PREVENTION OF SIGNIFICANT DETERIORATION PERMIT
FOR GREENHOUSE GAS EMISSIONS
ISSUED PURSUANT TO THE REQUIREMENTS AT 40 CFR § 52.21

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6

PSD PERMIT NUMBER: PSD-TX-1352-GHG

PERMITTEE: M & G Resins USA, L.L.C.
450 Gears Rd Ste 240
Houston, Texas 77067-4513

FACILITY NAME: PET Plant

FACILITY LOCATION: 7001 Joe Fulton Intl Trade Corridor, Suite 100
Corpus Christi, TX 78409

Pursuant to the provisions of the Clean Air Act (CAA), Subchapter I, Part C (42 U.S.C. Section 7470, et. Seq.), and the Code of Federal Regulations (CFR) Title 40, Section 52.21, and the Federal Implementation Plan at 40 CFR § 52.2305 (effective May 1, 2011 and published at 76 FR 25178), the U.S. Environmental Protection Agency, Region 6 is issuing a Prevention of Significant Deterioration (PSD) permit to M & G Resins USA, L.L.C. (M&G Resins) for Greenhouse Gas (GHG) emissions. The Permit for the PET Plant applies to the construction of a plant consisting of a polyethylene terephthalate plant (PET Plant) consisting of a terephthalic acid (PTA) unit, PET unit, and associated equipment in Nueces County, Texas.

M&G Resins is authorized to construct a new PET Plant as described herein, in accordance with the permit application (and plans submitted with the permit application), the federal PSD regulations at 40 CFR § 52.21, and other terms and conditions set forth in this PSD permit in conjunction with the corresponding Texas Commission on Environmental Quality (TCEQ) PSD permit No. PSD-TX-1352. Failure to comply with any condition or term set forth in this PSD Permit may result in enforcement action pursuant to Section 113 of the Clean Air Act (CAA). This PSD Permit does not relieve M&G Resins of the responsibility to comply with any other applicable provisions of the CAA (including applicable implementing regulations in 40 CFR Parts 51, 52, 60, 61, 72 through 75, and 98) or other federal and state requirements (including the state PSD program that remains under approval at 40 CFR § 52.2303).

In accordance with 40 CFR §124.15(b), this PSD Permit becomes effective 30 days after the service of notice of this final decision unless review is requested on the permit pursuant to 40 CFR §124.19.

_____ _____

Wren Stenger, Director — Date
Multimedia Planning and Permitting Division

M&G Resins USA, L.L.C. PET Plant (PSD-TX-1352-GHG)
Prevention of Significant Deterioration Permit
For Greenhouse Gas Emissions
Draft Permit Conditions

PROJECT DESCRIPTION

The permit allows M&G to construct a new polyethylene terephthalate (PET) production plant. The new PET plant will consist of a new polyethylene terephthalate unit and a new terephthalic acid (PTA) unit. As part of the same project, PSD permit PSD-TX-1354-GHG authorizes construction of a utility plant support facility, supplying either combined heat and power or steam only.

The new PET production plant, once constructed, is estimated to have a PET production capacity of approximately 1.323 million short tons per year.

EQUIPMENT LIST

The following equipment is subject to this GHG PSD permit.

FIN	EPN	Description
E7-A E7-B E7-C E7-D	E7-A E7-B E7-C E7-D	Four HTF (Heat Transfer Fluid) Heaters. These are 142 MMBtu/hr heat input devices firing either biogas, waste gas, natural gas, or a mixture thereof.
FLARE	FLARE	Biogas Flare natural gas fuel for pilot used to flare biogas when heaters are not available.
E1 E2	E1 E2	Two RTOs (Regenerative Thermal Oxidizers) natural gas fired, 18MMbtu/hr combusting PTA plant waste gas.
E85-A E85-B	E85-A E85-B	Two Emergency Diesel Generators, limited to 100 hrs per year use for testing and other purposes as described in 40 CFR 63 Subpart ZZZZ.
E87-A E87-B	E87-A E87-B	Two Fire Water Pump Diesel Engines limited to 100 hrs per year use for testing and other purposes as described in 40 CFR 63 Subpart ZZZZ.
FUG-PTA FUG-PET	FUG-PTA FUG-PET	Fugitive equipment leaks from pipe and other equipment, primarily from natural gas fuel system supply.

I. GENERAL PERMIT CONDITIONS

A. PERMIT EXPIRATION

As provided in 40 CFR §52.21(r), this PSD Permit shall become invalid if construction:

1. is not commenced (as defined in 40 CFR §52.21(b)(9)) within 18 months after the approval takes effect; or

2. is discontinued for a period of 18 months or more; or

3. is not completed within a reasonable time.

Pursuant to 40 CFR §52.21(r), EPA may extend the 18-month period upon a written satisfactory showing that an extension is justified.

B. PERMIT NOTIFICATION REQUIREMENTS

Permittee shall notify EPA Region 6 in writing or by electronic mail of the:

1. date construction is commenced, postmarked within 30 days of such date;

2. actual date of initial startup, as defined in 40 CFR §60.2, postmarked within 15 days of such date; and

3. date upon which initial performance tests will commence, in accordance with the provisions of Section VI, postmarked not less than 30 days prior to such date. Notification may be provided with the submittal of the performance test protocol required pursuant to Condition VI.C.

C. FACILITY OPERATION

At all times, including periods of startup, shutdown, and maintenance, Permittee shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA, which may include, but is not limited to, monitoring results, review of operating maintenance procedures and inspection of the facility.

D. MALFUNCTION REPORTING

1. Permittee shall notify EPA by mail within 48 hours following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in GHG emissions above the allowable emission limits or a violation of the exhaust gas temperature limit stated in Sections II and III of this permit.

2. Within 10 days of the restoration of normal operations after any failure described in condition I.D.1., Permittee shall provide a written supplement to the initial notification that includes a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Section II and III, and the methods utilized to mitigate emissions and restore normal operations.

3. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or any law or regulation such malfunction may cause.

E. RIGHT OF ENTRY

EPA authorized representatives, upon the presentation of credentials, shall be permitted:

1. to enter the premises where the facility is located or where any records are required to be kept under the terms and conditions of this PSD Permit;

2. during normal business hours, to have access to and to copy any records required to be kept under the terms and conditions of this PSD Permit;

3. to inspect any equipment, operation, or method subject to requirements in this PSD Permit; and,

4. to sample materials and emissions from the source(s).

F. TRANSFER OF OWNERSHIP

In the event of any changes in control or ownership of the facilities to be constructed, this PSD Permit shall be binding on all subsequent owners and operators. Permittee shall notify the succeeding owner and operator of the existence of the PSD Permit and its conditions by letter; a copy of the letter shall be forwarded to EPA Region 6 within thirty days of the letter signature.

G. SEVERABILITY

The provisions of this PSD Permit are severable, and, if any provision of the PSD Permit is held invalid, the remainder of this PSD Permit shall not be affected.

H. ADHERENCE TO APPLICATION AND COMPLIANCE WITH OTHER ENVIRONMENTAL LAWS

Permittee shall construct this project in compliance with this PSD Permit, the application on which this permit is based, the corresponding TCEQ PSD permits for the project and all other applicable federal, state, and local air quality regulations. This PSD permit does not release the Permittee from any liability for compliance with other applicable federal, state and local environmental laws and regulations, including the Clean Air Act.

I. ACRONYMS AND ABBREVIATIONS

API	American Petroleum Institute
BACT	Best Available Control Technology
CAA	Clean Air Act
CC	Carbon Content
CCS	Carbon Capture and Sequestration
CHP	Combined Heat and Power
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CH_4	Methane
CO_2	Carbon Dioxide
CO_{2e}	Carbon Dioxide Equivalent
CT	Combustion Turbine
DLNB	Dry Low-NO_x Burner
dscf	Dry Standard Cubic Foot EF Emission Factor
EPN	Emission Point Number
FIN	Facility Identification Number
Fc	Carbon Dioxide-Based Fuel Factor
FR	Federal Register
GCV	Gross Calorific Value
GHG	Greenhouse Gas
gr	Grains
GWP	Global Warming Potential
HRSG	Heat Recovery Steam Generator
HHV	High Heating Value
hr	Hour
lb	Pound
LDAR	Leak Detection and Repair
MMBtu	Million British Thermal Units
MSS	Maintenance, Start-up and Shutdown
N_2O	Nitrous Oxides
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PSD	Prevention of Significant Deterioration
QA/QC	Quality Assurance and/or Quality Control
SCFH	Standard Cubic Feet per Hour
SCR	Selective Catalytic Reduction
SF_6	Sulfur Hexafluoride
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TPY	Tons per Year
USC	United States Code
VOC	Volatile Organic Compound

II. Annual Emission Limits

Table 1 M&G PET Plant Annual Emissions and BACT Summary

FIN	EPN	Description	GHG Mass Basis		TPY [1,2,3] CO_2e	BACT Requirements
			GHG	TPY		
E7-A[4]	E7-A	HTF Heater	CO_2	72,622	72,622	Limit the heat CO_2 heat input factor to 116.9 lb CO_2/MMBtu and the exhaust gas temperature maximum average to 320°F, both 12-month rolling averages. See permit condition III.A.6
			CH_4	1.37	34.25	
			N_2O	0.14	41.72	
E7-B[4]	E7-B	HTF Heater	CO_2	72,622	72,622	
			CH_4	1.37	34.25	
			N_2O	0.14	41.72	
E7-C[4]	E7-C	HTF Heater	CO_2	72,622	72,622	
			CH_4	1.37	34.25	
			N_2O	0.14	41.72	
E7-D[4]	E7-D	HTF Heater	CO_2	72,622	72,622	
			CH_4	1.37	34.25	
			N_2O	0.14	41.72	
E1[5]	E1	RTO 1	CO_2	63,598	63,598	Maintain a minimum combustion temperature as determined by initial compliance testing and limit natural gas firing to no more than 18MMBtu/hr on a rolling 12-month basis. See permit condition III.C.
			CH_4	83	2,079	
			N_2O	0.56	166.88	
E2[5]	E2	RTO 2	CO_2	63,598	63,598	
			CH_4	83	2,079	
			N_2O	0.56	166.88	
FLARE[6]	FLARE	Biogas Flare-Flaring including nat gas pilot	CO_2	8,942	8,942	Good combustion and maintenance practices. See permit condition III.B
			CH_4	13.60	340.00	
			N_2O	0.09	26.52	
E85-A	E85-A	Emergency Diesel Generator	CO_2	2,577	2,577	Low annual capacity factor and annual routine maintenance as prescribed by NSPS. See permit condition III.D.
			CH_4	0.1	2.5	
			N_2O	0.02	5.96	
E85-B	E85-B	Emergency Diesel Generator	CO_2	2,577	2,577	Low annual capacity factor and annual routine maintenance as prescribed by NSPS. See permit condition III.D.
			CH_4	0.1	2.5	
			N_2O	0.02	5.96	
E87-A	E87-A	Fire Water Pump Diesel Generator	CO_2	248	248	Low annual capacity factor and annual routine maintenance as prescribed by NSPS. See permit condition III.E.
			CH_4	0.01	0.25	
			N_2O	0.002	0.596	
E87-B	E87-B	Fire Water Pump Diesel Generator	CO_2	248	248	Low annual capacity factor and annual routine maintenance as prescribed by NSPS. See permit condition III.E.
			CH_4	0.01	0.25	
			N_2O	0.002	0.596	
FUGPTA[7]	FUGPTA	Combined Plant Fugitives	CO_2	--	--	Implementation of LDAR/AVO program. See permit condition III.F.
FUGPET[7]	FUGPET		CH_4	--	--	
Totals			**CO_2**	432,946	432,946	
			CH_4	193	4,825	
			N_2O	2	396	
			CO2e		438,273	

Table 1. Annual Emission Limits notes

1. Compliance with the annual emission limits (tons per year) is based on a 12-month, rolling total and are not to be exceeded for any emissions unit.
2. The TPY emission limits specified in this table are not to be exceeded for this facility and include emissions from the facility during all operations and include MSS activities.
3. Global Warming Potentials (GWP): CO_2=1, CH_4 = 25, N_2O = 298
4. Includes the products of combustion of firing biogas and waste gas either as fuel or as part of the combustion air fed to the heaters. The maximum amount of waste gas to be fired will result in emissions of the following GHG: 9,581 tpy CO_2, 0.21 tpy CH_4 and 0.02 tpy N_2O.
5. Includes the products of combustion of firing natural gas as supplemental fuel. The maximum amount of natural gas to be fired will result in emissions of the following GHG: 9,103 tpy CO_2, 0.17 tpy CH4 and 0.02 tpy N_2O.
6. Includes the products of combustion of firing natural gas as a pilot and firing methane rich biogas, when biogas cannot be routed to the HTF heaters. The natural gas for the pilot results in the following products of combustion: GHG: 31tpy CO_2, 0.01 tpy CH_4 and 0.02 tpy N_2O. Note that if biogas is routed to the flare, it will not be routed to the HTF Heaters. Monitoring will be used to assure compliance.
7. Fugitive process emissions limitations from EPNs FUG-PTA and FUG-PET are estimates only, compliance with which is determined by the proper implementation of the AVO workpractice standard. Estimates include approximately 0.72 tpy CO_2 and 20.27 tpy CH_4, which equals approximately 507.47 tpy CO_2e for each fugitive source, or 1014.94 tpy CO_2e combined.

III. SPECIAL PERMIT CONDITIONS

A. HTF (Heat Transfer Fluid) Heaters (EPNs: E7-A, E7-B, E7-C and E7-D) Work Practice Standards, Operational Requirements, and Monitoring

1. The HTF Heaters shall combust pipeline quality natural gas, process gas from the PET Unit or waste water treatment plant (WWTP) generated biogas; contributions of combustibles to the combustion air from the PTA unit waste streams shall also be permitted.
2. The HTF Heaters shall have fuel metering and the Permittee shall:
    a. Measure and record the fuel flow rate by type using an operational non-resettable elapsed flow meter. A computer that collects, sums, and stores electronic data from continuous fuel flow meters is an acceptable totalizer.
    b. Record the total fuel combusted monthly, subtotaled by type.
    c. Records of the fuel GCV by type shall be maintained for a minimum period of five years. Upon request, Permittee shall provide a sample and/or analysis of the fuel that is fired in any unit covered by this permit at the time of the request, or shall allow a sample to be taken by EPA for analysis.
    d. Establish the rate and quantity of waste gas contribution to combustion air to the products of combustion by gas analysis on an annual basis, and its contribution to the maximum allowable emissions limits established in Table 1, which may not be exceeded and limits all products of combustion for GHG.
3. Permittee shall calibrate and perform a preventative maintenance check of the fuel gas flow meters and document annually.
4. Each HTF Heater shall not exceed a maximum firing rate of 142 MMBtu/hr (HHV, 1-hr average), including any contribution from waste gas used as combustion air. CO_2 lb per MMBtu heat input shall be limited to 116.9 lb CO_2/MMBtu on a 12-month rolling average basis.
5. Excess oxygen in the exhaust gas shall be monitored continuously and recorded to ensure the levels stay between 1-5% on an hourly average basis.
6. Thermal efficiency of the HTF Heaters shall be demonstrated by continuously monitoring and recording the inlet and exhaust gas temperatures of each heater. Exhaust stack temperatures will be limited to 320° F, averaged on a 365-day rolling average basis. The temperature monitors shall be calibrated on an annual basis to meet the accuracy specifications: temperature monitor accuracy shall be ±2.0% at absolute temperature.
7. Compliance with the Annual Emission Limit shall be demonstrated on a 12-month total, rolling monthly, calculated in accordance with equation C-5 found in 40 CFR §98.33(a)(3)(iii), and shall include the contribution, if any, from waste gas used as combustion air.

B. Biogas Flare (EPN: FLARE) Work Practice Standards, Operational Requirements, and Monitoring

1. The biogas flare (EPN: FLARE) shall have a minimum Destruction and Removal Efficiency (DRE) of 98% for VOCs and 99% for methane based on compliance with condition 2 below.
2. The flare shall be designed and operated in accordance with 40 CFR 60.18 including specifications of minimum heating value of the waste gas, maximum tip velocity, and while the flare is operating, continuously monitor pilots for presence of flame by thermocouple or equivalent. An infrared monitor is considered equivalent to a thermocouple for flame monitoring purposes.
3. The biogas flare shall combust pipeline-quality natural gas in the flare pilots. The flare may combust the biogas ordinarily routed to the heaters as fuel when the heaters are unable to control the biogas so generated. Biogas may be combusted either as fuel in the heaters, or during MSS, in the flare, but not to both simultaneously.
4. CO_2 emissions are to be calculated using methods found in 40 CFR § 98.253(b). CH_4 and N_2O emissions are calculated using equations Y-4 and Y-5 as found in 40 CFR Part 98 Subpart Y. GHG emissions are to be determine monthly.
5. The nature and quantity of materials routed to the flare, either as natural gas, or as waste gas to be controlled by the flare shall be determined continuously. The equipment so used shall be operated and maintained in accordance with 40 CFR §98.254, as appropriate.

C. Regenerative Thermal Oxidizers (RTOs), (EPNs: E1 and E2) Work Practice Standards, Operational Requirements, and Monitoring

1. The regenerative thermal oxidizers (RTOs) may combust pipeline quality natural gas and/or process waste gases vented from the PTA Unit.
2. The RTOs shall have an initial stack test to verify destruction and removal efficiency (DRE) of at least 98+% for VOCs and CO in the outlet, and at least 99% for methane. If the flow of vented gases to the RTOs exceed the flow rate established during testing by 10% or greater, additional sampling may be required by TCEQ or EPA.
3. For burner combustion, natural gas fuel usage (scf) shall be recorded using an operational, non-resettable elapsed flow meter at the RTOs. A computer that collects, sums, and stores electronic data from continuous fuel flow meters is an acceptable totalizer. The flow rate of the fuel gas combusted, as well as the specific heat content values shall be continuously measured and recorded using fuel flow meters at the RTOs in conjunction with fuel sampling and analysis. A computer that collects, sums, and stores electronic data from continuous fuel flow meters is an acceptable totalizer. The combined total emissions of the combustion of natural gas and waste gas shall be limited by the emissions limitations established in Table 1.

4. Waste gas will be sampled and analyzed at least quarterly for composition. The sampled data will be used, along with the data of natural gas usage in the same time frame to calculate GHG emissions to show compliance with the limits specified in Table 1.
5. Permittee shall calculate CO_2 emissions, on a monthly basis, using equation C-5 consistent with 40 CFR § 98.33(a)(3)(iii), with results converted to units of the standards required in Table 1.
6. Periodic maintenance and/or inspections will help maintain the efficiency of the regenerative thermal oxidizers and shall be performed at a minimum annually or more often as recommended by the manufacturer specifications or equivalent.
7. The Permittee shall maintain the combustion temperature above the one-hour average temperature maintained in the initial stack test, as required by the TCEQ NSR Permit No. 108466, based on the minimum chamber temperature on a 15-minute average. Prior to the stack test, the minimum 15-minute average combustion temperature will be no less than 1,400 ºF (760 ºC). Continuous temperature monitoring and recording of the RTOs will ensure proper operation.
8. The Permittee shall install and maintain a temperature recording device with an accuracy of ±2.5ºC or ±0.75 percent of the temperature being measured expressed in degrees Celsius.

D. Emergency Diesel Generators (EPNs: E85-A and E85-B) Work Practice Standards, Operational Requirements, and Monitoring

1. The Permittee shall limit the operation of the Emergency Diesel Generators to no more than 100 hours per 12-month rolling average each in order to perform maintenance checks and readiness tests and select non-emergency operation as specified in MACT ZZZZ.

2. The Permittee shall use engines that meet the requirements of New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines 40 CFR Part 60 Subpart IIII, and shall perform all annual maintenance as required by the applicable requirement of 40 CFR Part 60, Subpart IIII and 40 CFR Part 63, Subpart ZZZZ.

E. Fire Water Pump Diesel Engines (EPNs: E87-A and E87-B) Work Practice Standards, Operational Requirements, and Monitoring

1. The Permittee shall limit the operation of the Fire Water Pump Diesel Engines to no more than 100 hours per 12-month rolling average each in order to perform maintenance checks and readiness tests and select non-emergency operation as specified in MACT ZZZZ.

2. The Permittee shall use engines that meet the requirements of New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines 40 CFR Part 60 Subpart IIII, and shall perform all annual maintenance as required by the applicable requirement of 40 CFR Part 60, Subpart IIII and 40 CFR Part 63, Subpart ZZZZ.

F. Combined Plant Fugitives (EPNs: FUGPTA and FUGPET) Work Practice Standards, Operational Requirements, and Monitoring

1. The Permittee shall implement an auditory, visual, and olfactory (AVO) method for detecting leaks in equipment in methane or natural gas service and fugitive emission of methane from process lines not in VOC service but containing methane.

2. The Permittee shall implement the TCEQ 28VHP leak detection and repair (LDAR) program for fugitive emissions of methane for process lines in VOC service (defined as >10wt% VOC) in lieu of AVO monitored if required to do so by a TCEQ issued PSD criteria pollutant permit.

3. AVO monitoring shall be performed weekly.

IV. Recordkeeping and Reporting

1. In order to demonstrate compliance with the GHG emission limits in Table 1, the Permittee shall maintain the following parameters on a calendar month basis:

    a. Records of operating hours for air emission sources listed in Table 1;
    b. Records of the usage of pipeline quality natural gas, gas being combusted in the HTF Heaters (either as fuel or as part of combustion air) and in the biogas flare, measured in accordance with the Special Conditions in Section III of this permit;
    c. The fuel usage for the RTOs and waste gas combusted in the RTOs and biogas flare, using continuous fuel flow monitors (a group of equipment can utilize a common fuel flow meter, as long as actual fuel usage is allocated to the individual equipment based upon actual operating hours and maximum firing rate) A computer that collects, sums, and stores electronic data from continuous fuel flow meters is an acceptable totalizer; and,
    d. Semi-annual fuel sampling for natural gas, daily fuel sampling of blended fuel gas, or other frequencies as allowed by 40 CFR § 98.34(b)(3) or other frequencies allowed by this permit. Vendor analysis of supplied fuel is an acceptable alternative to site specific sampling.

2. For the EPNs listed in Table 1 and as required by this permit, the Permittee shall maintain records of the following for GHG emissions from the Equipment List (excluding fugitives): all records or reports pertaining to significant maintenance performed; duration of startup, shutdown; the initial startup period for the emission units; malfunctions; all records relating to performance tests, calibrations, checks, and monitoring of combustion equipment; duration of an inoperative monitoring device and emission units with the required corresponding emission data; and all other information required by this permit recorded in a permanent form suitable for inspection. These records may be maintained in electronic databases. The records must be retained for not less than five years following the date of such measurements, maintenance, reports, and/or records.

3. Permittee shall maintain records of all GHG emission units and CO_2 emission certification tests, and monitoring and compliance information required by this permit.

4. Permittee shall maintain records and submit a written report of all excess emissions to EPA semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator or authorized representative, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. The report is due on the 30th day following the end of each semi-annual period and shall include the following:
    a. Time intervals, data and magnitude of the excess emissions, the nature and cause (if known), corrective actions taken and preventive measures adopted;
    b. Applicable time and date of each period during which the monitoring equipment was inoperative (monitoring down-time) while equipment was operating;
    c. A statement in the report of a negative declaration; that is; a statement when no excess emissions occurred or when the monitoring equipment has not been inoperative, repaired or adjusted;
    d. Any failure to conduct any required source testing, monitoring, or other compliance activities; and,
    e. Any violation of limitations on operation.

5. Excess emissions shall be defined as any period in which the facility emissions exceed a maximum emission limit set forth in this permit, a malfunction occurs of an emission unit listed in the Equipment List that results in excess GHG emissions, or any other unauthorized GHG emissions occur.

6. Excess emissions indicated by GHG emission source certification testing or compliance monitoring shall be considered violations of the applicable emission limit for the purpose of this permit.

7. Instruments and monitoring systems required by this PSD permit shall have a 95% on-stream time on a 12-month rolling basis.

8. All records required by this PSD Permit shall be retained for not less than 5 years following the date of such measurements, maintenance, and reporting.

V. Initial Performance Testing Requirements:

A. The Permittee shall perform stack sampling and other testing to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Heat Transfer Fluid (HTF) Heaters (EPNs: E7-A, E7-B, E7-C and E7-D) and the Regenerative Thermal Oxidizers (RTOs) (EPNs: E1 and E2) to determine the initial compliance with the CO_2 emission limits established in this permit. Sampling shall be conducted in accordance with 40 CFR § 60.8 and EPA Method 3a or 3b for the concentration of CO_2.

    1. Multiply the CO_2 hourly average emission rate determined under maximum operating test conditions by 8,760 hours.

2. If the above calculated CO_2 emission total does not exceed the tons per year (TPY) specified on Table 1, no compliance strategy needs to be developed.
3. If the above calculated CO_2 emission total exceeds the tons per year (TPY) specified in Table 1, the facility shall;

    a. Document the exceedance in the test report; and
    b. Explain within the report how the facility will assure compliance with the CO_2 emission limit listed in Table 1.

B. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility, performance tests(s) must be conducted and a written report of the performance testing results furnished to the EPA. Additional sampling may be required by TCEQ or EPA.

C. Permittee shall submit a performance test protocol to EPA no later than 30 days prior to the test to allow review of the test plan and to arrange for an observer to be present at the test. The performance test shall be conducted in accordance with the submitted protocol, and any changes required by EPA.

D. The Heat Transfer Fluid Heaters (EPNs: E7-A, E7-B, E7-C and E7-D) and the Regenerative Thermal Oxidizers (EPNs: E1 and E2) shall operate at representative production rates and temperatures during stack emission testing, with the fuel being fired clearly included in the test results. Ordinarily, this will mean firing the heaters on biogas fuel supplemented as needed with natural gas, and for the RTOs, operating at normal conditions with waste gas providing the primary fuel and, if needed, natural gas as supplemental fuel.

E. Performance testing must be conducted using flow rates that are comparable to the normal operating flow rates.

F. Waste gas sampling shall be conducted in accordance with 40 CFR Part 98.

F. Stack testing of the Regenerative Thermal Oxidizers (EPNs: E1 and E2) will establish minimum combustion temperature for the RTOs. Stack testing will be performed initially and within 120 days of a process flow changes as identified in III.C.2. The permittee shall provide EPA with a copy of the stack testing results.

H. Performance tests must be conducted under such conditions to ensure representative performance of the affected facility. The owner or operator must make available to the EPA such records as may be necessary to determine the conditions of the performance tests.

I. The owner or operator must provide the EPA at least 30 days prior notice of any performance test required by this permit, except as specified under other subparts, to afford the EPA the opportunity to have an observer present and/or to attend a pre-test meeting. If there is a delay in the original test date, the facility must provide at least 7 days prior notice of the rescheduled date of the performance test unless EPA approves an

earlier rescheduled date.

J. The owner or operator shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to this facility,
2. Safe sampling platform(s),
3. Safe access to sampling platform(s), and
4. Utilities for sampling and testing equipment.

K. Unless otherwise specified, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For purposes of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply.

L. Emissions testing, as outlined above, shall be performed every five years, plus or minus 6 months, of when the previous performance test was performed to verify continued performance at permitted emission limits.

VI. Agency Notifications

Permittee shall submit GHG permit applications, permit amendments, and other applicable permit information to:

Multimedia Planning and Permitting Division
EPA Region 6
1445 Ross Avenue (6 PD-R)
Dallas, TX 75202
Email: Group R6AirPermits@EPA.gov

Permittee shall submit a copy of all compliance and enforcement correspondence as required by this Approval to Construct to:

Compliance Assurance and Enforcement Division
EPA Region 6
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