(c)	On/after July 29, 2015 to reduce emissions of HCL and HF from each existing, new, or reconstructed glass-melting furnace, you must either require cullet providers to provide records of their inspections, or sample raw materials and maintain records showing that no glass from industrial (also known as continuous strand, or textile) fiberglass, cathode ray tubes (CRT),	[G]§ 63.1382(b)	[G]§ 63.1382(b) § 63.1386(d)(2)(x) § 63.1386(d)(2)(xi)	[G]§ 63.1386(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						computer monitors that include CRT, and glass from microwave ovens, televisions or other electronics is included in the cullet.			
F902	EU	63NNN-902	PM	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.3 § 63.1382(a) § 63.1382(c) § 63.1382(c)(11) [G]§ 63.1382(c)(2) [G]§ 63.1382(c)(5) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing glass-melting furnace, limit PM emissions to 0.33 lb per ton of glass pulled.	[G]§ 63.1383(a) [G]§ 63.1383(c) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(4) § 63.1384(a)(5) § 63.1384(b) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(4) § 63.1384(a)(5) [G]§ 63.1386(c) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(ii) § 63.1386(d)(2)(ix) § 63.1386(d)(2)(xi) [G]§ 63.1389(f)	[G]§ 63.1386(a) [G]§ 63.1386(c) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)
F91A	EU	63NNN-F91A	HF/HCL	40 CFR Part 63, Subpart NNN	[G]§ 63.1382(b) § 63.1387(c)	On/after July 29, 2015 to reduce emissions of HCL and HF from each existing, new, or reconstructed glass-melting furnace, you must either require cullet providers to provide records of their inspections, or sample raw materials and maintain records showing that no glass from industrial (also known as continuous strand, or textile) fiberglass, cathode ray tubes (CRT), computer monitors that include CRT, and glass from microwave ovens, televisions or other	[G]§ 63.1382(b)	[G]§ 63.1382(b) § 63.1386(d)(2)(x)	[G]§ 63.1386(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						electronics is included in the cullet.			
F91A	EU	63NNN-F91A	PM	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table2.3 § 63.1382(a) § 63.1382(c) [G]§ 63.1382(c)(1) [G]§ 63.1382(c)(5) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing glass-melting furnace, limit PM emissions to 0.33 lb per ton of glass pulled.	[G]§ 63.1383(a) [G]§ 63.1383(b) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(b) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1384(a)(2) § 63.1384(a)(3) [G]§ 63.1386(c) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(i) § 63.1386(d)(2)(ix) § 63.1389(f)(2)	[G]§ 63.1386(a) [G]§ 63.1386(c) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)
F91B	EU	63NNN-F91B	HF/HCL	40 CFR Part 63, Subpart NNN	[G]§ 63.1382(b) § 63.1387(c)	On/after July 29, 2015 to reduce emissions of HCL and HF from each existing, new, or reconstructed glass-melting furnace, you must either require cullet providers to provide records of their inspections, or sample raw materials and maintain records showing that no glass from industrial (also known as continuous strand, or textile) fiberglass, cathode ray tubes (CRT), computer monitors that include CRT, and glass from microwave ovens, televisions or other electronics is included in the cullet.	[G]§ 63.1382(b)	[G]§ 63.1382(b) § 63.1386(d)(2)(x)	[G]§ 63.1386(a)
F91B	EU	63NNN-F91B	PM	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table2.3 § 63.1382(a) § 63.1382(c) [G]§ 63.1382(c)(1)	For each existing glass-melting furnace, limit PM emissions to 0.33 lb per ton of glass pulled.	[G]§ 63.1383(a) [G]§ 63.1383(b) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1)	§ 63.1384(a)(2) § 63.1384(a)(3) [G]§ 63.1386(c) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(i)	[G]§ 63.1386(a) [G]§ 63.1386(c) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.1382(c)(5) § 63.1387(c) § 63.1389(a) § 63.1389(b)		§ 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(b) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1386(d)(2)(ix) § 63.1389(f)(2)	
FHFUG	EU	R7400	CO	30 TAC Chapter 117, Subchapter B	§ 117.410(c)(1) § 117.410(c)(1)(B) § 117.410(c)(3) § 117.440(j)	No person shall allow the discharge into the atmosphere from any unit carbon monoxide (CO) emissions that exceed 400 ppmv at 3.0% oxygen, dry basis.	§ 117.435(a)(1) § 117.435(a)(3) § 117.435(b) § 117.435(d) § 117.440(a) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) ** See Periodic Monitoring Summary	§ 117.445(a) § 117.445(f) § 117.445(f)(1) § 117.445(f)(8)	§ 117.435(f) § 117.445(b) [G]§ 117.445(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
FHFUG	EU	R7400	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.410(a)(3)(B) § 117.410(a) § 117.410(b)(2) [G]§ 117.410(e)(1) § 117.410(e)(2) [G]§ 117.410(e)(3) § 117.410(e)(4) § 117.430(b) § 117.440(j)	No person shall allow the discharge from process heaters with a maximum rated capacity less than 40 MMBtu/hr, NOx emissions in excess of 0.036 lb/MMBtu (or alternatively, 30 ppmv, at 3.0% oxygen, dry basis).	§ 117.435(a)(1) § 117.435(a)(3) § 117.435(b) § 117.435(d) § 117.440(a) § 117.440(k)(1) § 117.440(k)(2) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)	§ 117.445(a) § 117.445(f) § 117.445(f)(1) § 117.445(f)(8)	§ 117.435(f) § 117.445(b) [G]§ 117.445(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
GEN1	EU	R7400	Exempt	30 TAC Chapter 117, Subchapter B	§ 117.403(a)(7)(D) § 117.403(a)	Units exempt from this division, except as specified	§ 117.8140(a) § 117.8140(a)(3)	§ 117.440(i) § 117.445(f)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						in §§ 117.440(i), 117.445(f)(4) and (9), 117.450 and 117.454, include stationary gas turbines and stationary internal combustion engines used exclusively in emergency situations, except that operation for testing or maintenance is allowed for up to 100 hours per year, based on a rolling 12-month average. New, modified, reconstructed or relocated stationary diesel engine placed into service on or after June 1, 2007, are ineligible.		§ 117.445(f)(4)	
GEN2	EU	R7400	Exempt	30 TAC Chapter 117, Subchapter B	§ 117.403(a)(7)(D) § 117.403(a)	Units exempt from this division, except as specified in §§ 117.440(i), 117.445(f)(4) and (9), 117.450 and 117.454, include stationary gas turbines and stationary internal combustion engines used exclusively in emergency situations, except that operation for testing or maintenance is allowed for up to 100 hours per year, based on a rolling 12-month average. New, modified, reconstructed or relocated stationary diesel engine placed into service on or after June 1, 2007, are ineligible.	§ 117.8140(a) § 117.8140(a)(3)	§ 117.440(i) § 117.445(f) § 117.445(f)(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPTANK	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
PRO-LINE90	PRO	R5470	VOC	30 TAC Chapter 115, Subchapter E, Division 7	§ 115.473(a)-Table 2 § 115.473(a) § 115.473(a)(1)(A) [G]§ 115.473(b) [G]§ 115.473(c)(1) [G]§ 115.473(c)(2)	The owner or operator shall limit VOC emissions from all adhesives and adhesive primers used during the application processes of contact adhesive to 2.1 lb VOC/gal adhesive as specified. These limits are based on the daily weighted average of all adhesives or adhesive primers delivered to the application system each day. If an adhesive or adhesive primer is used to bond dissimilar substrates together, then the applicable substrate category with the least stringent VOC content limit applies.	[G]§ 115.475	§ 115.478(b)(1) § 115.478(b)(3) § 115.478(b)(4)	None
PRO-LINE91	PRO	60PPP	PM	40 CFR Part 60, Subpart PPP	§ 60.682	After the date which the performance test required by §60.8 is completed, no person may discharge any gases containing PM in excess of 5.5 kg/Mg (11.0 lb/ton) of glass pulled.	§ 60.683(a) § 60.683(c) § 60.684(e) § 60.685(a) § 60.685(b) [G]§ 60.685(c) § 60.685(d) ** See Periodic Monitoring Summary	§ 60.684(a) § 60.684(c) § 60.684(e)	§ 60.684(d) § 60.684(e) § 60.685(d)
PRO-	EU	63JJJJ	112(B)HAP	40 CFR Part 63,	§ 63.3320(b)(1)	You must limit organic HAP	§ 63.3360(a)(1)	§ 63.3410(a)	§ 63.3400(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
LINE91			S	Subpart JJJJ	§ 63.3320(a) § 63.3330(a)	emissions to no more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources, and no more than 2 percent of the organic HAP applied for each month (98 percent reduction) at new affected sources.	§ 63.3360(c)(3)	§ 63.3410(a)(1) § 63.3410(a)(1)(iii)	§ 63.3400(b)(1) § 63.3400(c) [G]§ 63.3400(c)(1) § 63.3400(e) [G]§ 63.3400(c)(2)(i)-(iv)
PRO-LINE91	EU	63NNN	FORMALDEHYDE	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.9 § 63.1380(b)(2) § 63.1382(a) § 63.1382(c) § 63.1382(c)(10) [G]§ 63.1382(c)(7) § 63.1382(c)(9) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing rotary spin manufacturing line, limit formaldehyde emissions to 1.2 lb per ton of glass pulled.	[G]§ 63.1383(a) § 63.1383(f) § 63.1383(h) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(11) [G]§ 63.1384(a)(13) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(8) § 63.1384(a)(9) § 63.1384(c) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1383(h) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1384(a)(11) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) [G]§ 63.1386(c) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(ix) § 63.1386(d)(2)(v) § 63.1386(d)(2)(vii)	[G]§ 63.1384(a)(13) [G]§ 63.1386(a) [G]§ 63.1386(c) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)
PRO-LINE91	EU	63NNN	METHANOL	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.9 § 63.1380(b)(2) § 63.1382(c) § 63.1382(c)(10) [G]§ 63.1382(c)(7) § 63.1382(c)(9) § 63.1387(c) § 63.1389(a)	For each existing rotary spin manufacturing line, limit methanol emissions to 1.1 lb per ton of glass pulled.	[G]§ 63.1383(a) § 63.1383(f) § 63.1383(h) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1)	§ 63.1383(h) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1384(a)(11) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) [G]§ 63.1386(c)	[G]§ 63.1384(a)(13) [G]§ 63.1386(a) [G]§ 63.1386(c) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.1389(b)		§ 63.1384(a)(11) [G]§ 63.1384(a)(13) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(8) § 63.1384(a)(9) § 63.1384(c) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	[G]§ 63.1386(d)(1) § 63.1386(d)(2)(ix) § 63.1386(d)(2)(v) § 63.1386(d)(2)(vii)	
PRO-LINE92	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
PRO-LINE92	EU	63NNN	FORMALDEHYDE	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.16 § 63.1382(a) § 63.1382(c)(10) [G]§ 63.1382(c)(8) § 63.1382(c)(9) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing flame attenuation fiberglass manufacturing line that is manufacturing an HVAC product, limit formaldehyde emissions to 2.8 lb per ton of glass pulled.	[G]§ 63.1383(a) § 63.1383(i)(1) § 63.1383(i)(2) [G]§ 63.1383(i)(3) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(10) [G]§ 63.1384(a)(13) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1384(c) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1384(a)(10) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1386(c)(1) § 63.1386(c)(2) § 63.1386(c)(3) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(v) § 63.1386(d)(2)(vi) § 63.1386(d)(2)(xi)	[G]§ 63.1384(a)(13) [G]§ 63.1386(a) § 63.1386(c)(4) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)
PRO-	EU	63NNN	METHANO	40 CFR Part 63,	§ 63.1382(a)-Table	For each existing flame	[G]§ 63.1383(a)	§ 63.1383(j)	[G]§ 63.1384(a)(13)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
LINE92			L	Subpart NNN	2.16 § 63.1382(a) § 63.1382(c)(10) [G]§ 63.1382(c)(8) § 63.1382(c)(9) § 63.1387(c) § 63.1389(a) § 63.1389(b)	attenuation fiberglass manufacturing line that is manufacturing an HVAC product, limit methanol emissions to 7.3 lb per ton of glass pulled.	§ 63.1383(i)(1) § 63.1383(i)(2) [G]§ 63.1383(i)(3) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(10) [G]§ 63.1384(a)(13) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1384(c) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1383(k) § 63.1383(l) § 63.1384(a)(10) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1386(c)(1) § 63.1386(c)(2) § 63.1386(c)(3) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(v) § 63.1386(d)(2)(vi) § 63.1386(d)(2)(xi)	[G]§ 63.1386(a) § 63.1386(c)(4) [G]§ 63.1386(f) § 63.1386(g)
PRO-LINE92	EU	63NNN	PHENOL	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.16 § 63.1382(a) § 63.1382(c)(10) [G]§ 63.1382(c)(8) § 63.1382(c)(9) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing flame attenuation fiberglass manufacturing line that is manufacturing an HVAC product, limit phenol emissions to 0.4 lb per ton of glass pulled.	[G]§ 63.1383(a) § 63.1383(i)(1) § 63.1383(i)(2) [G]§ 63.1383(i)(3) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(10) [G]§ 63.1384(a)(13) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1384(c) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1384(a)(10) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1386(c)(1) § 63.1386(c)(2) § 63.1386(c)(3) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(v) § 63.1386(d)(2)(vi) § 63.1386(d)(2)(xi)	[G]§ 63.1384(a)(13) [G]§ 63.1386(a) § 63.1386(c)(4) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)
PRO-	EP	R5121	VOC	30 TAC Chapter	§ 115.127(a)(2)(A)	A vent gas stream having a	[G]§ 115.125	§ 115.126	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
LINE93				115, Vent Gas Controls	[G]§ 115.122(a)(4) § 115.127(a)(2)	combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	§ 115.126(2)	§ 115.126(2) § 115.126(4)	
PRO-LINE93	EU	63NNN	FORMALDEHYDE	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.16 § 63.1382(a) § 63.1382(c)(10) [G]§ 63.1382(c)(8) § 63.1382(c)(9) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing flame attenuation fiberglass manufacturing line that is manufacturing an HVAC product, limit formaldehyde emissions to 2.8 lb per ton of glass pulled.	[G]§ 63.1383(a) § 63.1383(i)(1) § 63.1383(i)(2) [G]§ 63.1383(i)(3) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(10) [G]§ 63.1384(a)(13) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1384(c) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1384(a)(10) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1386(c)(1) § 63.1386(c)(2) § 63.1386(c)(3) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(v) § 63.1386(d)(2)(vi) § 63.1386(d)(2)(xi)	[G]§ 63.1384(a)(13) [G]§ 63.1386(a) § 63.1386(c)(4) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)
PRO-LINE93	EU	63NNN	METHANOL	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.16 § 63.1382(a) § 63.1382(c)(10) [G]§ 63.1382(c)(8) § 63.1382(c)(9) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing flame attenuation fiberglass manufacturing line that is manufacturing an HVAC product, limit methanol emissions to 7.3 lb per ton of glass pulled.	[G]§ 63.1383(a) § 63.1383(i)(1) § 63.1383(i)(2) [G]§ 63.1383(i)(3) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(10) [G]§ 63.1384(a)(13)	§ 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1384(a)(10) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1386(c)(1) § 63.1386(c)(2) § 63.1386(c)(3) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(v)	[G]§ 63.1384(a)(13) [G]§ 63.1386(a) § 63.1386(c)(4) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1384(c) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1386(d)(2)(vi) § 63.1386(d)(2)(xi)	
PRO-LINE93	EU	63NNN	PHENOL	40 CFR Part 63, Subpart NNN	§ 63.1382(a)-Table 2.16 § 63.1382(a) § 63.1382(c)(10) [G]§ 63.1382(c)(8) § 63.1382(c)(9) § 63.1387(c) § 63.1389(a) § 63.1389(b)	For each existing flame attenuation fiberglass manufacturing line that is manufacturing an HVAC product, limit phenol emissions to 0.4 lb per ton of glass pulled.	[G]§ 63.1383(a) § 63.1383(i)(1) § 63.1383(i)(2) [G]§ 63.1383(i)(3) § 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1383(m) § 63.1384(a) § 63.1384(a)(1) § 63.1384(a)(10) [G]§ 63.1384(a)(13) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1384(c) § 63.1384(e) [G]§ 63.1385(a) § 63.1385(b)	§ 63.1383(j) § 63.1383(k) § 63.1383(l) § 63.1384(a)(10) § 63.1384(a)(2) § 63.1384(a)(3) § 63.1384(a)(9) § 63.1386(c)(1) § 63.1386(c)(2) § 63.1386(c)(3) [G]§ 63.1386(d)(1) § 63.1386(d)(2)(v) § 63.1386(d)(2)(vi) § 63.1386(d)(2)(xi)	[G]§ 63.1384(a)(13) [G]§ 63.1386(a) § 63.1386(c)(4) § 63.1386(e) [G]§ 63.1386(f) § 63.1386(g)

Additional Monitoring Requirements

CAM Summary

Unit/Group/Process Information	
ID No.: F901	
Control Device ID No.: 15A	Control Device Type: Wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart CC	SOP Index No.: 60CC
Pollutant: PM	Main Standard: § 60.292(a)(1)
Monitoring Information	
Indicator: Secondary Voltage	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: 2 fields operational: minimum secondary voltage for both fields = 36kV. 3 fields operational: one field minimum secondary voltage = 36kV; two remaining minimum secondary voltage = 30kV.	
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 2% of reading; or ± 5% over its operating range.	

CAM Summary

Unit/Group/Process Information	
ID No.: F901	
Control Device ID No.: 15A	Control Device Type: Wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart CC	SOP Index No.: 60CC
Pollutant: PM	Main Standard: § 60.292(a)(1)
Monitoring Information	
Indicator: Secondary Current	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: 2 fields operational: secondary current for both fields between 36mA and 690mA. 3 fields operational: secondary current between 170mA and 690mA.	
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 1% of reading; or ± 5% over its operating range.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: FHFUG	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7400
Pollutant: CO	Main Standard: § 117.410(c)(1)
Monitoring Information	
Indicator: Heat Input	
Minimum Frequency: See PM text	
Averaging Period: Monthly	
Deviation Limit: Maximum heat input = 18 MMBtu/hr	
Periodic Monitoring Text: Fuel flow will be metered continuously and the total fuel usage will be recorded monthly. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with the manufacturer's specifications or other written procedures. On a monthly basis, the monthly average hourly heat input rate (MMBtu/hr) will be calculated based on the natural gas heating value obtained from natural gas bills. Using the heat input, the calculated exhaust flow rate based on the 40 CFR Part 75 Appendix F f-factor along with the NSR permit's Maximum Allowable Emission Rate for CO will demonstrate ongoing compliance with the 30 TAC Chapter 117 CO emission limitation of 400 ppmv. Any monitoring data above the maximum hourly heat input shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PRO-LINE91	
Control Device ID No.: 16	Control Device Type: Wet scrubber
Control Device ID No.: 17	Control Device Type: Wet scrubber
Control Device ID No.: 18	Control Device Type: Wet scrubber
Control Device ID No.: 19	Control Device Type: Wet scrubber
Control Device ID No.: 20	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart PPP	SOP Index No.: 60PPP
Pollutant: PM	Main Standard: § 60.682
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: Minimum pressure drop (16, 17, 18, 19) = 4.66 inches; minimum pressure drop (20) = 12.86 inches	
Periodic Monitoring Text: Measure and record the pressure drop. The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the deviation limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PRO-LINE91	
Control Device ID No.: 16	Control Device Type: Wet scrubber
Control Device ID No.: 17	Control Device Type: Wet scrubber
Control Device ID No.: 18	Control Device Type: Wet scrubber
Control Device ID No.: 19	Control Device Type: Wet scrubber
Control Device ID No.: 20	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart PPP	SOP Index No.: 60PPP
Pollutant: PM	Main Standard: § 60.682
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: Minimum liquid flow rate = 375 gpm	
Periodic Monitoring Text: Measure and record the liquid flow rate. The monitoring instrumentation shall be calibrated, maintained and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the deviation limit shall be considered and reported as a deviation.	

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
16	N/A	30 TAC Chapter 117, Subchapter B	Capacity < 5MMBtu/hr
17	N/A	30 TAC Chapter 117, Subchapter B	Capacity < 5 MMBtu/hr
18	N/A	30 TAC Chapter 117, Subchapter B	Capacity < 5 MMBtu/hr
19	N/A	30 TAC Chapter 117, Subchapter B	Capacity < 5 MMBtu/hr
20	N/A	30 TAC Chapter 117, Subchapter B	Low-temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing which nitrogen-containing resins, or other additives are used.
90OVEN	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
90OVEN	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
91OVEN	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator.
91OVEN	N/A	30 TAC Chapter 117, Subchapter B	Capacity < 5MMBtu/hr
92TRNPOT	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
92TRNPOT	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
97O1	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
97O1	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
97O2	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
97O2	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
AHTANK	N/A	30 TAC Chapter 115, Storage of VOCs	Does not store a VOC
AHTANK	N/A	40 CFR Part 60, Subpart Kb	Does not store a VOL.
DRYTUNFUG	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
F902	N/A	40 CFR Part 60, Subpart CC	Glass furnace was constructed prior to June 15,

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Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			1979.
F91A	N/A	40 CFR Part 60, Subpart CC	Unit is all-electric melter.
F91B	N/A	40 CFR Part 60, Subpart CC	Unit is all-electric melter.
FG92-CF	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel-fired steam generator.
FG92-CF	N/A	30 TAC Chapter 117, Commercial	A forming oven or forming process used in mineral wool-type fiberglass manufacturing.
FG92-CO	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel-fired steam generator.
FG92-CO	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
FG93-CF	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel-fired steam generator.
FG93-CF	N/A	30 TAC Chapter 117, Commercial	A forming oven or forming process used in mineral wool-type fiberglass manufacturing.
FG93-CO	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel-fired steam generator.
FG93-CO	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
FH-EAST	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
FH-EAST	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
FH-WEST	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
FH-WEST	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
FHFUG2	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
FMFUG	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
GEN1	N/A	40 CFR Part 63, Subpart ZZZZ	Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			operate or is not contractually obligated to be available for more than 15 hours per calendar year.
GEN2	N/A	40 CFR Part 63, Subpart ZZZZ	Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year.
GRP-COOL	91-CT1, 91-CT2, E-CT1, E-CT2, E-CT3, P&M-CT1, P&M-CT2	40 CFR Part 63, Subpart Q	Cooling tower does not operate with chromium-based water treatment chemicals.
GRPPRESS	TANK63, TANK64, TANK65	40 CFR Part 60, Subpart Kb	Tanks are less than 19,800 gallons
GRPSMALL	DIESEL1, DIESEL2, DIESEL3, SULHLDTNK, TANK12, TANK13, TANK18, TANK23, TANK32, TANK33, TANK41, TANK51, TANK52, TANK53, TANK59, TANK6, TANK60, TANK61, TANK62, TANK7, TANK71, TANK8, UNLEAD1, UREMIXTNK	30 TAC Chapter 115, Storage of VOCs	Tanks are less than 1,000 gallons
GRPSMALL	DIESEL1, DIESEL2, DIESEL3, SULHLDTNK, TANK12, TANK13, TANK18, TANK23, TANK32, TANK33, TANK41, TANK51, TANK52, TANK53, TANK59, TANK6, TANK60, TANK61, TANK62, TANK7, TANK71, TANK8, UNLEAD1, UREMIXTNK	40 CFR Part 60, Subpart Kb	Tanks are less than 19,800 gallons
GRPTANK	CATLYSTNK, TANK1, TANK10, TANK11, TANK19, TANK2, TANK20, TANK21, TANK22, TANK28, TANK29,	40 CFR Part 60, Subpart Kb	Tanks are less than 19,800 gallons

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
	TANK3, TANK30, TANK31, TANK34, TANK35, TANK36, TANK37, TANK38, TANK4, TANK40, TANK42, TANK43, TANK45, TANK46, TANK47, TANK48, TANK49, TANK5, TANK50, TANK54, TANK55, TANK57, TANK58, TANK68, TANK69, TANK70, TANK9, TK-DOIL		
HEAT1	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
HEAT1	N/A	30 TAC Chapter 117, Subchapter B	Natural gas-fired heaters used exclusively for providing comfort heat to areas designed for human occupancy.
LHT	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
LHT	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
MARBLELEHR	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
MARBLELEHR	N/A	30 TAC Chapter 117, Commercial	Capacity < 5MMBtu/hr
PRO-LINE90	N/A	30 TAC Chapter 115, Surface Coating Operations	Coating of fiberglass insulation mat is not a regulated surface coating process.
PRO-LINE90	N/A	40 CFR Part 63, Subpart DDDDD	Does not meet the definition of “Process Heater” in this subpart, due to not qualifying as enclosed device/controlled flame and/or direct contact with process material.
PRO-LINE90	N/A	40 CFR Part 63, Subpart OOOO	Fabric and other textile substrate web coating or printing operations conducted at ambient temperatures that does not involve drying or curing equipment such as ovens, tenter frames, steam cans, or dryers.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
PRO-LINE91	N/A	40 CFR Part 63, Subpart DDDDD	Does not meet the definition of “Process Heater” in this subpart, due to not qualifying as enclosed device/controlled flame and/or direct contact with process material.
PRO-LINE92	N/A	40 CFR Part 60, Subpart PPP	The facility does not manufacture rotary spun wool fiberglass insulation.
PRO-LINE92	N/A	40 CFR Part 63, Subpart DDDDD	Does not meet the definition of “Process Heater” in this subpart, due to not qualifying as enclosed device/controlled flame and/or direct contact with process material.
PRO-LINE93	N/A	40 CFR Part 60, Subpart PPP	The facility does not manufacture rotary spun wool fiberglass insulation.
PRO-LINE93	N/A	40 CFR Part 63, Subpart DDDDD	Does not meet the definition of “Process Heater” in this subpart, due to not qualifying as enclosed device/controlled flame and/or direct contact with process material.
PRO-LINE97	N/A	30 TAC Chapter 115, Surface Coating Operations	Coating of fiberglass insulation mat is not a regulated surface coating process.
PRO-LINE97	N/A	40 CFR Part 63, Subpart DDDDD	Does not meet the definition of “Process Heater” in this subpart, due to not qualifying as enclosed device/controlled flame and/or direct contact with process material.
PRO-LINE97	N/A	40 CFR Part 63, Subpart OOOO	Fabric and other textile substrate web coating or printing operations conducted at ambient temperatures that does not involve drying or curing equipment such as ovens, tenter frames, steam cans, or dryers.
RNGBRNR	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
RNGBRNR	N/A	30 TAC Chapter 117, Commercial	Curing oven used in mineral wool-type fiberglass manufacturing in which nitrogen-bound chemical additives are used.
STEAMCLNR	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel fired steam generator
STEAMCLNR	N/A	30 TAC Chapter 117, Subchapter B	Not an affected unit.
TANK39	N/A	30 TAC Chapter 115, Storage of VOCs	Does not store a VOC
TANK39	N/A	40 CFR Part 60, Subpart Kb	Capacity < 19,800 gallons
TANK66	N/A	30 TAC Chapter 115, Storage of VOCs	Does not store VOC
TANK66	N/A	40 CFR Part 60, Subpart Kb	Capacity < 19,800 gallons
TANK67	N/A	30 TAC Chapter 115, Storage of VOCs	Does not store a VOC
TANK67	N/A	40 CFR Part 60, Subpart Kb	Capacity < 19,800 gallons
TK-LFC1	N/A	40 CFR Part 60, Subpart Kb	Capacity < 19,800 gallons
TK-LFC2	N/A	40 CFR Part 60, Subpart Kb	Capacity < 19,800 gallons
WWT	N/A	30 TAC Chapter 115, Industrial Wastewater	Not an affected source category.

New Source Review Authorization References

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX1025M1	Issuance Date: 10/10/2024
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 946A	Issuance Date: 10/10/2024
Authorization No.: 130233	Issuance Date: 02/23/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 51	Version No./Date: 09/12/1989
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.418	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000
Number: 118	Version No./Date: 05/04/1994

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
16	LINE 91 COLLECTION WET SCRUBBER NO.1 STACK	946A, PSDTX1025M1, 106.261/11/01/2003 [160971], 106.262/11/01/2003 [160971]
17	LINE 91 COLLECTION WET SCRUBBER NO.2 STACK	946A, PSDTX1025M1, 106.261/11/01/2003 [160971], 106.262/11/01/2003 [160971]
18	LINE 91 COLLECTION WET SCRUBBER NO.3 STACK	946A, PSDTX1025M1, 106.261/11/01/2003 [107085, 160971], 106.262/11/01/2003 [107085, 160971]
19	LINE 91 COLLECTION WET SCRUBBER NO.4 STACK	946A, PSDTX1025M1, 106.261/11/01/2003 [107085, 160971], 106.262/11/01/2003 [107085, 160971]
20	LINE 91 OVEN WET SCRUBBER (W/RING BURNER) STACK	946A, PSDTX1025M1, 106.261/11/01/2003 [107085, 160971], 106.262/11/01/2003 [107085, 160971]
90OVEN	LINE 90 OVEN	106.183/09/04/2000
91-CT1	LINE 91 COOLING TOWER 1	106.371/09/04/2000
91-CT2	LINE 91 COOLING TOWER 2	106.371/09/04/2000
91OVEN	LINE 91 OVEN	946A, PSDTX1025M1
92TRNPOT	92 TRAINING POT	106.183/09/04/2000
97O1	LINE 97 OVEN 1	946A, PSDTX1025M1
97O2	LINE 97 OVEN 2	946A, PSDTX1025M1
AHTANK	ALUMINUM HYDROCHLORIDE TANK	106.472/09/04/2000
CATLYSTNK	CATALYST TANK	106.472/09/04/2000
DIESEL1	DIESEL TANK	106.472/09/04/2000
DIESEL2	E-GLASS GENERATOR DIESEL TANK	106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
DIESEL3	HERM GENERATOR DIESEL TANK	106.472/09/04/2000
DRYTUNFUG	GYPSUM DRYING TUNNEL	946A, PSDTX1025M1, 106.183/09/04/2000 [42504], 106.262/11/01/2003 [42504]
E-CT1	E-GLASS COOLING TOWER 1	106.371/09/04/2000
E-CT2	E-GLASS COOLING TOWER 2	106.371/09/04/2000
E-CT3	E-GLASS COOLING TOWER 3	106.371/09/04/2000
F901	E-GLASS FURNACE NO. 901	946A, PSDTX1025M1
F902	GLASS MARBLE FURNACE NO. 902	946A, PSDTX1025M1
F91A	UNIT #91 ELECTRIC GLASS FURNACE A	946A, PSDTX1025M1
F91B	UNIT #91 ELECTRIC GLASS FURNACE B	946A, PSDTX1025M1
FG92-CF	UNIT #92 COLLECTION/FORMING	946A, PSDTX1025M1
FG92-CO	UNIT #92 OVEN (CURING)	946A, PSDTX1025M1
FG93-CF	UNIT # 93 COLLECTION/FORMING	946A, PSDTX1025M1
FG93-CO	UNIT #93 OVEN (CURING)	946A, PSDTX1025M1
FH-EAST	LINE 91 FOREHEARTH (EAST)	106.183/09/04/2000
FH-WEST	LINE 91 FOREHEARTH (WEST)	106.183/09/04/2000
FHFUG	1901 FOREHEARTH	946A, PSDTX1025M1
FHFUG2	1902 FURNACE FOREHEARTH	946A, PSDTX1025M1
FMFUG	1901 FORMING AREA	946A, PSDTX1025M1
GEN1	E-GLASS EMERGENCY GENERATOR	106.511/09/04/2000
GEN2	HERM EMERGENCY GENERATOR	106.511/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
HEAT1	COMFORT HEATERS	106.183/09/04/2000
LHT	LINE 91 LAMINATE HEATING TABLE	946A, PSDTX1025M1
MARBLELEHR	MARBLE LEHRS	106.183/09/04/2000
P&M-CT1	POT & MARBLE COOLING TOWER 1	106.371/09/04/2000
P&M-CT2	POT & MARBLE COOLING TOWER 2	106.371/09/04/2000
PRO-LINE90	SURFACE COATING OPERATION	946A, PSDTX1025M1
PRO-LINE91	LINE #91	946A, PSDTX1025M1, 106.418/09/04/2000 [91903], 106.433/09/04/2000 [91903]
PRO-LINE92	LINE #92	946A, PSDTX1025M1
PRO-LINE93	LINE #93	946A, PSDTX1025M1
PRO-LINE97	SURFACE COATING OPERATIONS	946A, PSDTX1025M1
RNGBRNR	LINE 91 RING BURNER	946A, PSDTX1025M1
STEAMCLNR	STEAM CLEANER	106.183/09/04/2000
SULHLDTNK	SULFATE HOLDING TANK	106.472/09/04/2000
TANK1	9985 OFFLINE 97 FOAM - NO. 5	106.472/09/04/2000
TANK10	751 BULK TANK - P&M	106.472/09/04/2000
TANK11	P&M HYDROFLOAT	106.472/09/04/2000
TANK12	ACH - P&M	106.472/09/04/2000
TANK13	751 DAY TANK	106.472/09/04/2000
TANK18	SILANE MIX TANK	106.472/09/04/2000
TANK19	PREREACT 92 A1 (SOUTHERN TANKS)	106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
TANK2	9985 UNIT 90 FOAM - NO. 4	106.472/09/04/2000
TANK20	PREREACT 92 A2 (SOUTHERN TANKS)	106.472/09/04/2000
TANK21	PREREACT 93 B1 (NORTHERN TANKS)	106.472/09/04/2000
TANK22	PREREACT 93 B2 (NORTHERN TANKS)	106.472/09/04/2000
TANK23	DYE MIX TANK	106.472/09/04/2000
TANK28	RESIN 444 CHEMBOND (COLD ROOM)	106.472/09/04/2000
TANK29	RESIN 444 CHEMBOND (COLD ROOM)	106.472/09/04/2000
TANK3	9985 UNIT 90 FOAM - NO. 3	106.472/09/04/2000
TANK30	RESIN 444 CHEMBOND (COLD ROOM)	106.472/09/04/2000
TANK31	RESIN 444 CHEMBOND (COLD ROOM)	106.472/09/04/2000
TANK32	AMMONIA (P&M DAY TANK)	106.472/09/04/2000
TANK33	SODIUM HYPOCHLORITE	106.472/09/04/2000
TANK34	300 STORAGE - SIZING ROOM	106.261/11/01/2003, 106.262/11/01/2003
TANK35	300 MIX - SIZING TANK	106.261/11/01/2003, 106.262/11/01/2003
TANK36	MAIN MIX TANK - SIZING ROOM	106.261/11/01/2003, 106.262/11/01/2003
TANK37	STORAGE #1 - SIZING ROOM	106.261/11/01/2003, 106.262/11/01/2003
TANK38	STORAGE ROOM #2 - SIZING ROOM	106.261/11/01/2003, 106.262/11/01/2003
TANK39	SODIUM HYDROXIDE (CAUSTIC)	106.472/09/04/2000
TANK4	9988 UNIT 90 FOAM - NO. 2	106.472/09/04/2000
TANK40	AMMONIA BULK STORAGE TANK	106.476/09/04/2000
TANK41	AMMONIA (HERM DAY TANK)	106.476/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
TANK42	HERM FILTERED PROCESS WATER (WEST TANK)	106.472/09/04/2000
TANK43	HERM FILTERED PROCESS WATER (EAST TANK)	106.472/09/04/2000
TANK45	HERM FILTERED PROCESS WATER STORAGE (ROUND TANK)	106.472/09/04/2000
TANK46	HERM HYDROFLOAT	106.472/09/04/2000
TANK47	RESIN GP 2819 - TANK A1	106.472/09/04/2000
TANK48	RESIN GP 2819 - TANK A2	106.472/09/04/2000
TANK49	RESIN GP 2819 - TANK B1	106.472/09/04/2000
TANK5	9988 UNIT 90 FOAM - NO. 1	106.472/09/04/2000
TANK50	RESIN GP 2819 - TANK B2	106.472/09/04/2000
TANK51	DYE SUPPLY TANK (WEST TANK)	106.472/09/04/2000
TANK52	DYE MIX TANK (EAST TANK)	106.472/09/04/2000
TANK53	DEDUSTING OIL (HERM DAY TANK)	106.472/09/04/2000
TANK54	UREA (WEST TANK)	106.472/09/04/2000
TANK55	UREA (EAST TANK)	106.472/09/04/2000
TANK57	PREREACT MIX (WEST TANK)	106.472/09/04/2000
TANK58	PREREACT MIX (EAST TANK)	106.472/09/04/2000
TANK59	AMMONIUM SULFATE MIX TANK (WEST TANK)	106.472/09/04/2000
TANK6	9985 DAY TANKS LINE 90	106.472/09/04/2000
TANK60	AMMONIUM SULFATE MIX TANK (EAST TANK)	106.472/09/04/2000
TANK61	MCLUBE PRESSURIZED DAY TANK	106.476/09/04/2000
TANK62	PROPANE (FORKLIFT TANK)	106.476/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
TANK63	PROPANE - (EAST)	106.476/09/04/2000
TANK64	PROPANE - (CENTER)	106.476/09/04/2000
TANK65	PROPANE - (WEST)	106.476/09/04/2000
TANK66	CL-206 DAY TANK	106.472/09/04/2000
TANK67	PR-2150 DAY TANK	106.472/09/04/2000
TANK68	EPG PROCESS WATER TANK FOR DISPOSAL (BULK)	106.472/09/04/2000
TANK69	EPG PROCESS WATER TANK FOR DISPOSAL (SMALL)	106.472/09/04/2000
TANK7	9988 DAY TANKS LINE 90	106.472/09/04/2000
TANK70	RO WATER TANK (BULK)	106.472/09/04/2000
TANK71	RO REJECT WATER, FILTER BACK WASH TANK (SMALL)	106.472/09/04/2000
TANK8	9985 DAY TANKS LINE 97	106.472/09/04/2000
TANK9	LAWX 235D BULK GLUE - LINE 91	106.472/09/04/2000
TK-DOIL	DEDUSTING OIL TANK	106.478/09/04/2000
TK-LFC1	LATEX FOAM COATING TANK	51/09/12/1989
TK-LFC2	LATEX FOAM COATING TANK	51/09/12/1989
UNLEAD1	UNLEADED GASOLINE TANK	106.473/09/04/2000
UREMIXTNK	UREA MIX TANK	106.472/09/04/2000
WWT	WASTEWATER TREATMENT PROCESS	106.532/09/04/2000

**This column may include Permit by Rule (PBR) numbers and version dates, PBR Registration numbers in brackets, Standard Permit Registration numbers, Minor NSR permit numbers, and Major NSR permit numbers.

Appendix A

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
CEMS ..... continuous emissions monitoring system
CFR ..... Code of Federal Regulations
COMS ..... continuous opacity monitoring system
CVS ..... closed vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MACT ..... Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr ..... Million British thermal units per hour
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NESHAP ..... National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PEMS ..... predictive emissions monitoring system
PM ..... particulate matter
ppmv ..... parts per million by volume
PRO ..... process unit
PSD ..... prevention of significant deterioration
psia ..... pounds per square inch absolute
SIP ..... state implementation plan
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Appendix B

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
1/2/3/4/5	Lines 92 and 93 Collectors and High-Energy Air Filtration (HEAF) - Stacks	PM	33.50	146.73	31, 32, 35, 40, 45	47, 54, 55	47
		PM_{10}	33.50	146.73			
		$PM_{2.5}$	33.50	146.73			
		Total VOC	21.61	94.64			
		NO_x	11.76	51.51			
		SO_2	6.53	28.65			
		CO	57.46	251.67			
		NH_3	36.00	157.68			
		Formaldehyde	6.93	30.35			
		Phenol	4.12	18.05			
		Methyl Alcohol	3.69	16.15			
15A	Glass Furnaces (1901 and 1902) ESP - Stack	PM	7.46	32.65	6, 7, 31, 32, 35, 37, 38, 45	6, 7, 37, 38, 47, 54, 55	6, 7, 42, 47
		PM (6)	8.00	0.16			
		PM_{10}	7.46	32.65			
		PM_{10} (6)	8.00	0.16			
		$PM_{2.5}$	7.46	32.65			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		$PM_{2.5}$ (6)	8.00	0.16			
		VOC	0.12	0.53			
		NO_x	18.32	80.25			
		SO_2	4.20	18.36			
		SO_2 (6)	8.40	0.17			
		CO	0.55	2.40			
		HF	0.18	0.78			
		Pb	0.00035	0.00153			
FHFUG	1901 Forehearth (5)	PM	0.09	0.40			
		PM_{10}	0.09	0.40			
		$PM_{2.5}$	0.09	0.40			
		VOC	0.05	0.24		54, 55	
		NO_x	0.98	4.28			
		SO_2	0.01	0.03			
		CO	0.82	3.59			
		HF	0.05	0.21			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
FHFUG2	1902 Furnace Forehearth (5)	PM	0.25	1.10		54, 55	
		PM_{10}	0.25	1.10			
		$PM_{2.5}$	0.25	1.10			
		VOC	0.04	0.18			
		NO_x	1.46	6.40			
		SO_2	<0.01	0.05			
		CO	1.10	4.80			
FMFUG	1901 Forming Area (5)	PM	1.67	7.30		54, 55	
		PM_{10}	1.67	7.30			
		$PM_{2.5}$	1.67	7.30			
		VOC	0.75	3.29			
		NH_3	0.13	0.58			
BFUG	1901 Batch Plant (5)	PM	<0.01	0.02	34	34, 54, 55	
		PM_{10}	<0.01	0.02			
		$PM_{2.5}$	<0.01	0.02			
FUGRM	1901 Batch Drop Railcar	PM	<0.01	<0.01		54, 55	

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
	Unloading (5)	PM_{10}	<0.01	<0.01			
		$PM_{2.5}$	<0.01	<0.01			
MXBIN1	1901 E-Glass Mixing Bin (North) (5)	PM	<0.01	<0.01			
		PM_{10}	<0.01	<0.01	34	34, 54, 55	
		$PM_{2.5}$	<0.01	<0.01			
MXBIN2	1901 E-Glass Mixing Bin (South) (5)	PM	<0.01	<0.01			
		PM_{10}	<0.01	<0.01	34	34, 54, 55	
		$PM_{2.5}$	<0.01	<0.01			
16	Line 91 Collection Wet Scrubber No. 1 - Stack	PM	4.50	19.08			
		PM_{10}	4.50	19.08			
		$PM_{2.5}$	4.50	19.08			
		Total VOC	3.84	12.38			
		NO_x	1.29	5.63	6, 7, 31, 32, 35, 40	6, 7, 42, 47, 54, 55	6, 7, 47
		SO_2	0.01	0.04			
		CO	9.15	40.17			
		NH_3	4.20	18.37			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		Formaldehyde	0.68	2.97			
		Phenol	0.75	3.29			
17	Line 91 Collection Wet Scrubber No. 2 - Stack	PM	4.50	19.08	6, 7, 31, 32, 35, 40	6, 7, 42, 47, 54, 55	6, 7, 47
		PM_{10}	4.50	19.08			
		$PM_{2.5}$	4.50	19.08			
		Total VOC	3.84	12.38			
		NO_x	1.29	5.63			
		SO_2	0.01	0.04			
		CO	9.15	40.17			
		NH_3	4.20	18.37			
		Formaldehyde	0.68	2.97			
		Phenol	0.75	3.29			
18	Line 91 Collection Wet Scrubber No. 3 - Stack	PM	4.50	19.08	6, 7, 31, 32, 35, 40	6, 7, 42, 47, 54, 55	6, 7, 47
		PM_{10}	4.50	19.08			
		$PM_{2.5}$	4.50	19.08			
		Total VOC	3.84	12.38			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		NO_x	1.29	5.63			
		SO_2	0.01	0.04			
		CO	9.15	40.17			
		NH_3	4.20	18.37			
		Formaldehyde	0.68	2.97			
		Phenol	0.75	3.29			
19	Line 91 Collection Wet Scrubber No. 4 - Stack	PM	4.50	19.08	6, 7, 31, 32, 35, 40	6, 7, 42, 47, 54, 55	6, 7, 47
		PM_{10}	4.50	19.08			
		$PM_{2.5}$	4.50	19.08			
		Total VOC	3.84	12.38			
		NO_x	1.29	5.63			
		SO_2	0.01	0.04			
		CO	9.15	40.17			
		NH_3	4.20	18.37			
		Formaldehyde	0.68	2.97			
		Phenol	0.75	3.29			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
20	Line 91 Curing Oven Wet Scrubber (with Ring-Burner) - Stack	PM	4.51	18.96	6, 7, 31, 32, 35, 40	6, 7, 42, 47, 54, 55	6, 7, 47
		PM_{10}	4.51	18.96			
		$PM_{2.5}$	4.51	18.96			
		Total VOC	7.82	34.24			
		NO_x	4.38	19.18			
		SO_2	0.01	0.04			
		CO	22.28	97.58			
		NH_3	7.02	30.75			
		Formaldehyde	1.60	7.00			
		Phenol	1.00	4.38			
21	Line 91 Melters Baghouse No. 1 - Stack	PM	0.99	4.34	6, 7, 31, 32, 35, 36, 40, 45	6, 7, 42, 47, 54, 55	6, 7, 47
		PM_{10}	0.99	4.34			
		$PM_{2.5}$	0.99	4.34			
		Total VOC	3.72	16.27			
		NO_x	0.11	0.50			
		SO_2	1.12	4.92			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		CO	5.27	23.08			
		Boron Oxide	0.40	1.75			
		Pb	0.000166	0.000736			
		As	0.000223	0.000977			
		Cd	0.000088	0.000389			
		Cr	0.00425	0.0186			
22	Line 91 Cold End/Horizontal Band Saw Baghouse No. 2 - Stack	PM	0.06	0.26	31, 35	54, 55	
		PM_{10}	0.06	0.26			
		$PM_{2.5}$	0.06	0.26			
23	Line 91 Batch Loading Shed Baghouse No. 3 - Stack	PM	0.03	0.13	31, 35	54, 55	
		PM_{10}	0.03	0.13			
		$PM_{2.5}$	0.03	0.13			
24	Line 91 Unload Shed Baghouse No. 4 - Stack	PM	0.03	0.13	31, 35	54, 55	
		PM_{10}	0.03	0.13			
		$PM_{2.5}$	0.03	0.13			
25	Line 91 Melter Dust	PM	0.03	0.13	31, 35	54, 55	

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
	Refeed Baghouse No. 5 - Stack	PM_{10}	0.03	0.13			
		$PM_{2.5}$	0.03	0.13			
26	Line 91 Mixed Batch Day Bin Baghouse No. 6 - Stack	PM	0.03	0.13	31, 35	54, 55	
		PM_{10}	0.03	0.13			
		$PM_{2.5}$	0.03	0.13			
27	Line 91 Mixed Batch Day Bin Baghouse No. 7 - Stack	PM	0.03	0.13	31, 35	54, 55	
		PM_{10}	0.03	0.13			
		$PM_{2.5}$	0.03	0.13			
28	Line 91 Mixed Batch Day Bin Baghouse No. 8 - Stack	PM	0.03	0.13	31, 35	54, 55	
		PM_{10}	0.03	0.13			
		$PM_{2.5}$	0.03	0.13			
29	Line 91 Mixed Batch Day Bin Baghouse No. 9 - Stack	PM	0.03	0.13	31, 35	54, 55	
		PM_{10}	0.03	0.13			
		$PM_{2.5}$	0.03	0.13			
30	Line 90 IR Curing Oven Stack	VOC	2.26	2.75	24, 25	54, 55	
		IOC	0.47	0.59			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
31	Proline 90 Oven Stack Zone 1	VOC	4.45	2.51		54, 55	
		ES	5.96	3.37			
32	Proline 90 Oven Stack Zone 2	VOC	4.45	2.51	24, 25	54, 55	
		ES	5.96	3.37			
		NO_X	0.15	0.64			
		CO	0.12	0.54			
		SO_2	0.01	0.01			
		PM	0.01	0.05			
		PM_{10}	0.01	0.05			
		$PM_{2.5}$	0.01	0.05			
33	Proline 90 Oven Stack Zone 3	VOC	4.45	2.51	24, 25	54, 55	
		ES	5.96	3.37			
		NO_X	0.15	0.64			
		CO	0.12	0.54			
		SO_2	0.01	0.01			
		PM	0.01	0.05			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		PM_{10}	0.01	0.05			
		$PM_{2.5}$	0.01	0.05			
34	Proline 90 Application and Conveyor Flash Off Emissions	VOC	22.82	22.86	24, 25	54, 55	
		ES	10.06	5.68			
		IOC	3.23	4.03			
Adhesive CAP	Proline 90 Adhesive Application Emissions from EPNs 30/31/32/33/34	VOC	12.00	14.98	24, 25	54, 55	
		IOC	3.71	4.63			
9701	Line 97 Oven Stack Zone 1	VOC	6.67	2.26	24, 25	54, 55	
		ES	8.95	3.03			
		NOx	0.10	0.43			
		CO	0.08	0.36			
		SO_2	0.01	0.01			
		PM	0.01	0.03			
		PM_{10}	0.01	0.03			
		$PM_{2.5}$	0.01	0.03			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
9702	Line 97 Oven Stack Zone 2	VOC	6.67	2.26	24, 25	54, 55	
		ES	8.95	3.03			
		NOx	0.1	0.43			
		CO	0.08	0.36			
		SO_2	0.01	0.01			
		PM	0.01	0.03			
		PM_{10}	0.01	0.03			
		$PM_{2.5}$	0.01	0.03			
97IR	Proline 97 IR Curing Oven	VOC	1.08	0.51	24, 25	54, 55	
9703	Proline 97 Application Flash Off Emissions	VOC	14.79	6.13	24, 25	54, 55	
		ES	10.07	3.41			
35	South Trim Waste Re-Feed Baghouse	PM	0.03	0.12	31, 35	54, 55	
		PM_{10}	0.03	0.12			
		$PM_{2.5}$	0.03	0.12			
36	North Trim Waste Re-	PM	0.03	0.12	31, 35	54, 55	

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
	Feed Baghouse	PM_{10}	0.03	0.12			
		$PM_{2.5}$	0.03	0.12			
37	Off-Line Trim Waste Re-Feed Baghouse	PM	0.08	0.36	31, 35	54, 55	
		PM_{10}	0.08	0.36			
		$PM_{2.5}$	0.08	0.36			
Tanks 34, 35, 36, 37, and 38	E-Glass Mixing Tanks	VOC	0.31	1.54		54, 55	
RA901	1901 E-Glass Reclaim Area	PM	0.62	2.72		54, 55	
		PM_{10}	0.62	2.72			
		$PM_{2.5}$	0.62	2.72			
		VOC	0.45	1.97			
		NO_x	0.10	0.44			
		SO_2	<0.01	0.01			
		CO	0.08	0.35			
		NH_3	0.10	0.44			
DRYTUNFUG	Gypsum Drying Tunnel	PM	0.02	0.088		54, 55	

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
	(5)	PM_{10}	0.02	0.088			
		$PM_{2.5}$	0.02	0.088			
		Total VOC	0.14	0.61			
		NO_x	0.15	0.66			
		SO_2	<0.01	<0.01			
		CO	0.13	0.55			
		HF	0.01	0.04			
OGMFUG	Off-Line Grooving Machine (5)	PM	0.14	0.61			
		PM_{10}	0.14	0.61		54, 55	
		$PM_{2.5}$	0.14	0.61			
MSSFUG	MSS Fugitives (5)	PM	<0.40	<1.00			
		PM_{10}	<0.40	<1.00			
		$PM_{2.5}$	<0.40	<1.00		54, 55	
		VOC	<0.40	<1.00			
		NO_x	<0.40	<1.00			
		SO_2	<0.40	<1.00			

Major NSR Summary Table

Permit Number 946A and PSDTX1025M1					Issuance Date: October 10, 2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		CO	<0.40	<1.00			
		NH_3	<0.40	<1.00			
		Formaldehyde	<0.40	<1.00			
		Phenol	<0.40	<1.00			

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
NH_3 - ammonia
HF - hydrogen fluoride
Pb - lead
As - arsenic
Cd - cadmium
Cr - chromium
ES - exempt solvents
IOC - inorganic compounds
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Emission rates apply during inspection, cleaning, and maintenance of Glass Furnaces 1901 and 1902 dry scrubber.
(7) Planned startup and shutdown emissions are included. Maintenance activities, except as specified in Special Condition No. 21, are not authorized by this permit and will need separate authorization, unless the activity can meet the conditions of 30 TAC § 116.119.

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Johns Manville
Authorizing the Construction and Operation of
Fiberglass Manufacturing Plant
Located at **Cleburne, Johnson County, Texas**
Latitude 32.3875 Longitude -97.393888

Permit: 946A and PSDTX1025M1

Amendment Date: October 10, 2024

Expiration Date: June 8, 2025

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] [1]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] [1]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. [1]

[1] Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
$\mu g/m^3$ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H_2CO = formaldehyde
H_2S = hydrogen sulfide
H_2SO_4 = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H_2O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m^3 = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen
NSPS = New Source Performance Standards

PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
PM_{10} = total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO_2 = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Numbers 946A and PSDTX1025M1

1. This permit authorizes the operation fiberglass manufacturing facilities. These facilities are located at 200 West Industrial Boulevard, Cleburne, Johnson County. This permit covers only those sources of emissions listed on the maximum allowable emission rates table (MAERT) and those sources are limited to the emission limits and other conditions specified in the attached table. The annual rates are based on any consecutive 12-month period.

2. This permit does not include the facilities or maintenance, startup, or shutdown (MSS) activities at the site, except as noted in the MAERT. Instead, these facilities and/or activities are authorized by a permit-by-rule (PBR) under Title 30 Texas Administrative Code (30 TAC) Chapter 106, standard exemption, exemption from permitting, or are a de minimis source listed under 30 TAC § 116.119

3. The facilities and/or activities listed in the following table operate per the criteria of the referenced Standard Exemption (SE)/Permit by Rule (PBR)/Standard Permit and are incorporated by reference:

Facilities/Activities	SE No./PBR No./Standard Permit	Registration No.
Formaldehyde-free based binder in the binding process on Lines 91, 92, and 93 (trial basis only)	106.261	Registration No. 107085
Formaldehyde-free based binder in production of rolled products on Line 91	6001 Non-rule	Registration No. 130233

4. A copy of this permit shall be kept at the site and made available at the request of personnel from the Texas Commission on Environmental Quality (TCEQ) or any other air pollution control agency with jurisdiction.

5. With the exception of fugitive sources, the holder of this permit shall clearly label all equipment at the property that has the potential of emitting air contaminants. Permitted emission points shall be clearly labeled corresponding to the emission point numbering on the MAERT.

Federal Applicability

6. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) Regulations on Standards of Performance for New Stationary Sources in Title 40 Code of Federal Regulations (40 CFR) Part 60, specifically the following:

   A. Subpart A - General Provisions;

   B. Subpart CC - Glass Manufacturing Plants; and

   C. Subpart PPP - Wool Fiberglass Insulation Manufacturing Plants.

7. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) Regulations on Standards of Performance for New Stationary Sources in Title 40 Code of Federal Regulations (40 CFR) Part 60, specifically the following:

   A. Subpart A - General Provisions;

B. Subpart NNN – Wool Fiberglass Manufacturing; and

C. Subpart JJJJ – Paper and Other Web Coating.

Emission Limitations

8. There shall be no visible fugitive emissions leaving the plant property from any building, the mixing bin, or raw material batching plant for more than 30 cumulative seconds in any six-minute period.

9. Opacity of particulate matter emissions from the following sources shall not exceed the associated opacity restriction listed below, averaged over a six-minute period.

Table 1: Opacity Restrictions

Emission Point Nos. (EPNs)	Source	Opacity Restriction (%)
21, 35-37	Line 91 Melters Baghouse No. 1 Stack, Trim Waste Baghouse Stacks	5
3, 16-20, 22-29	Lines 92 and 93 HEAF Stack, Line 91 scrubber and baghouse stacks	10
1, 2, 4, 5, 15A	Line 92 and 93 Collector Stacks, Furnaces 1901 and 1902 electrostatic precipitator (ESP) Stack	20

10. The adhesives used in the facilities covered by this permit shall comply with the following:

A. The adhesives used in the facilities covered by this permit shall comply with the VOC content limits specified in 30 TAC § 115.473 less water and exempt solvents regardless of whether the facilities would otherwise qualify for an exemption. Compliance with the individual VOC content limits shall be demonstrated on a daily weighted average basis per line for all adhesives as applied.

11. The site shall comply with 30 TAC § 115.453(d)(1) and (d)(2) regardless of whether the facilities would otherwise be subject to these requirements.

Operational Limitations, Work Practices, and Plant Design

12. Fuel for the glass furnaces and all ovens at this facility shall be liquid petroleum gas (LPG) or pipeline-quality natural gas. Use of any other fuel will require prior approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ).

13. The maximum authorized glass pull rates on an hourly and annual basis can be found in the confidential file for Line 91 and Furnace 1901 amended application submitted March 2010.

14. The fluids management program and low emission binders, designed for process optimization and abatement for Lines 92 and 93, are implemented and shall be properly maintained.

15. Wet venturi scrubbers and fabric filter baghouses, properly installed and in good working order, shall control particulate matter (PM) emissions from the Line 91 fiberglass and resin processes and Curing Oven Stacks (EPNs 16 through 20, and 22 through 29).

16. A fabric filter baghouse, properly installed and in good working order, shall control PM emissions from the Line 91 Melters (EPN 21). Stack height shall be 60 feet.

17. Fabric filter baghouse designed to meet an outlet grain loading of not more than 0.002 grains per dry standard cubic foot of exhaust, properly installed and in good working order, shall control particulate matter emissions from the Gypsum Drying Tunnel when this equipment is in operation.

18. Furnaces 1901 and 1902 shall use oxygen with natural gas as a combustion control process. An ESP, properly installed and in good working order, shall control PM emissions from the Glass Furnaces 1901 and 1902 (EPN 15A). Stack height shall be 90 feet. Furnace 1901 shall exhaust through a dry scrubber prior to venting into the ESP. The dry scrubber, using an alkali and water mix, shall be used to control sulfur dioxide (SO_2) and acid gases.

19. A High-Energy Air Filtration (HEAF) system, properly installed and in good working order, shall control PM emissions from the ovens on Lines 92 and 93 (EPN 3).

20. Except for those trucks that pneumatically transfer materials using an enclosed system, all other raw materials unloaded by truck or railcar shall be conducted within an enclosed building which is vented to a fabric filter baghouse.

21. The fiber strand choppers shall be completely enclosed and shall not have any fugitive emissions.

22. The company shall be limited to the maximum cullet usage rate represented in the confidential file of the March 2009 amendment request.

23. All operations from Production Line 90 (EPNs 30, 31, 32, 33, and 34) and Line 97 (EPNs 9701, 9702, 97IR, and 9703) shall be restricted to the areas as designated and shall be performed according to the following requirements: **(10/24)**

    A. The application of coatings, inks, and adhesives shall be performed using rollers or other application methods demonstrated to achieve the same transfer efficiency. This equipment shall be operated and maintained within the limits set forth by the manufacturer.

    B. The face velocity across each natural draft opening (NDO) on each enclosure and oven shall be at least 100 feet per minute (fpm) during all coating and drying operations.

24. The ventilation systems for the operations in Production Line 90 and Line 97 shall include exhaust stacks that have no obstructions or restrictions to vertical exhaust flow. The exhaust stacks shall have a height (as measured from ground level to the discharge point) that is equal to or greater than the following: **(10/24)**

Emission Point Number (EPN)	Height (feet)
30	40

Emission Point Number (EPN)	Height (feet)
31	40
32	40
33	40
34	40
9701	40
9702	40
97IR	40
9703	40

Material Usage Flexibility

25. In addition to the currently-approved materials, the use of new materials or products that meet all of the following sub-conditions are allowed. Pollutants from categories of air pollutants not currently authorized on the MAERT cannot be authorized using this special condition. This special condition does not authorize the use of any chlorinated or fluorinated compound when emissions are routed to a thermal control device. **(10/24)**

    A. All the ingredients of the new material are known; i.e., the weight percentages of the ingredients add to 100 percent or more.

    B. The maximum hourly (short-term) or annual emission rates from new or existing air contaminant ingredients (aka air contaminants) shall not cause any increases in the short-term or annual emission rates as listed on the MAERT.

    C. Emissions from the new material shall only be from the emission points represented in the table provided in paragraph G(2) of this special condition.

    D. Any air contaminant in the new material is exempt from paragraphs E through H of this special condition if the air contaminant is currently authorized under this permit and the proposed emission rate from each EPN is less than or equal to the authorized emission rate from the same EPN.

    E. Any air contaminant in the new material is exempt from paragraphs F through H of this special condition if:

        (1) The air contaminant is a particulate and no specific short-term effects screening level (ESL) is included in the most current set of ESLs available through the TCEQ Toxicity Factor Database (must meet NAAQS); or

        (2) The air contaminant is not included in the most current set of ESLs available through the TCEQ Toxicity Factor Database.

        If the compound is not on the current ESL list and does not belong to a category of compounds on the list, the permit holder shall request confirmation from the Toxicology Division that an ESL need not be created for authorization through this condition. If the Toxicology Division determines that an ESL is not required under this condition, confirmation that no ESL is required shall be kept on file by the applicant.

    F. Any air contaminant in the new material is exempt from paragraphs G and H of this special condition if:

(1) it is emitted at a rate and has a short-term ESL and an annual ESL as stated in the following table; or

Emission Rate (lbs/hr)	Short-term ESL (µg/m^3)	Annual ESL (µg/m^3)
≤ 0.04	≥ 2 and < 500	≥ 0.2 and < 50
≤ 0.10	≥ 500 and < 3,500	≥ 50 and < 350
≤ 0.40	≥ 3,500	≥ 350

(2) it is not sprayed and it has at least one of the following physical characteristics:

(a) a vapor pressure less than 0.01 mm Hg (0.0002 psi) at 68°F;

(b) a boiling point at atmospheric pressure that is above 400°F (204°C), provided the compound is not heated above room temperature in the process; or

(c) a molecular weight that is above 200 g/g-mol, provided the compound is not heated above room temperature in the process.

G. For all other new air contaminants or increases in existing air contaminants, the following procedure shall be completed to determine if the short-term impacts are acceptable.

(1) Determine the emission rate of each air contaminant including emissions of the same air contaminant (if an existing air contaminant) from the currently authorized materials that may be emitted at the same time from each emission point.

(2) Multiply the emission rate of the air contaminant by the unit impact multiplier for each emission point from the following table to determine the off-property impact Ground Level Concentration $(GLC)_{MAX}$ for each emission point.

EPN	Unit Impacts (µg/m^3 per lb/hr)
30	44.17
31	84.21
32	82.31
33	65.57
34	40.57
9701	57.71
9702	98.62
9703	97.23
97IR	27.76

(3) Sum the impacts from each emission point/emission point group to determine a total short-term off-property impact (Total GLC_{MAX}) for the new or existing air contaminant.

(4) Compare the total short-term off-property impact to the short-term ESL for the air contaminant as shown below to determine if it is less than or equal to the ESL. If the

total off-property impact exceeds the short-term ESL, then a permit amendment is required to authorize the emission rate for the air contaminant.

Total $GLC_{MAX} \leq ESL_{SHORT}$

Where:

Total GLC_{MAX} = The sum of the short-term GLCs from each emission point.

ESL_{SHORT} = The short-term ESL of the new or existing air contaminant from the most current set of ESLs available through the TCEQ Toxicity Factor Database and the date of the database retrieval or as specifically derived by the TCEQ Toxicology Division. The ESL shall be obtained in writing prior to the use of the new or increased air contaminant.

H. For all other new air contaminants or increases in existing air contaminants, the following procedure shall be completed to determine if the annual impacts are acceptable.

(1) Determine the annual emission rate (tpy) of each air contaminant including emissions of the same air contaminant (if an existing air contaminant) from the currently authorized materials that may be emitted at the same time from each emission point.

(2) Convert the annual emission rate to an hourly emission rate using 8760 hours per year and 2000 pounds per ton.

(3) Multiply the hourly emission rate (lb/hr) of the air contaminant determined in paragraph H(2) of this special condition by the unit impact multiplier for each emission point from the table provided in paragraph G(2) of this special condition to determine the off-property impact GLC_{MAX} for each emission point.

(4) Sum the impacts from each emission point to determine a total off-property impact (Total GLC_{MAX}) for the new or existing air contaminant.

(5) Multiply the total off-property impact (Total GLC_{MAX}) determined in paragraph H(4) of this special condition by 0.08 to determine the annual off-property impact (Annual GLC_{MAX}) for the new or existing air contaminant.

(6) Compare the annual off-property impact to the annual ESL for the air contaminant as shown below to determine if it is less than or equal to the ESL. If the annual off-property impact exceeds the annual ESL, then a permit amendment is required to authorize the emission rates for the air contaminant.

Annual $GLC_{MAX} \leq ESL_{ANNUAL}$

Where:

ESL_{ANNUAL} = The annual ESL of the new or existing air contaminant from the most current set of ESLs available through the TCEQ Toxicity Factor Database or as specifically derived by the TCEQ Toxicology Division.

Maintenance, Startup, and Shutdown (MSS) Activities

26. The following MSS activities, which are planned and predictable and ensure the continuous normal operation of a facility or control device or return a facility or control device to normal operating conditions, are authorized:

    A. Routine maintenance on Lines 90 and 97 including maintenance on the foam application system, curing oven, and printing system.

    B. Routine maintenance on Line 91 including filter replacement and maintenance on the binder application system, curing oven, wet abatement system, refeed system, dry abatement system, process water systems, and batch systems.

    C. Routine maintenance on Lines 92 and 93 including maintenance on the binder application system, curing oven, marble distribution system, process water system, and HEAF system.

    D. Routine maintenance on Glass Furnace 1901 including maintenance on the glass melting furnace and forehearth systems, gypsum dryer, abatement systems, refeed system, sizing systems, and batch systems. Inspection, cleaning, and maintenance of the dry scrubber shall be limited to 40 hours per year.

    E. Routine maintenance on Glass Furnace 1902 including maintenance on the ESP.

27. All maintenance activities shall be conducted to ensure compliance with the maximum allowable emission rates table (MAERT).

28. Entrained dust shall be allowed to settle prior to opening the control devices.

29. Upset conditions and the resulting emissions are not authorized by this permit.

30. No maintenance activities, other than those specified in Special Condition No. 26, are authorized by this permit.

Demonstration of Continuous Compliance

31. Upon being informed by the TCEQ Executive Director that the staff has documented visible emissions from these facilities exceeding those specified opacities in this permit, when adjusted for uncombined water vapor, averaged over six consecutive minutes, the holder of this permit may be required to conduct stack sampling analyses or other tests to prove satisfactory equipment performance and demonstrate compliance. Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual or in accordance with applicable U.S. EPA CFR procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director prior to sampling.

32. The holder of this permit shall perform stack sampling analysis for (but not limited to) PM, NO_x, VOCs, ammonia, phenol, and formaldehyde and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere. If a unit is taken out of service on or before the identified year for testing to be completed, the holder of this permit will perform testing as specified in this condition within 60 days of achieving the maximum glass pull rate at which the unit will be operated but not later than 180 days after startup. Stack testing for all operating lines, including EPNs 3 and 15A, shall be performed on a rotating basis in accordance with the following table:

Table 3: Stack Testing for Operating Lines and EPNs

Lines and/or EPNs to be tested	Year Testing To Be Completed					
2012	2014	2016	2017	2019	2021	
91		Yes			Yes	
92 and 93 and EPN 3	Yes			Yes		
EPN 15A			Yes			Yes

All testing shall be conducted in accordance with Chapter 14 of the TCEQ Sampling Procedures Manual. Any request for an extension shall be approved by the TCEQ Regional Office, and a written request shall be filed three months prior to the testing date.

33. If a condition of nuisance is confirmed by the TCEQ, the holder of this permit may be required to perform stack sampling for PM, total VOC, or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere.

34. The holder of this permit shall conduct a quarterly visible emissions determination to demonstrate compliance with the visible emissions limitation specified in this permit for the plant property. This visible emissions determination shall be performed: 1) during normal plant operations, 2) for a minimum of six minutes, 3) approximately perpendicular to plume direction, 4) with the sun behind the observer (to the extent practicable), 5) at least 15 feet, but not more than 0.25 mile, from the plume, and 6) in accordance with EPA 40 CFR Part 60, Appendix A, Test Method 22, except where stated otherwise in this condition. If visible emissions leaving the property exceed 30 cumulative seconds in any six-minute period, the owner or operator shall take immediate action (as appropriate) to eliminate the excessive visible emissions. The corrective action shall be documented within 24 business hours of completion.

35. The holder of this permit shall conduct a quarterly visible emissions determination to demonstrate compliance with the opacity limitations specified in Special Condition No. 9 “Table 1: Opacity Restrictions”. This visible emissions determination shall be performed: 1) during normal plant operations, 2) for a minimum of six minutes, 3) approximately perpendicular to plume direction, 4) with the sun behind the observer (to the extent practicable), and 5) at least two stack heights, but not more than five stack heights, from the emission point. If visible emissions are observed from the emission point, the owner or operator shall:

    A. Take immediate action to eliminate visible emissions, record the corrective action within 24 hours, and comply with any applicable requirements in 30 Texas Administrative Code (TAC) § 101.201, Emissions Event Reporting and Record Keeping Requirements; or

    B. Determine opacity using 40 CFR Part 60, Appendix A, Test Method 9. If the opacity limit is exceeded, take immediate action (as appropriate) to reduce opacity to within the permitted limit, record the corrective action within 24 hours, and comply with applicable requirements in 30 TAC § 101.201, Emissions Event Reporting and Record Keeping Requirements.

36. The holder of this permit shall install, calibrate, and maintain a device to detect leaks in the baghouse associated with the Line 91 Melters (EPN 21).

    A. The bag leak detection system shall be maintained in a manner consistent with EPA, Office of Air Quality Planning and Standards, Fabric Filter Bag Leak Detection Guidance (EPA-454/R-98-015).

    B. The maximum signal from the bag leak detection system shall not exceed 18 picoamps (pA). The actual signal shall be checked and recorded at least four times per hour.

37. The holder of this permit shall install, calibrate, and maintain a device to monitor and record secondary voltage on the electrostatic precipitator associated with the Glass Furnaces (1901 and 1902) (EPN 15A). The monitoring device shall be calibrated in accordance with the manufacturer's specifications and shall be calibrated at least annually and shall be accurate to within a range of ± 2% of reading; or ± 5% over its operating range.

    The minimum secondary voltage shall be maintained as follows:

    A. 2 fields operational: minimum = 36 kilovolts (kV)

    B. 3 fields operational: one field minimum secondary voltage = 36kV; two remaining fields minimum secondary voltage = 30kV

    The actual secondary voltage shall be recorded at least once per day.

38. The holder of this permit shall install, calibrate, and maintain a device to monitor and record the secondary current in the electrostatic precipitator associated with the Glass Furnaces (1901 and 1902) (EPN 15A). The monitoring device shall be calibrated in accordance with the manufacturer's specifications and shall be calibrated at least annually and shall be accurate to within a range of ± 1% of reading; or ± 5% over its operating range.

    The minimum and maximum secondary current shall be maintained as follows:

    A. 2 fields operational: secondary current for both fields between 36mA and 690mA.

    B. 3 fields operational: secondary current between 170mA and 690mA

    The actual secondary current shall be recorded at least once per day.

39. The holder of this permit may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging times specified, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

40. The holder of this permit shall perform quarterly inspections to verify proper operation of the capture system to check for conditions that would reduce the collection efficiency of the emission capture system as represented. If the results of the inspections indicate that the capture system is not operating properly, the permit holder shall promptly take necessary corrective actions.

41. The control devices shall not be bypassed during normal operations.

42. The TCEQ Regional Office shall be notified as soon as possible after the discovery of any monitor malfunction that is expected to result in more than 24 hours of lost data. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director in case of extended monitor downtime. Necessary corrective action shall be taken if the downtime exceeds 5 percent of the Glass Furnaces (1901 and 1902) or Line 91 Melters operating hours in the quarter. Failure to complete any corrective action as directed by the TCEQ Regional Office may be deemed a violation of the permit.

Sampling Requirements

43. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their own expense. Sampling ports and platforms shall be incorporated into the design of the stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Office with jurisdiction.

44. During stack sampling emissions testing, the facilities shall operate at maximum represented glass pull rates, cullet usage rates, and other operating parameters. Primary operating parameters that enable determination of glass pull rates and cullet usage rates shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting.

    If the plant is unable to operate at the maximum represented glass pull rates, cullet usage rates, and other operating parameters during testing, then additional stack testing shall be required when these parameters exceed the previous stack test rates by +10 percent unless otherwise determined, in writing, by the TCEQ Executive Director.

45. Sampling shall be conducted in accordance with the TCEQ Sampling Procedures Manual and U.S. EPA TMs in 40 CFR Part 60, Appendix A, and 40 CFR Part 51, Appendix M, as follows:

    A. TM 5 or 17 for the filterable concentration of PM (front-half catch);

    B. TM 5 or 201A, for the filterable concentration of PM_{10} (front-half catch);

    C. TMs 201A and 202 (or TM 5), modified with a controlled condensate method subject to approval from the TCEQ prior to sampling, for the concentration of PM_{10} including back-half condensables;

    D. TM 6, 6a, 6c, or 8 for the concentration of SO_2;

    E. TM 7E, or equivalent methods, for the concentrations of NO_x and O_2;

    F. TM 26 or 26A for the concentrations of HF;

    G. TM 29 for the concentrations of the metals listed in Attachment A; and

    H. TM 9 for opacity.

46. A pretest meeting shall be held with personnel from the TCEQ before the required testing and monitoring are performed. The TCEQ Regional Office shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. Test methods to be used shall be determined at this pretest meeting.

    A. Sampling shall occur within 60 days of being informed that testing is required.

B. The notice to the TCEQ Regional Office shall include:

(1) Date for pretest meeting.

(2) Date sampling will occur.

(3) Name of firm conducting sampling.

(4) Type of sampling equipment to be used.

(5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test results.

47. Copies of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Fort Worth Regional Office.

One copy to the TCEQ Office of Air, Air Permits Division in Austin.

One copy to each appropriate local air pollution control program.

48. Alternate sampling methods and representative unit testing may be proposed by the permit holder. A written proposed description of any deviation from sampling procedures or emission sources specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. Such a proposal must be approved, in writing, by the TCEQ Regional Director with jurisdiction and the TCEQ Office of Air, Air Permits Division in Austin at least two weeks prior to sampling.

49. A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or U.S. EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Office shall approve or disapprove of any deviation from specified sampling procedures.

50. Requests to waive testing for any pollutant specified shall be submitted, in writing, for approval to the TCEQ Office of Air, Air Permits Division in Austin.

51. Request for additional time to perform sampling shall be submitted to the TCEQ Regional Office with jurisdiction. Additional time to comply with the applicable federal requirements requires U.S. EPA approval, and requests shall be submitted to the TCEQ Office of Compliance and Enforcement in Austin.

52. If, as a result of stack sampling, compliance with the permitted emission rates cannot be demonstrated, the holder of this permit shall adjust any operating parameters so as to comply with Special Condition No. 1 and the permitted emission rates.

53. If the holder of this permit is required to adjust any operating parameters for compliance, then beginning no later than 60 days after the date of the test conducted, the holder of this permit shall submit two copies to the TCEQ, on a monthly basis, a record of adjusted operating parameters and

daily records of glass production sufficient to demonstrate compliance with the permitted emission rates. Daily records of glass production and operating parameters shall be distributed as follows:

One copy to the TCEQ Fort Worth Regional Office.

One copy to the TCEQ Office of Air, Air Permits Division in Austin.

Recordkeeping Requirements

54. The following procedures shall be used to demonstrate compliance with the special conditions and the MAERT: **(10/24)**

A. Environmental Data Sheet (EDS) or similar documentation (including safety data sheets) for all paints, adhesive, foam, inks and solvents used in the coating operations and all solvents used in the cleanup operations. The EDS or similar documentation for materials shall indicate the maximum composition of all constituents.

B. Data shall be recorded as follows:

(1) Daily total gallons of each paint, adhesive, foam, ink and solvent (including exempt solvents) used;

(2) Daily hours of operation; and

(3) As applied coating VOC content for each mixture and solvent used.

C. The data recorded in this Special Condition shall be used to produce a monthly summary that reflects:

(1) The VOC, PM, and exempt solvent emissions in lbs/hr as daily averages as averaged over 30 operating days; and

(2) The VOC, PM, and exempt solvent emissions in tons per year (tpy) over the previous 12 months updated on a monthly basis.

(3) Hazardous Air Pollutant (HAP) emissions in tpy over the previous 12 months for each individual HAP and total HAPs.

D. Hourly and annual glass pull rates for each line (in tons).

E. Hours of line operation.

F. Duration of startup, shutdown, or malfunctions in the process.

G. All malfunctions and repairs of the Gypsum Drying Tunnel Fabric Filter Baghouse.

H. Downtime of the ESP during routine maintenance activity when complying with NSPS, Subpart CC, § 60.292(e).

I. Manufacturer’s documentation on PM control efficiency for the filters used in the coating booths. Documentation which shows the manufacturer’s specified operating range and the procedures recommended for replacement of the filters.

J. Records of when filters were replaced.

K. Records and calculations demonstrating compliance with Material Usage Flexibility condition for the introduction of any new materials.

L. Hourly and annual cullet usage rates (in tons).

M. All monitoring data and support information as specified in 30 TAC § 122.144.

N. Inspections of capture systems and abatement devices shall be recorded as they occur.

O. Field records of visible emissions observation and/or opacity measurements. Records of any corrective action taken.

P. MSS activities specified in Special Condition No. 26.

Q. A copy of initial test reports and any records of subsequent testing performed shall be kept for the life of the permit.

55. The records required by the special conditions shall be maintained in hard copy or electronic format and shall be maintained for at least two years. The recordkeeping summary required shall contain examples of the calculations performed (including units, conversion factors, transfer efficiency, and emission factors), any assumptions made in the calculations, and the basis for those assumptions. These records shall be kept on-site and made available for review upon request by representatives of the TCEQ or any air pollution control agency with appropriate jurisdiction.

Pollution Prevention

56. Paint pots shall be covered while filled with solvent during cleaning.

57. All waste coatings and solvents shall be stored in closed containers. In no case shall any container be left uncovered whose contents exceed one inch in depth as measured with the container placed on a level surface.

58. All spills shall be cleaned up immediately using appropriate procedures.

59. Towels, rags, sponges, or other materials used for cleanup operations shall be placed into closed containers immediately after use.

60. Containers that contain waste coatings and solvent, equipment cleaning waste and spill cleanup materials may be opened to allow for the addition or removal of material and shall be closed immediately after the transfer operation is complete. All waste materials shall be kept in storage until removed from the plant site in accordance with all applicable waste rules.

Emission Sources - Maximum Allowable Emission Rates

Permit Number 946A and PSDTX1025M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
1/2/3/4/5	Lines 92 and 93 Collectors and High-Energy Air Filtration (HEAF) - Stacks	PM	33.50	146.73
		PM_{10}	33.50	146.73
		$PM_{2.5}$	33.50	146.73
		Total VOC	21.61	94.64
		NO_x	11.76	51.51
		SO_2	6.53	28.65
		CO	57.46	251.67
		NH_3	36.00	157.68
		Formaldehyde	6.93	30.35
		Phenol	4.12	18.05
		Methyl Alcohol	3.69	16.15
15A	Glass Furnaces (1901 and 1902) ESP - Stack	PM	7.46	32.65
		PM (6)	8.00	0.16
		PM_{10}	7.46	32.65
		PM_{10} (6)	8.00	0.16
		$PM_{2.5}$	7.46	32.65
		$PM_{2.5}$ (6)	8.00	0.16
		VOC	0.12	0.53
		NO_x	18.32	80.25
		SO_2	4.20	18.36
		SO_2 (6)	8.40	0.17

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
		CO	0.55	2.40
		HF	0.18	0.78
		Pb	0.00035	0.00153
FHFUG	1901 Forehearth (5)	PM	0.09	0.40
		PM_{10}	0.09	0.40
		$PM_{2.5}$	0.09	0.40
		VOC	0.05	0.24
		NO_x	0.98	4.28
		SO_2	0.01	0.03
		CO	0.82	3.59
		HF	0.05	0.21
FHFUG2	1902 Furnace Forehearth (5)	PM	0.25	1.10
		PM_{10}	0.25	1.10
		$PM_{2.5}$	0.25	1.10
		VOC	0.04	0.18
		NO_x	1.46	6.40
		SO_2	<0.01	0.05
		CO	1.10	4.80
FMFUG	1901 Forming Area (5)	PM	1.67	7.30
		PM_{10}	1.67	7.30
		$PM_{2.5}$	1.67	7.30
		VOC	0.75	3.29
		NH_3	0.13	0.58

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
BFUG	1901 Batch Plant (5)	PM	<0.01	0.02
		PM_{10}	<0.01	0.02
		$PM_{2.5}$	<0.01	0.02
FUGRM	1901 Batch Drop Railcar Unloading (5)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
MXBIN1	1901 E-Glass Mixing Bin (North) (5)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
MXBIN2	1901 E-Glass Mixing Bin (South) (5)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
16	Line 91 Collection Wet Scrubber No. 1 - Stack	PM	4.50	19.08
		PM_{10}	4.50	19.08
		$PM_{2.5}$	4.50	19.08
		Total VOC	3.84	12.38
		NO_x	1.29	5.63
		SO_2	0.01	0.04
		CO	9.15	40.17
		NH_3	4.20	18.37
		Formaldehyde	0.68	2.97
		Phenol	0.75	3.29
17	Line 91 Collection Wet	PM	4.50	19.08

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
	Scrubber No. 2 - Stack	PM_{10}	4.50	19.08
		$PM_{2.5}$	4.50	19.08
		Total VOC	3.84	12.38
		NO_x	1.29	5.63
		SO_2	0.01	0.04
		CO	9.15	40.17
		NH_3	4.20	18.37
		Formaldehyde	0.68	2.97
		Phenol	0.75	3.29
18	Line 91 Collection Wet Scrubber No. 3 - Stack	PM	4.50	19.08
		PM_{10}	4.50	19.08
		$PM_{2.5}$	4.50	19.08
		Total VOC	3.84	12.38
		NO_x	1.29	5.63
		SO_2	0.01	0.04
		CO	9.15	40.17
		NH_3	4.20	18.37
		Formaldehyde	0.68	2.97
		Phenol	0.75	3.29
19	Line 91 Collection Wet Scrubber No. 4 - Stack	PM	4.50	19.08
		PM_{10}	4.50	19.08
		$PM_{2.5}$	4.50	19.08
		Total VOC	3.84	12.38

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
		NO_x	1.29	5.63
		SO_2	0.01	0.04
		CO	9.15	40.17
		NH_3	4.20	18.37
		Formaldehyde	0.68	2.97
		Phenol	0.75	3.29
20	Line 91 Curing Oven Wet Scrubber (with Ring-Burner) - Stack	PM	4.51	18.96
		PM_{10}	4.51	18.96
		$PM_{2.5}$	4.51	18.96
		Total VOC	7.82	34.24
		NO_x	4.38	19.18
		SO_2	0.01	0.04
		CO	22.28	97.58
		NH_3	7.02	30.75
		Formaldehyde	1.60	7.00
		Phenol	1.00	4.38
21	Line 91 Melters Baghouse No. 1 - Stack	PM	0.99	4.34
		PM_{10}	0.99	4.34
		$PM_{2.5}$	0.99	4.34
		Total VOC	3.72	16.27
		NO_x	0.11	0.50
		SO_2	1.12	4.92
		CO	5.27	23.08

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
		Boron Oxide	0.40	1.75
		Pb	0.000166	0.000736
		As	0.000223	0.000977
		Cd	0.000088	0.000389
		Cr	0.00425	0.0186
22	Line 91 Cold End/Horizontal Band Saw Baghouse No. 2 - Stack	PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
23	Line 91 Batch Loading Shed Baghouse No. 3 - Stack	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13
24	Line 91 Unload Shed Baghouse No. 4 - Stack	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13
25	Line 91 Melter Dust Refeed Baghouse No. 5 - Stack	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13
26	Line 91 Mixed Batch Day Bin Baghouse No. 6 - Stack	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13
27	Line 91 Mixed Batch Day Bin Baghouse No. 7 - Stack	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
28	Line 91 Mixed Batch Day Bin Baghouse No. 8 - Stack	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13
29	Line 91 Mixed Batch Day Bin Baghouse No. 9 - Stack	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13
30	Line 90 IR Curing Oven Stack	VOC	2.26	2.75
		IOC	0.47	0.59
31	Proline 90 Oven Stack Zone 1	VOC	4.45	2.51
		ES	5.96	3.37
32	Proline 90 Oven Stack Zone 2	VOC	4.45	2.51
		ES	5.96	3.37
		NO_X	0.15	0.64
		CO	0.12	0.54
		SO_2	0.01	0.01
		PM	0.01	0.05
		PM_{10}	0.01	0.05
		$PM_{2.5}$	0.01	0.05
33	Proline 90 Oven Stack Zone 3	VOC	4.45	2.51
		ES	5.96	3.37
		NO_X	0.15	0.64
		CO	0.12	0.54
		SO_2	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
		PM	0.01	0.05
		PM_{10}	0.01	0.05
		$PM_{2.5}$	0.01	0.05
34	Proline 90 Application and Conveyor Flash Off Emissions	VOC	22.82	22.86
		ES	10.06	5.68
		IOC	3.23	4.03
Adhesive CAP	Proline 90 Adhesive Application Emissions from EPNs 30/31/32/33/34	VOC	12.00	14.98
		IOC	3.71	4.63
9701	Line 97 Oven Stack Zone 1	VOC	6.67	2.26
		ES	8.95	3.03
		NOx	0.10	0.43
		CO	0.08	0.36
		SO_2	0.01	0.01
		PM	0.01	0.03
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.03
9702	Line 97 Oven Stack Zone 2	VOC	6.67	2.26
		ES	8.95	3.03
		NOx	0.1	0.43
		CO	0.08	0.36
		SO_2	0.01	0.01
		PM	0.01	0.03
		PM_{10}	0.01	0.03

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
		$PM_{2.5}$	0.01	0.03
97IR	Proline 97 IR Curing Oven	VOC	1.08	0.51
9703	Proline 97 Application Flash Off Emissions	VOC	14.79	6.13
		ES	10.07	3.41
35	South Trim Waste Re-Feed Baghouse	PM	0.03	0.12
		PM_{10}	0.03	0.12
		$PM_{2.5}$	0.03	0.12
36	North Trim Waste Re-Feed Baghouse	PM	0.03	0.12
		PM_{10}	0.03	0.12
		$PM_{2.5}$	0.03	0.12
37	Off-Line Trim Waste Re-Feed Baghouse	PM	0.08	0.36
		PM_{10}	0.08	0.36
		$PM_{2.5}$	0.08	0.36
Tanks 34, 35, 36, 37, and 38	E-Glass Mixing Tanks	VOC	0.31	1.54
RA901	1901 E-Glass Reclaim Area	PM	0.62	2.72
		PM_{10}	0.62	2.72
		$PM_{2.5}$	0.62	2.72
		VOC	0.45	1.97
		NO_x	0.10	0.44
		SO_2	<0.01	0.01
		CO	0.08	0.35
		NH_3	0.10	0.44
DRYTUNFUG	Gypsum Drying	PM	0.02	0.088

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (4)
	Tunnel (5)	PM_{10}	0.02	0.088
		$PM_{2.5}$	0.02	0.088
		Total VOC	0.14	0.61
		NO_x	0.15	0.66
		SO_2	<0.01	<0.01
		CO	0.13	0.55
		HF	0.01	0.04
OGMFUG	Off-Line Grooving Machine (5)	PM	0.14	0.61
		PM_{10}	0.14	0.61
		$PM_{2.5}$	0.14	0.61
MSSFUG	MSS Fugitives (5)	PM	<0.40	<1.00
		PM_{10}	<0.40	<1.00
		$PM_{2.5}$	<0.40	<1.00
		VOC	<0.40	<1.00
		NO_x	<0.40	<1.00
		SO_2	<0.40	<1.00
		CO	<0.40	<1.00
		NH_3	<0.40	<1.00
		Formaldehyde	<0.40	<1.00
		Phenol	<0.40	<1.00

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented

Emission Sources - Maximum Allowable Emission Rates

PM_{10}	- total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$	- particulate matter equal to or less than 2.5 microns in diameter
CO	- carbon monoxide
NH_3	- ammonia
HF	- hydrogen fluoride
Pb	- lead
As	- arsenic
Cd	- cadmium
Cr	- chromium
ES	- exempt solvents
IOC	- inorganic compounds

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Emission rates apply during inspection, cleaning, and maintenance of Glass Furnaces 1901 and 1902 dry scrubber.
(7) Planned startup and shutdown emissions are included. Maintenance activities, except as specified in Special Condition No. 21, are not authorized by this permit and will need separate authorization, unless the activity can meet the conditions of 30 TAC § 116.119.

Date: October 10, 2024