

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Joy Global Longview Operations LLC

AUTHORIZING THE OPERATION OF
Joy Global Longview Operations
Longview Facility
Construction Machinery and Equipment

LOCATED AT
Gregg County, Texas
Latitude 32° 27' 30" Longitude 94° 43' 54"
Regulated Entity Number: RN100650779

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: 01540 Issuance Date: _____

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, Subpart MMMM as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.960 which incorporates the 40 CFR Part 63 Subpart by reference.
 - F. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
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 and constructed either before or after January 31, 1972 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. 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.
- C. 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(b)(1).
- 5. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

- A. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities specified in 30 TAC Chapter 115, Subchapter C, the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 115.221 (relating to Emission Specifications)
 - (ii) Title 30 TAC § 115.222 (relating to Control Requirements)
 - (iii) Title 30 TAC § 115.223 (relating to Alternate Control Requirements)
 - (iv) Title 30 TAC § 115.224 (relating to Inspection Requirements)
 - (v) Title 30 TAC § 115.225 (relating to Testing Requirements)
 - (vi) Title 30 TAC § 115.226 (relating to Recordkeeping Requirements)

- B. When filling gasoline storage vessels with a nominal capacity greater than 1,000 gallons (Stage I) at motor vehicle fuel dispensing facilities, which have dispensed less than 100,000 gallons of gasoline in any calendar month after October 31, 2014, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
 - (i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)
 - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)

- 6. 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)
7. 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.
 8. 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

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 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, 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).

Compliance Requirements

13. 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.
14. 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)

Permit Location

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

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 12

Applicable Requirements Summary13

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
837GASTK2	STORAGE TANKS/VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
881VDEGRS	SOLVENT DEGREASING MACHINES	N/A	R5412	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
884PAINT	SURFACE COATING OPERATIONS	N/A	R5421	30 TAC Chapter 115, Surface Coating Operations	No changing attributes.
884PAINT	SURFACE COATING OPERATIONS	N/A	4-M	40 CFR Part 63, Subpart MMMM	No changing attributes.
889PAINT	SURFACE COATING OPERATIONS	N/A	4M	40 CFR Part 63, Subpart MMMM	No changing attributes.
ITBUGEN	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
PROLNGVW	SURFACE COATING OPERATIONS	N/A	R5421	30 TAC Chapter 115, Surface Coating Operations	No changing attributes.
RADIOBU	SRIC ENGINES	N/A	60JJJJ	40 CFR Part 60, Subpart JJJJ	No changing attributes.
RADIOBU	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
RTO	SURFACE COATING OPERATIONS	N/A	R5421	30 TAC Chapter 115, Surface Coating Operations	No changing attributes.
RTO	SURFACE COATING OPERATIONS	N/A	4M	40 CFR Part 63, Subpart MMMM	No changing attributes.
SMENG525	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	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)
837GASTK2	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(b)(4) § 115.118(b)(5)	None
881VDEGRS	EU	R5412	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.417(5)	In Gregg, Nueces, and Victoria Counties, operations which can emit, when uncontrolled, a combined weight of VOC < 550 pounds in any consecutive 24-hour period are exempt from § 115.412.	None	§ 115.416 § 115.416(3)	None
884PAINT	PRO	R5421	VOC	30 TAC Chapter 115, Surface Coating Operations	§ 115.420 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Surface Coating Operations
884PAINT	EU	4-M	112(B) HAPS	40 CFR Part 63, Subpart M	§ 63.3882 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart M	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart M	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart M	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart M	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart M

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)
889PAINT	EU	4M	112(B) HAPS	40 CFR Part 63, Subpart MMMM	§ 63.3882 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart MMMM	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart MMMM	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart MMMM	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart MMMM	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart MMMM
ITBUGEN	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table 2d.5 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(j) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP that operates 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP that operates 24 hours or less per calendar year, located at an area source, you must comply with the requirements as specified in Table 2d.5.a-c.	§ 63.6625(f) § 63.6625(j) § 63.6640(a) § 63.6640(a)-Table 6.9.a.i § 63.6640(a)-Table 6.9.a.ii § 63.6640(b)	§ 63.6625(j) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
PROLNGVW	PRO	R5421	VOC	30 TAC Chapter 115, Surface Coating Operations	§ 115.420 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Surface Coating Operations

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)
RADIOBU	EU	60JJJJ	CO	40 CFR Part 60, Subpart JJJJ	§ 60.4233(a) § 60.4231(a) § 60.4234 § 60.4243(a) [G]§ 60.4243(d) § 60.4243(e) § 60.4243(g) § 60.4246 § 90.103(a)	Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW and manufactured on or after 07/01/2008 must comply with a CO emission limit of 610 g/KW-hr, as stated in 40 CFR 60.4231(a) and 40 CFR 90.103(a) and 40 CFR 1054.105(a).	§ 60.4243(e)	§ 60.4243(a)(1) § 60.4243(e) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(3)	None
RADIOBU	EU	60JJJJ	NMHC and NO _x	40 CFR Part 60, Subpart JJJJ	§ 60.4233(a) § 60.4231(a) § 60.4234 § 60.4243(a) [G]§ 60.4243(d) § 60.4243(e) § 60.4243(g) § 60.4246 § 90.103(a)	Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW and a displacement of greater than or equal to 225cc and manufactured on or after 07/01/2008 and before 12/31/2010 and is a natural gas engine must comply with an NMHC+NO _x emission limit of 11.3 g/KW-hr, as stated in 40 CFR 60.4231(a) and 40 CFR 90.103(a)-Table 2.	§ 60.4243(e)	§ 60.4243(a)(1) § 60.4243(e) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(3)	None
RADIOBU	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark	None	None	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)
						ignition engines as applicable. No further requirements apply for such engines under this part.			
RTO	PRO	R5421	VOC	30 TAC Chapter 115, Surface Coating Operations	§ 115.420 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Surface Coating Operations	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Surface Coating Operations
RTO	blank	4M	112(B) HAPS	40 CFR Part 63, Subpart M	§ 63.3882 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart M	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart M	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart M	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart M	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart M
SMENG525	EU	63ZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table 2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G] § 63.6640(f)(2) [G] § 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table 6.9.a.i § 63.6640(a)-Table 6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)

Additional Monitoring Requirements

Periodic Monitoring Summary..... 18

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 837GASTK2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(b)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if the inspection indicates that the structural integrity of the fill pipe is in question, and required repairs are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 837GASTK2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(b)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if the facility does not have drawings of the tank construction to illustrate that the fill pipe has a maximum clearance of 6 inches from the tank bottom.	
Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	

New Source Review Authorization References

New Source Review Authorization References 21

New Source Review Authorization References by Emission Unit..... 22

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.: PSDTX1102	Issuance Date: 02/25/2014
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.: 186	Issuance Date: 02/25/2014
Authorization No.: 56464	Issuance Date: 05/26/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 03/14/1997
Number: 3	Version No./Date: 06/07/1996
Number: 5	Version No./Date: 06/07/1996
Number: 7	Version No./Date: 06/07/1996
Number: 40	Version No./Date: 06/07/1996
Number: 41	Version No./Date: 06/07/1996
Number: 42	Version No./Date: 06/07/1996
Number: 53	Version No./Date: 06/07/1996
Number: 57	Version No./Date: 06/07/1996
Number: 83	Version No./Date: 06/07/1996
Number: 102	Version No./Date: 06/07/1996
Number: 107	Version No./Date: 06/07/1996

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
837GASTK2	3760 GAL. GASOLINE TANK	53/06/07/1996
881VDEGRS	VAPOR DEGREASING	41/06/07/1996
884PAINT	PAINT BOOTH WITH FABRIC FILTER	56464
889PAINT	PAINT BOOTH WITH WATER CURTAIN	56464
ITBUGEN	EMERGENCY GENERATOR	106.511/03/14/1997
RADIOBU	EMERGENCY GENERATOR	106.511/03/14/1997
RTO	RTO CONTROLLING NEW PAINT BOOTH	56464
SMENG525	EMERGENCY GENERATOR	5/06/07/1996

Appendix A

Acronym List 24

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
COMS	.....	continuous opacity monitoring system
CVS	.....	closed-vent system
D/FW	.....	Dallas/Fort Worth (nonattainment area)
DR	.....	Designated Representative
ELP	.....	El Paso (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
GF	.....	grandfathered
gr/100 scf	.....	grains per 100 standard cubic feet
HAP	.....	hazardous air pollutant
H/G/B	.....	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	.....	hydrogen sulfide
ID No.	.....	identification number
lb/hr	.....	pound(s) per hour
MMBtu/hr	.....	Million British thermal units per hour
MRRT	.....	monitoring, recordkeeping, reporting, and testing
NA	.....	nonattainment
N/A	.....	not applicable
NADB	.....	National Allowance Data Base
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
PM	.....	particulate matter
ppmv	.....	parts per million by volume
PSD	.....	prevention of significant deterioration
RO	.....	Responsible Official
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..... 26

Major NSR Summary Table

Permit Number: 186 and PSDTX1102			Issuance Date: 2/25/2014				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	CO	75.25	270.90	3, 5, 17, 25, 27	27, 28, 30, 32	24, 28, 30
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	NOx	29.89	107.60	3, 5, 17, 25, 27	27, 28, 30, 32	24, 28, 30
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	Pb	2.57	0.87	3, 5, 17, 25, 27	27, 28, 30, 32	24, 28, 30
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	PM	15.32	67.10	3, 5, 17, 18, 19, 20, 25, 27, 31	27, 28, 30, 32	24, 28, 30
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	PM10	15.32	67.10	3, 5, 17, 18, 19, 20, 25, 27, 31	27, 28, 30, 32	24, 28, 30
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	PM2.5	15.32	67.10	3, 5, 17, 18, 19, 20, 25, 27, 31	27, 28, 30, 32	24, 28, 30
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	SO2	2.94	10.58	3, 5, 17, 25, 27	27, 28, 30, 32	24, 28, 30
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	VOC	7.33	26.37	3, 5, 17, 25, 27	27, 28, 30, 32	24, 28, 30
ROOFVNT	Two Electric ARC Furnaces Roof Vent	CO	4.27	10.79	3, 6, 9		
ROOFVNT	Two Electric ARC Furnaces Roof Vent	NOx	4.13	8.74	3, 6, 9		
ROOFVNT	Two Electric ARC Furnaces Roof Vent	Pb	0.05	0.02	3, 6, 9		
ROOFVNT	Two Electric ARC Furnaces Roof Vent	PM	13.32	77.54	3, 6, 9		

Permit Number: 186 and PSDTX1102

Issuance Date: 2/25/2014

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
ROOFVNT	Two Electric ARC Furnaces Roof Vent	PM10	13.32	47.49	3, 6, 9		
ROOFVNT	Two Electric ARC Furnaces Roof Vent	PM2.5	13.32	47.49	3, 6, 9		
ROOFVNT	Two Electric ARC Furnaces Roof Vent	SO2	0.07	0.22	3, 6, 9		
ROOFVNT	Two Electric ARC Furnaces Roof Vent	VOC	0.35	0.90	3, 6, 9		
SCRAPHAND	Scrap Handling (4)	PM	5.50	19.80			
SCRAPHAND	Scrap Handling (4)	PM10	0.28	0.99			
SCRAPHAND	Scrap Handling (4)	PM2.5	0.28	0.99			
TORCHCUT	Torch Cutting	CO	0.57	2.49	3		
TORCHCUT	Torch Cutting	NOx	1.90	8.32	3		
TORCHCUT	Torch Cutting	PM	0.05	0.23	3		
TORCHCUT	Torch Cutting	PM10	0.05	0.23	3		
TORCHCUT	Torch Cutting	PM2.5	0.05	0.23	3		
TORCHCUT	Torch Cutting	SO2	0.01	0.02	3		
TORCHCUT	Torch Cutting	VOC	0.04	0.16	3		
SOAKPITS	Ingot Pre-Heating Soakpits	CO	28.41	55.10	3	31	
SOAKPITS	Ingot Pre-Heating Soakpits	NOx	33.82	65.59	3	31	
SOAKPITS	Ingot Pre-Heating Soakpits	PM	2.57	4.98	3	31	
SOAKPITS	Ingot Pre-Heating Soakpits	PM10	2.57	4.98	3	31	
SOAKPITS	Ingot Pre-Heating Soakpits	PM2.5	2.57	4.98	3	31	
SOAKPITS	Ingot Pre-Heating Soakpits	SO2	0.20	0.39	3	31	
SOAKPITS	Ingot Pre-Heating Soakpits	VOC	1.86	3.61	3	31	
HTREATFUR	Heat Treating Furnaces Stack	CO	44.96	81.99	3		
HTREATFUR	Heat Treating Furnaces Stack	NOx	26.76	48.81	3		

Permit Number: 186 and PSDTX1102			Issuance Date: 2/25/2014				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
HTREATFUR	Heat Treating Furnaces Stack	PM	4.07	7.42	3		
HTREATFUR	Heat Treating Furnaces Stack	PM10	4.07	7.42	3		
HTREATFUR	Heat Treating Furnaces Stack	PM2.5	4.07	7.42	3		
HTREATFUR	Heat Treating Furnaces Stack	SO2	0.32	0.59	3		
HTREATFUR	Heat Treating Furnaces Stack	VOC	2.94	5.37	3		
842LVR	Ladle Vacuum Refining Baghouse Stack	CO	7.79	16.30	3, 5	10, 31	
842LVR	Ladle Vacuum Refining Baghouse Stack	NOx	6.35	6.96	3, 5	10, 31	
842LVR	Ladle Vacuum Refining Baghouse Stack	PM	0.27	0.29	3, 5	10, 31	
842LVR	Ladle Vacuum Refining Baghouse Stack	PM10	0.27	0.29	3, 5	10, 31	
842LVR	Ladle Vacuum Refining Baghouse Stack	PM2.5	0.27	0.29	3, 5	10, 31	
842LVR	Ladle Vacuum Refining Baghouse Stack	SO2	10.63	11.64	3, 5	10, 31	
842LVR	Ladle Vacuum Refining Baghouse Stack	VOC	0.81	1.70	3, 5	10, 31	

Footnotes:

- (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) CO - carbon monoxide
NOx - total oxides of nitrogen
Pb - lead
PM - total particulate matter, suspended in the atmosphere, including PM10 and PM2.5, as represented

PM10 - total particulate matter equal to or less than 10 microns in diameter, including PM2.5, as represented

PM2.5 - particulate matter equal to or less than 2.5 microns in diameter

SO2 - sulfur dioxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

- (4) Fugitive emissions are an estimate only.
- (5) 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
- (6) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (7) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT



A Permit Is Hereby Issued To
Joy Global Longview Operations LLC
Authorizing the Continued Operation of
Mini Steel Mill

Located at **Longview, Gregg County, Texas**

Latitude 37° 27' 30" Longitude 94° 44' 00"

Permit: 186 and PSDTX1102

Issuance Date : February 25, 2014

Renewal Date: February 25, 2024

For the Commission

- 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 116.116 (30 TAC 116.116)]
- 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(a), (b) and (c)]
- 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)]
- 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)(iii)]
- 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; comply with any additional recordkeeping requirements specified in special conditions attached to 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)]
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 for upsets and maintenance 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, regulations, 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 a condition of "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.

Special Conditions

Permit Numbers 186 and PSDTX1102

Emission Standards

1. This permit authorizes those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission rates and other conditions specified in the table. In addition, this permit authorizes all emissions from planned startup and shutdown activities associated with facilities or groups of facilities that are authorized by this permit.

Fuel Specifications

2. Any fuel used in the steelmaking and casting processes shall be pipeline quality natural gas. Use of any other fuel will require prior approval from the Texas Commission on Environmental Quality (TCEQ) Executive Director.
3. Upon request by the TCEQ Executive Director or the TCEQ Regional Director or any local air pollution program having jurisdiction, the holder of this permit shall provide a sample and/or analysis of the fuels used in these facilities or shall allow air pollution representatives to obtain a sample for analysis.

Federal Applicability

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) Regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in Title 40 Code of Federal Regulations (40 CFR) Part 63, specifically the following:
 - A. Subpart A - General Provisions; and
 - B. Subpart MMMM - Surface Coating of Miscellaneous Metal Parts and Products.

Opacity/Visible Emission Limitations

5. In accordance with the EPA Test Method (TM) 9 or equivalent, and except for those periods described in Title 30 Texas Administrative Code §§ 101.201 and 101.211 (30 TAC § 101.201) and 40 CFR Part 60, Subpart A, § 60.11(c), opacity of emissions from Two Electric Arc Furnaces Baghouse Stack [Emission Point Number (EPN) ARCFURVNT] and Ladle Vacuum Refining Baghouse Stack (EPN 842LVR) shall not exceed 5 percent averaged over a six-minute period.
6. There shall be a visible opacity limit of 10 percent, averaged over a six-minute period, for emissions exiting the Two Electric Arc Furnaces Roof Vent (EPN ROOFVNT) including the operations of both electric arc furnaces and other operations within the melt shop building.

7. No visible emissions shall leave the plant property boundary. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined using EPA TM 22 or equivalent. If this condition is violated, further controls shall be installed and/or implemented to limit visible emissions.

Operational Limitations, Work Practices and Plant Design

8. The maximum hourly steel pour rate shall not exceed 25 tons, and the maximum annual steel pour rate shall not exceed 180,000 tons for both Electric Arc Furnaces (EAFs) combined.
9. Natural gas combusted for flame cutting, scarfing and ingot warming operations (EPN ROOFVNT) shall each be limited to 5 million (MM) standard cubic feet (scf) per year. Natural gas combusted for ingot cropping (EPN ROOFVNT) shall be limited to 10 MMscf per year.
10. Ladle Vacuum Refining shall be limited to 20 heats per day.
11. A fabric filter baghouse designed to meet an outlet grain loading of not more than 0.0052 grains/dry standard cubic feet (gr/dscf), properly installed and in good working order, shall control particulate matter emissions from the EAFs and Ladle Vacuum Refining.
12. The EAF baghouse dust collection and handling system from the EAF baghouse hoppers to the shipping container or vehicle shall be totally enclosed, except during truck loading periods to remove dust off-site. During these truck loading periods, precautions shall be taken to minimize dust emissions. The collection and handling system shall be physically inspected once per month to ensure that the system is properly maintained to prevent any dust emissions from becoming airborne.
13. All particulate material retrieved from any of the baghouses shall be disposed of in a manner that will prevent any dust from becoming airborne.
14. All hood, duct, and collection systems shall be effective in capturing emissions from process equipment and in minimizing fugitive emissions from the buildings. The hood and duct systems shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the emission capture system as represented in the application.
15. All air pollution abatement equipment shall be properly maintained and operated. Cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer.
16. All in-plant roads, truck loading and unloading areas, parking areas, and other traffic areas shall be sprinkled with water, and/or be paved (with a cohesive hard surface) and cleaned as necessary to maintain compliance with all TCEQ rules and regulations.

Initial Determination of Compliance

17. To demonstrate compliance with the MAERT and with emission performance levels as specified in the special conditions, the holder of this permit shall perform stack sampling and/or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from EAFs' baghouse (EPN ARCFURVNT). Air contaminants to be tested for include (but are not limited to) PM. Any future sampling shall be accomplished within 60 days of achieving maximum production but not later than 180 days after the request. Sampling must be conducted in accordance with the TCEQ *Sampling Procedures Manual* and in accordance with the applicable EPA 40 CFR procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director prior to sampling.

Demonstration of Continuous Compliance

18. Upon request by the TCEQ Executive Director or the TCEQ Regional Director having jurisdiction, the holder of this permit shall perform stack sampling and/or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere to demonstrate compliance with the MAERT and with emission performance levels as specified in the special conditions and/or otherwise prove satisfactory equipment performance. Sampling must be conducted in accordance with the TCEQ *Sampling Procedures Manual* and in accordance with the applicable EPA 40 CFR procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director or the appropriate TCEQ Regional Director prior to conducting sampling.
19. The holder of this permit shall install, calibrate, and maintain a device to monitor and record pressure drop in the two EAFs' baghouse (EPN ARCFURVNT). 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 ± 0.5 inches water gauge pressure (± 125 pascals); or $\pm 0.5\%$ of span.

A minimum and maximum hourly average pressure drop shall be maintained at (or above) 1.00 and at (or below) 14.00 inches of water column based on the manufacturers operational recommendations. The actual pressure drop shall be recorded at least four times per hour. One-hour averages shall be computed from the data points recorded in that hour.

20. 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).
21. The holder of this permit shall perform monthly inspections to verify proper operation of the capture system to verify there are no holes, cracks, and/or other 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.

22. The control device shall not have a bypass.
23. 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 two EAFs' baghouse (EPN ARCFURVNT) 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

24. 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 stack (EPN ARCFURVNT) 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.
25. A pretest meeting shall be held with personnel from the TCEQ before the required tests are performed. The TCEQ Regional Office with jurisdiction shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. The notice shall include:
 - A. Date for pretest meeting;
 - B. Date sampling will occur;
 - C. Points or sources to be sampled;
 - D. Name of firm conducting sampling;
 - E. Type of sampling equipment to be used; and
 - F. 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 reports.

26. 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 by the TCEQ Regional Office with jurisdiction at least two weeks prior to sampling.
27. 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.

28. During stack sampling emission testing, the facilities shall operate at maximum represented production/throughput rates. Primary operating parameters that enable determination of production/throughput 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 production/throughput rates during testing, then additional stack testing shall be required when the production rate exceeds the previous stack test production rate by +10 percent unless otherwise determined, in writing, by the TCEQ Executive Director.

Requests 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 EPA approval, and requests shall be submitted to the TCEQ Regional Office with jurisdiction.

29. 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 attached provisions of Chapter 14 of the TCEQ *Sampling Procedures Manual*. The reports shall be distributed as follows:

One copy to the TCEQ Regional Office with jurisdiction.
One copy to the TCEQ Office of Air, Air Permits Division in Austin.
One copy to each appropriate local air pollution control program with jurisdiction.

30. 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.
31. 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 to the TCEQ, on a monthly basis, a record of adjusted operating parameters and daily records of production sufficient to demonstrate compliance with the permitted emission rates. Daily records of production and operating parameters shall be distributed as follows:

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

Recordkeeping Requirements

32. The following records shall be maintained at this facility and made available at the request of personnel from the TCEQ or any other air pollution control program having jurisdiction. These records shall be totaled for each calendar month, retained for a rolling 60-month period, and include the following:
- A. Hourly and annual steel pour rates (in tons);
 - B. Annual natural gas usage rates for flame cutting, scarfing, ingot warming and ingot cropping operations (in MMSCF);
 - C. Number of heats per day for Ladle Vacuum Refining operations; and

- D. A copy of the manufacturer's recommended cleaning and maintenance schedule shall be kept at the plant site for all abatement equipment.
33. The following records shall be maintained at this facility site and made available at the request of personnel from the TCEQ or any other air pollution control program having jurisdiction. These records shall be retained for a rolling 60-month period:
- A. All monitoring data and support information as specified in 30 TAC § 122.144; and
 - B. Inspections of capture systems and abatement devices shall be recorded as they occur.

Date: February 25, 2014

Emission Sources - Maximum Allowable Emission Rates

Permit Number 186 and PSDTX1102

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 (6)
ARCFURVNT	Two Electric Arc Furnaces Baghouse Stack	CO	75.25	270.90
		NO _x	29.89	107.60
		Pb (5)	2.57	0.87
		PM	15.32	67.10
		PM ₁₀	15.32	67.10
		PM _{2.5}	15.32	67.10
		SO ₂	2.94	10.58
		VOC	7.33	26.37
ROOFVNT	Two Electric Arc Furnaces Roof Vent (Charging/Pouring, Soaking Pit, Ladle Preheat, Slocool, Flamecut, Scarfer, Ingot Warmer, Ingot Cropper, and Man Heater)	CO	4.27	10.79
		NO _x	4.13	8.74
		Pb (5)	0.05	0.02
		PM	13.32	77.54
		PM ₁₀	13.32	47.49
		PM _{2.5}	13.32	47.49
		SO ₂	0.07	0.22
		VOC	0.35	0.90
SCRAPHAND	Scrap Handling (4)	PM	5.50	19.80
		PM ₁₀	0.28	0.99
		PM _{2.5}	0.28	0.99
TORCHCUT	Torch Cutting	CO	0.57	2.49
		NO _x	1.90	8.32
		PM	0.05	0.23
		PM ₁₀	0.05	0.23

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
		PM _{2.5}	0.05	0.23
		SO ₂	0.01	0.02
		VOC	0.04	0.16
SOAKPITS	Ingot Pre-Heating Soakpits (Soakpit Nos. 1, and 10 – 13)	CO	28.41	55.10
		NO _x	33.82	65.59
		PM	2.57	4.98
		PM ₁₀	2.57	4.98
		PM _{2.5}	2.57	4.98
		SO ₂	0.20	0.39
		VOC	1.86	3.61
HTREATFUR	Heat Treating Furnaces Stack	CO	44.96	81.99
		NO _x	26.76	48.81
		PM	4.07	7.42
		PM ₁₀	4.07	7.42
		PM _{2.5}	4.07	7.42
		SO ₂	0.32	0.59
		VOC	2.94	5.37
842LVR	Ladle Vacuum Refining Baghouse Stack	CO	7.79	16.30
		NO _x	6.35	6.96
		PM	0.27	0.29
		PM ₁₀	0.27	0.29
		PM _{2.5}	0.27	0.29
		SO ₂	10.63	11.64
		VOC	0.81	1.70

- (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.

Emission Sources - Maximum Allowable Emission Rates

- (3) CO - carbon monoxide
- NO_x - total oxides of nitrogen
- Pb - lead
- PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
- PM₁₀ - 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
- SO₂ - sulfur dioxide
- VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Fugitive emissions are an estimate only.
- (5) 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
- (6) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (7) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: February 25, 2014