FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
3M Company

AUTHORIZING THE OPERATION OF
3M Austin Center
Commercial Physical and Biological Research

LOCATED AT
Travis County, Texas
Latitude 30° 23' 49" Longitude 97° 50' 33"
Regulated Entity Number: RN100218692

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: O1376 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 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 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. 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. 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.

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

E. 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. 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.

5. 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

6. 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

7. 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

8. 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.

9. 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

10. 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.

11. 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

12. 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.

Temporary Fuel Shortages (30 TAC § 112.15)

13. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:

    A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)

    B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)

    C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)

    D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

Permit Location

14. 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)

15. 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
AUX/BOILER	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	REG2-1	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
BLACKSTART ENG	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
ENG/GEN1	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
ENG/GEN2	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
PUMP1-DIES	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
PUMP2-DIES	SRIC ENGINES	N/A	63ZZZZ-1	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)
AUX/BOILER	EU	REG2-1	SO2	30 TAC Chapter 112, Sulfur Compounds	§ 112.9(a)	No person may cause, suffer, allow, or permit emissions of SO2 from any liquid fuel-fired steam generator, furnace, or heater to exceed 440 ppmv at actual stack conditions and averaged over 3-hours.	§ 112.2(a) ** See Periodic Monitoring Summary	§ 112.2(c)	§ 112.2(b)
BLACKSTART ENG	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b)	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)-Table6.9.a.i § 63.6640(a)-Table6.9.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)
ENG/GEN1	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.9 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(j) § 63.6640(b) § 63.6640(c)(7)	For each existing non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP that is not a remote stationary RICE and that operates more than 24 hours per calendar year, you must install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	§ 63.6612(a) [G]§ 63.6612(b) § 63.6620(a) § 63.6620(a)-Table4.1.a.i § 63.6620(a)-Table4.1.a.ii § 63.6620(a)-Table4.1.a.iii § 63.6620(b) § 63.6620(d) § 63.6620(e)(1) [G]§ 63.6620(e)(2) [G]§ 63.6625(b) § 63.6625(j) § 63.6630(a)-Table5.13.a.i § 63.6630(a)-Table5.13.a.ii § 63.6630(e) § 63.6630(e)(1)	§ 63.6625(j) § 63.6635(a) § 63.6635(c) § 63.6655(a) § 63.6655(a)(1) § 63.6655(a)(2) § 63.6655(a)(3) § 63.6655(a)(4) § 63.6655(a)(5) [G]§ 63.6655(b) § 63.6655(d) § 63.6655(e) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6645(a) § 63.6645(g) § 63.6645(h) § 63.6650(a) § 63.6650(a)-Table7.3 § 63.6650(b) § 63.6650(b)(1) § 63.6650(b)(2) § 63.6650(b)(3) § 63.6650(b)(4) § 63.6650(b)(6) § 63.6650(b)(7) § 63.6650(b)(8) § 63.6650(b)(9) [G]§ 63.6650(c) [G]§ 63.6650(e) § 63.6650(f)

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)
							§ 63.6630(e)(2) § 63.6630(e)(3) § 63.6630(e)(5) § 63.6630(e)(6) § 63.6635(a) § 63.6635(b) § 63.6640(a) § 63.6640(a)-Table6.14.a.i § 63.6640(a)-Table6.14.a.ii § 63.6640(b) § 63.6640(c) § 63.6640(c)(1) § 63.6640(c)(2) § 63.6640(c)(3) § 63.6640(c)(5) § 63.6640(c)(6) § 63.6640(c)(7)		
ENG/GEN2	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.9 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(j) § 63.6640(b) § 63.6640(c)(7)	For each existing non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP that is not a remote stationary RICE and that operates more than 24 hours per calendar year, you must install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	§ 63.6612(a) [G]§ 63.6612(b) § 63.6620(a) § 63.6620(a)-Table4.1.a.i § 63.6620(a)-Table4.1.a.ii § 63.6620(a)-Table4.1.a.iii § 63.6620(b) § 63.6620(d) § 63.6620(e)(1) [G]§ 63.6620(e)(2) [G]§ 63.6625(b) § 63.6625(j) § 63.6630(a)-Table5.13.a.i § 63.6630(a)-Table5.13.a.ii § 63.6630(e)	§ 63.6625(j) § 63.6635(a) § 63.6635(c) § 63.6655(a) § 63.6655(a)(1) § 63.6655(a)(2) § 63.6655(a)(3) § 63.6655(a)(4) § 63.6655(a)(5) [G]§ 63.6655(b) § 63.6655(d) § 63.6655(e) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6645(a) § 63.6645(g) § 63.6645(h) § 63.6650(a) § 63.6650(a)-Table7.3 § 63.6650(b) § 63.6650(b)(1) § 63.6650(b)(2) § 63.6650(b)(3) § 63.6650(b)(4) § 63.6650(b)(6) § 63.6650(b)(7) § 63.6650(b)(8) § 63.6650(b)(9) [G]§ 63.6650(c) [G]§ 63.6650(e) § 63.6650(f)

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)
							§ 63.6630(e)(1) § 63.6630(e)(2) § 63.6630(e)(3) § 63.6630(e)(5) § 63.6630(e)(6) § 63.6635(a) § 63.6635(b) § 63.6640(a) § 63.6640(a)-Table6.14.a.i § 63.6640(a)-Table6.14.a.ii § 63.6640(b) § 63.6640(c) § 63.6640(c)(1) § 63.6640(c)(2) § 63.6640(c)(3) § 63.6640(c)(5) § 63.6640(c)(6) § 63.6640(c)(7)		
PUMP1-DIES	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.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)-Table6.9.a.i § 63.6640(a)-Table6.9.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)

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)
PUMP2-DIES	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.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)-Table6.9.a.i § 63.6640(a)-Table6.9.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

Unit/Group/Process Information	
ID No.: AUX/BOILER	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: REG2-1
Pollutant: SO2	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Fuel oil sulfur content	
Minimum Frequency: As fuel is obtained	
Averaging Period: N/A	
Deviation Limit: Fuel oil < 0.8% sulfur.	
Periodic Monitoring Text: Permit holders of sites subject to 30 TAC § 112.9(a) shall perform the following to meet the Periodic Monitoring requirements: Maintain fuel purchase and composition records together with a record of any change in fuel composition to demonstrate that only fuel oil < 0.8% sulfur is burned in the unit. Should fuel blending be practiced, document the procedure to ensure the fuel oil used meets the sulfur requirement and record sulfur composition of the blended fuel which is used.	

Permit Shield

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		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
AUX/BOILER	N/A	40 CFR Part 60, Subpart D	Boiler heat input rate is less than 250 MMBtu/hr.
AUX/BOILER	N/A	40 CFR Part 60, Subpart Da	Boiler heat input rate is less than 250 MMBtu/hr.
AUX/BOILER	N/A	40 CFR Part 60, Subpart Db	Boiler heat input rate is less than 100 MMBtu/hr.
AUX/BOILER	N/A	40 CFR Part 60, Subpart Dc	Boiler was installed before June 9, 1989 and has not been modified or reconstructed.
AUX/BOILER	N/A	40 CFR Part 72	Source does not serve a generator with a capacity greater than 25 MW.
BLACKSTART ENG	N/A	40 CFR Part 60, Subpart IIII	The unit was constructed prior to July 11, 2005.
BLACKSTART ENG	N/A	40 CFR Part 72	Non-utility unit
ENG/GEN1	N/A	40 CFR Part 60, Subpart IIII	The unit was constructed prior to July 11, 2005.
ENG/GEN1	N/A	40 CFR Part 72	Source does not serve a generator with a capacity greater than 25 MW.
ENG/GEN2	N/A	40 CFR Part 60, Subpart IIII	The unit was constructed prior to July 11, 2005.
ENG/GEN2	N/A	40 CFR Part 72	Source does not serve a generator with a capacity greater than 25 MW.
GRPCT	CTOWER1, CTOWER2, CTOWER3, CTOWER4	40 CFR Part 60, Subpart Q	Cooling towers have never used chromium compounds.
GRPTANK	TANK 1, TANK 2	30 TAC Chapter 115, Storage of VOCs	Vapor pressure is less than 1.5 psia at storage conditions.

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		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRPTANK	TANK 1, TANK 2	40 CFR Part 60, Subpart Kb	Vapor pressure is less than 0.5 psia at storage conditions.
PUMP1-DIES	N/A	40 CFR Part 60, Subpart IIII	The unit was constructed prior to July 11, 2005.
PUMP1-DIES	N/A	40 CFR Part 72	Non-utility unit
PUMP2-DIES	N/A	40 CFR Part 60, Subpart IIII	The unit was constructed prior to July 11, 2005.
PUMP2-DIES	N/A	40 CFR Part 72	Non-utility unit
R/D EQUIP	N/A	40 CFR Part 60, Subpart CC	Facility does not have a glass melting furnace.
R/D EQUIP	N/A	40 CFR Part 60, Subpart DDD	Facility does not manufacture polymers.
R/D EQUIP	N/A	40 CFR Part 60, Subpart EE	Facility does not coat furniture.
R/D EQUIP	N/A	40 CFR Part 60, Subpart FFF	Facility does not have a printing or coating line.
R/D EQUIP	N/A	40 CFR Part 60, Subpart N	Facility does not have a basic oxygen process furnace.
R/D EQUIP	N/A	40 CFR Part 60, Subpart OOO	Facility has no equipment or operations of any size for size reduction or other processing of a nonmetallic mineral.
R/D EQUIP	N/A	40 CFR Part 60, Subpart QQ	Facility does not have “publication” rotogravure printing presses.
R/D EQUIP	N/A	40 CFR Part 60, Subpart RR	Facility does not have any web coating lines.
R/D EQUIP	N/A	40 CFR Part 60, Subpart RRR	Facility does not produce chemicals.
R/D EQUIP	N/A	40 CFR Part 60, Subpart SS	Facility does not coat appliances.
R/D EQUIP	N/A	40 CFR Part 60, Subpart SSS	Facility does not coat magnetic tape products.

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		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
R/D EQUIP	N/A	40 CFR Part 60, Subpart TT	Facility does not have a web coating line.
R/D EQUIP	N/A	40 CFR Part 60, Subpart VV	Facility does not manufacture chemicals.
R/D EQUIP	N/A	40 CFR Part 61, Subpart C	Facility does not process beryllium.
R/D EQUIP	N/A	40 CFR Part 61, Subpart D	Facility is not a rocket motor test site.
R/D EQUIP	N/A	40 CFR Part 61, Subpart F	Facility does not manufacture chemicals.
R/D EQUIP	N/A	40 CFR Part 63, Subpart B	Facility is not subject because it is a research and development facility.
R/D EQUIP	N/A	40 CFR Part 63, Subpart EE	Facility does not manufacture magnetic tape.
R/D EQUIP	N/A	40 CFR Part 63, Subpart F	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart G	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart GG	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart GGG	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.

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		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
R/D EQUIP	N/A	40 CFR Part 63, Subpart H	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart III	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart JJ	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart JJJ	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart KK	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart N	The facility has no equipment or operations for Cr electroplating or Cr anodizing.
R/D EQUIP	N/A	40 CFR Part 63, Subpart PPP	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.

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		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
R/D EQUIP	N/A	40 CFR Part 63, Subpart U	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart W	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
R/D EQUIP	N/A	40 CFR Part 63, Subpart YY	This rule applies only to major sources of HAP emissions. This facility is an area source of HAP emissions.
SEPARATOR	N/A	30 TAC Chapter 115, Water Separation	The VOC separated from water from the separator at the facility is No. 2 fuel oil with a vapor pressure less than 1.5 psia, which exempts the unit from control requirements in Travis County.

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.: PSDTX674M1	Issuance Date: 02/11/2011
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.: 9904	Issuance Date: 02/11/2011
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 4	Version No./Date: 11/25/1985
Number: 7	Version No./Date: 11/25/1985
Number: 10	Version No./Date: 11/25/1985
Number: 16	Version No./Date: 11/25/1985
Number: 18	Version No./Date: 11/25/1985
Number: 20	Version No./Date: 11/25/1985
Number: 22	Version No./Date: 11/25/1985
Number: 25	Version No./Date: 11/25/1985
Number: 27	Version No./Date: 11/05/1986
Number: 30	Version No./Date: 11/25/1985
Number: 34	Version No./Date: 11/25/1985
Number: 38	Version No./Date: 11/25/1985
Number: 39	Version No./Date: 11/25/1985
Number: 40	Version No./Date: 11/25/1985
Number: 41	Version No./Date: 08/30/1988
Number: 45	Version No./Date: 11/25/1985
Number: 46	Version No./Date: 08/30/1988
Number: 49	Version No./Date: 11/25/1985
Number: 51	Version No./Date: 11/25/1985

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.

Number: 52	Version No./Date: 11/25/1985
Number: 53	Version No./Date: 11/25/1985
Number: 55	Version No./Date: 11/25/1985
Number: 61	Version No./Date: 11/05/1986
Number: 75	Version No./Date: 11/25/1985
Number: 76	Version No./Date: 11/25/1985
Number: 102	Version No./Date: 11/25/1985
Number: 103	Version No./Date: 11/25/1985
Number: 104	Version No./Date: 11/25/1985
Number: 105	Version No./Date: 08/30/1988
Number: 107	Version No./Date: 11/25/1985
Number: 117	Version No./Date: 11/25/1985
Number: 123	Version No./Date: 07/20/1992
Number: 125	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
AUX/BOILER	AUXILIARY BOILER	9904, PSDTX674M1
BLACKSTART ENG	STATIONARY RECIP. INTERNAL COMBUSTION ENGINES	9904, PSDTX674M1
CTOWER1	COOLING TOWER 1	9904, PSDTX674M1
CTOWER2	COOLING TOWER 2	9904, PSDTX674M1
CTOWER3	COOLING TOWER 3	9904, PSDTX674M1
CTOWER4	COOLING TOWER 4	9904, PSDTX674M1
ENG/GEN1	STATIONARY RECIP. INTERNAL COMBUSTION ENGINES	9904, PSDTX674M1
ENG/GEN2	STATIONARY RECIP. INTERNAL COMBUSTION ENGINES	9904, PSDTX674M1
PUMP1-DIES	STATIONARY RECIP. INTERNAL COMBUSTION ENGINES	9904, PSDTX674M1
PUMP2-DIES	STATIONARY RECIP. INTERNAL COMBUSTION ENGINES	9904, PSDTX674M1
R/D EQUIP	RESEARCH DEVELOPMENT EQUIPMENT	9904, PSDTX674M1
SEPARATOR	OIL/H2O SEPARATOR ASSOC/W NO.2 FUELOIL UNLOAD AREA	9904, PSDTX674M1
TANK 1	NO. 2 FUEL OIL STORAGE TANK	9904, PSDTX674M1
TANK 2	NO. 2 FUEL OIL STORAGE TANK	9904, PSDTX674M1

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
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_2S ..... 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

Permit Number: 9904 and PSDTX674M1			Issuance Date: 02/11/2011				
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.**
Case I: Natural Gas Firing							
1	8386 Horsepower Dual-fuel Generator Engine (4)	VOC	12.90	57.0	7	7, 8	
		NOx	37.00	162.1			
		SO2	1.64	7.2			
		PM	2.00	8.8			
		CO	39.30	172.0			
2	8386 Horsepower Dual-fuel Generator Engine (4)	VOC	12.90	57.0	5, 7	5, 7, 8	5
		NOx	37.00	162.1			
		SO2	1.64	7.2			
		PM	2.00	8.8			
		CO	39.30	172.0			
3	52 MMBtu/hr Boiler	VOC	0.20	0.9	5	5, 8	5
		NOx	5.20	23.0			
		SO2	0.04	0.2			
		PM	0.50	2.3			
		CO	3.50	15.4			
Case II: Oil Firing							
1	8386 Horsepower Dual-Fuel Generator Engine	VOC	7.40	1.9	7	7, 8	
		NOx	203.00	51.0			
		SO2	29.30	7.4			
		PM	7.50	1.9			
		CO	5.50	1.4			
2	8386 Horsepower Dual-Fuel Generator Engine	VOC	7.40	1.9	5, 7	5, 7, 8	5
		NOx	203.00	51.0			
		SO2	29.30	7.4			
		PM	7.50	1.9			
		CO	5.50	1.4			
3	52 MMBtu/hr Boiler	VOC	0.30	<0.1	5	5, 8	5
		NOx	6.40	1.6			
		SO2	25.40	6.4			
		PM	0.70	0.2			

Permit Number: 9904 and PSDTX674M1			Issuance Date: 02/11/2011				
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.
		CO	3.0	0.8			

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) PM – particulate matter

VOC – volatile organic compound

NOx – total oxides of nitrogen

SO2 – sulfur dioxide

CO – carbon monoxide

(4) 95 percent of heat input from natural gas and 5 percent from diesel oil.

(5) 50.46 MMBtu/hr heat input maximum firing fuel oil.

* Emission rates are based on the facilities are limited by the following maximum operating schedule:

Case I:

Hrs/day__24__ Days/week__7__ Weeks/year__52__ or Hrs/year__8,760__

Case II:

Hrs/day_____ Days/week_____ Weeks/year_____ or Hrs/year__504__

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 11, 2011

MR TODD LUECK
MANAGER ENVIRONMENTAL HEALTH AND SAFETY AND PLANT ENG
3M COMPANY
6801 RIVER PLACE BLVD
AUSTIN TX 78726-4530

Re: Permit Renewal
Permit Numbers: 9904 and PSDTX674M-1
3M Austin Center
Austin, Travis County
Regulated Entity Number: RN100218692
Customer Reference Number: CN600291397
Account Number: TH-0243-G

Dear Mr. Lueck:

This is in response to your application Form PI-1R (General Application for Air Permit Renewals) concerning the proposed renewal of Permit Number 9904.

As indicated in Title 30 Texas Administrative Code § 116.314(a) [30 TAC § 116.314(a)], and based on our review, Permit Number 9904 is hereby renewed. Since you certified there were no changes to your existing permit, it is renewed as written and will be in effect for ten years from the date of approval (Commission's final decision). Please attach this letter to your permit. We appreciate your careful review of the special conditions of the permit and assuring that all requirements are consistently met.

Also, you are reminded that acceptance of this permit constitutes acknowledgment and agreement that you will comply with all rules, regulations, and orders of the commission issued in conformity with the Texas Clean Air Act and the conditions precedent to the granting of the permit. If more than one state rule, 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.

No planned maintenance, startup, and shutdown emissions have been reviewed or represented in this application and none are authorized by this permit.

As of July 1, 2008, all analytical data generated by a mobile or stationary laboratory in support of compliance with air permits must be obtained from a NELAC (National Environmental Laboratory Accreditation Conference) accredited laboratory under the Texas Laboratory Accreditation Program or meet one of several exemptions. Specific information concerning which laboratories must be accredited and which are exempt may be found in 30 TAC § 25.4 and § 25.6.

For additional information regarding the laboratory accreditation program and a list of accredited laboratories and their fields of accreditation, please see the following Web site:

http://www.tceq.state.tx.us/compliance/compliance_support/qa/env_lab_accreditation.html

For questions regarding the accreditation program, you may contact the Texas Laboratory Accreditation Program at (512) 239-3754 or by e-mail at labprgms@tceq.state.tx.us.

You may file a **motion to overturn** with the Chief Clerk. A motion to overturn is a request for the commission to review the executive director's decision. Any motion must explain why the commission should review the executive director's decision. According to 30 TAC § 50.139, an action by the executive director is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the Chief Clerk within 23 days after the date of this letter. An original and 11 copies of a motion must be filed with the Chief Clerk in person, or by mail to the Chief Clerk's address on the attached mailing list. On the same day the motion is transmitted to the Chief Clerk, please provide copies to the applicant, the executive director's attorney, and the Public Interest Counsel at the addresses listed on the attached mailing list. If a motion to overturn is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the executive director's approval. According to Texas Health and Safety Code § 382.032, a person affected by the executive director's approval must file a petition appealing the executive director's approval in Travis County district court within 30 days after the effective date of the approval. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

Thank you for your cooperation in sending us the information necessary to evaluate your operations and for your commitment to air pollution control. If you need further information or have any questions, please contact Ms. Katherine Stinchcomb at (512) 239-1583 or write to the Texas Commission on Environmental Quality, Office of Permitting and Registration, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Re: Permit Numbers: 9904 and PSDTX674M-1

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,

Steve Hagle, P.E., Director
Air Permits Division
Office of Permitting and Registration
Texas Commission on Environmental Quality

SH/KS/ks

cc: Sustainability Officer, Austin Energy, City of Austin, Austin
Toxicologist - Office of Director, Public Health Response Epidemiology and Surveillance, Austin-Travis County Health and Human Services Department, Austin
Air Section Manager, Region 11 - Austin
Air Permits Section Chief, New Source Review, Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 161748

SPECIAL PROVISIONS

Permits No. 9904 and PSD-TX-674M-1

EMISSION STANDARDS AND FUEL SPECIFICATIONS

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates", and those sources are limited to the emission limits and other conditions specified in that attached table.

2. Emissions of nitrogen oxides (NO_x) from the two engines identified as Emission Point No. (EPN) 1 and EPN 2 shall not exceed 2.0 grams per horsepower-hour while firing in the dual-fuel mode and 12.0 grams per horsepower-hour while firing in the diesel mode, except for generator outputs below 3.5 megawatts (MW) when firing diesel, where the emission of NO_x shall not exceed 12.5 grams per horsepower-hour.

3. Emissions of NO_x from the auxiliary boiler identified as EPN 3 shall not exceed 0.12 pounds per million Btu heat input while firing natural gas and 0.127 pounds per million Btu heat input while firing distillate fuel oil.

4. Fuels are limited to pipeline-quality sweet natural gas containing no more than 0.25 grains total sulfur per 100 dry standard cubic feet, No. 2 fuel oil and diesel fuel. Liquid fuels shall not exceed 0.5 percent by weight sulfur and must be first-run refinery grade and shall not consist of a blend containing waste oils or solvents. Use of any other fuel will require prior approval by the Executive Director of the Texas Air Control Board (TACB).

INITIAL DETERMINATION OF COMPLIANCE

5. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Cooper Bessemer LSVB20 GDT Engine identified as EPN 2 and the Boiler identified as EPN 3 (completed December 4-10, 1990). The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operation at his expense.

A. The TACB Regional Office in Waco shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice 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.
(6) Procedures to be used to determine engine horsepower load during sampling period.

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.

A written proposed description of any deviation from sampling procedures specified in permit provisions or TACB or Environmental Protection Agency (EPA) sampling procedures shall be made available to the TACB at or prior to the pretest meeting. The Regional Director or the Director of the Source and Mobile Monitoring Division shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in B of this provision shall be submitted to the TACB Permits Program. Test waivers and alternate/equivalent procedure proposals for New Source Performance Standards (NSPS) testing which must have EPA approval shall be submitted to the TACB Source and Mobile Monitoring Division in Austin.

B. Air contaminants to be tested for from EPN 2 include (but are not limited to) NO_x, carbon monoxide (CO), volatile organic compounds and particulate matter while operating in the dual-fuel mode, and separately, while operating on diesel fuel only. Air contaminants to be tested for from the boiler include (but are not limited to) NO_x and CO while firing natural gas, and separately, while firing fuel oil. (This testing was satisfactorily accomplished by testing conducted in April of 1990).

C. Engine emissions shall be determined by EPA Methods 1, 2, 3, 4, 10 and 20 (as modified by proposed NSPS,

Subpart FF, paragraph 60.324, titled "Test Methods and Procedures", for sampling site location, traverse points and required engine operating data) or any other methods approved by the Regional Director or the Director of the Source and Mobile Monitoring Division prior to sampling. Emissions shall be sampled at a minimum of four points over the normal load range of the engine, including the minimum and maximum of the range. At each test load the following operating parameters shall be recorded and varied as is feasible to identify the range over which the allowable emission limits are not exceeded: manifold pressure and spark ignition timing. In an effort to be representative of normal operating conditions, no other engine adjustments shall be made during the compliance sampling period. The nature of all engine adjustments shall be described clearly in the sampling report. The NO_x concentration limit of the proposed NSPS Subpart FF is not applicable, and hence, the correction to 15 percent oxygen (O_2) specified in Method 20 and Subpart FF is not applicable to the engine tests. The NO_x emissions level measured by Reference Method 20 shall be adjusted to reference ambient conditions in accordance with Section 60.324 of the proposed NSPS Subpart FF and reported. The adjusted NO_x emission level shall be used to determine compliance with the brake-specific emission limits of this permit.

Gaseous sampling ports for the engines shall consist of 2 two-inch diameter or larger schedule 40 couplings or three-inch long pipe nipples installed in the exhaust system according to EPA Method 1 at a location where the full flow of the engine exhaust sweeps by the sampling point and where sufficient turbulence (no stratification) may be expected to ensure a representative sample. A temporary work platform for sampling operations is acceptable if proper safety and accessibility is provided. All other requirements detailed in Chapter 2 of the TACB Sampling Procedures Manual pertaining to monorails, port, loading, clearance and power must be met by the temporary facilities.

D. Sampling ports and platforms shall be incorporated into the design of the boiler stack according to the specifications set forth in the attachment

entitled "Chapter 2, Stack Sampling Facilities". Alternate sampling facility designs may be submitted for approval by the Executive Director of the TACB.

E. Sampling shall occur within 60 days after the facilities achieve maximum production but not later than 180 days after initial start-up of the facilities, and at such other time as may be required by the Executive Director of the TACB.

F. Three copies of the final sampling report shall be forwarded to the TACB within 30 days after sampling is completed. Sampling reports shall comply with the provisions of Chapter 14 of the TACB Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TACB Waco Regional Office.
One copy to each appropriate local air pollution control program.
One copy to the TACB Source and Mobile Monitoring Division, Austin Office.

CONTINUOUS DETERMINATION OF COMPLIANCE

6. The holder of this permit shall install, calibrate and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of CO and O_2 from the cogeneration engine stack in accordance with the requirements of Title 40 Code of Federal Regulations Part 60.13 (40 CFR 60.13) and 40 CFR 60.45.

A. The CEMS shall meet the design and performance specifications, pass the field tests and meet the installation requirements and the data analysis and reporting requirements specified in Performance Specification No. 3 and Performance Specification No. 4 of 40 CFR 60, Appendix B.

B. The system shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in 40 CFR 60, Appendix B. Each monitor shall be quality-assured in accordance with 40 CFR 60, Appendix F, Procedure 1.

C. The monitoring data shall be reduced to hourly average concentrations at least once every day. A minimum of four equally-spaced data points shall be used in calculating hourly averages, except for periods when the monitoring system is out of service. During any periods for which only partial data is available, at least two data points will be used to calculate any hourly average. The individual concentrations shall be reduced to units of the permit allowable emission rate in pounds/million BTU at least once every month.

D. The data from the CEMS will be used to demonstrate continuous compliance with the provisions of this permit. All cylinder gas audit exceedances of greater than ±15 percent accuracy and any CEMS downtime in excess of 48 hours shall be reported to the appropriate Regional Director. Supplemental stack concentration measurements may be required at the discretion of the appropriate Regional Director if the CEMS is inoperable for an extended time period.

(or)

7. In order to demonstrate continuous compliance with the permit limitations for CO from the cogeneration engines, the holder of this permit shall develop and implement a procedure for monitoring surrogate parameters as defined by previously conducted stack sampling which will correlate to CO emissions. The parameters to be monitored shall include the electrical production in MW and the manifold pressure for each side of the engine. The attached Figure 1 provided by 3M, Emission Rate of CO (lb/hr) vs. Electrical Production (MW), shall be the basis for calculating hourly emissions. Annual emissions will be calculated from the hourly averages on a 12-month rolling period to demonstrate compliance with the annual permit allowable.

RECORDKEEPING AND REPORTING REQUIREMENT

8. The holder of this permit shall record the date, quantity and sulfur content of all liquid fuels delivered, each period of engine operation on diesel fuel only and each period of boiler operation on No. 2 fuel oil. Records of operating hours for each unit fired only on liquid fuel shall be totaled on a monthly basis. A rolling 12-month total of hours of operation of each of the two engines and the boiler while firing only diesel shall be maintained to demonstrate compliance with the hourly limitation contained in the maximum allowable emission rates table. All records shall be maintained for at least two years and made available on request to representatives of the TACB or any local air pollution program having jurisdiction.

SPECIAL CONDITIONS OF PERMIT

9. The Permittee shall comply with the requirements delineated within the October 24, 1990 correspondence from Mr. Robert M. Short of the United States Department of the Interior, Fish and Wildlife Service, to Mr. Norm Thomas of the U. S. Environmental Protection Agency attached hereto and incorporated by reference.

Revised_____

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permits No. 9904 and PSD-TX-674M-1

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. 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 * lb/hr	TPY
Case I: Natural Gas Firing				
1	8386 Horsepower Dual-fuel Generator Engine (4)	VOC	12.90	57.0
		NOx	37.00	162.1
		SO2	1.64	7.2
		PM	2.00	8.8
		CO	39.30	172.0
2	8386 Horsepower Dual-fuel Generator Engine (4)	VOC	12.90	57.0
		NOx	37.00	162.1
		SO2	1.64	7.2
		PM	2.00	8.8
		CO	39.30	172.0
3	52 MMBtu/hr Boiler	VOC	0.20	0.9
		NOx	5.20	23.0
		SO2	0.04	0.2
		PM	0.50	2.3
		CO	3.50	15.4
Case II: Oil Firing				
1	8386 Horsepower Dual - Fuel Generator Engine	VOC	7.40	1.9
		NOx	203.00	51.0
		SO2	29.30	7.4
		PM	7.50	1.9
		CO	5.50	1.4
2	8386 Horsepower Dual - Fuel Generator Engine	VOC	7.40	1.9
		NOx	203.00	51.0
		SO2	29.30	7.4
		PM	7.50	1.9
		CO	5.50	1.4
3	52 MMBtu/hr Boiler (5)	VOC	0.30	<0.1
		NOx	6.40	1.6
		SO2	25.40	6.4
		PM	0.70	0.2
		CO	3.0	0.8

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(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) PM - particulate matter
VOC - volatile organic compounds as defined in General Rule 101.1
NOx - total oxides of nitrogen
SO2 - sulfur dioxide
CO - carbon monoxide
(4)95 percent of heat input from natural gas and 5 percent from diesel oil.
(5) 50.46 MMBtu/hr heat input maximum firing fuel oil.

*Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Case I:

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year 8,760

Case II:

Hrs/day Days/week Weeks/year or Hrs/year 504

Revised