Louisiana Department of Environmental Quality
Office of Environmental Services

STATEMENT OF BASIS
For
Activity Number: PER20060007
Permit No. 0560-00002-V1

Cameron Meadows Gas Plant
Agency Interest No. 26858
Williams Field Services Company
Johnsons Bayou, Cameron Parish, Louisiana

I. APPLICANT

Company

Williams Field Services Company
2800 Post Oak Boulevard
Houston, Texas 77056

Facility

Cameron Meadows Gas Plant
5526 Gulf Beach Highway 108, Johnsons Bayou, Cameron Parish, Louisiana
UTM Coordinates: 438.26 kilometers East and 3292.62 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

The Cameron Meadows Gas Plant is a natural gas processing facility consisting of two processing trains – the Cameron cryogenic plant and the relocated Sea Robin II plant. The facility uses a turbo expander extraction process to condense liquefiable products from the incoming gas. The extracted liquid is amine-treated to remove CO_2 and then routed to a centralized fractionation facility. The residue or sales gas is compressed and transported offsite via pipeline.

The gas plant is operating under Permit 0560-00002-V1, dated August 8, 2002.

III. PROPOSED PERMIT / PROJECT INFORMATION

Proposed Permit

A Part 70 operating permit application and Emission Inventory Questionnaire dated November 9, 2006, as well as additional information dated January 12 and January 19, 2007 were submitted requesting a Part 70 operating permit renewal.

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, and in the local newspaper. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List. The application and proposed permit were submitted to the Cameron Parish Library. The proposed permit was submitted to US EPA Region VI. All comments will be considered prior to the final permit decision.

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Project description

Williams Field Services Company requested a Part 70 operating permit renewal for the plant. The process flare which was permitted but never been constructed will be deleted from the permit. The Cold Flare and several sources that are no longer in operation were removed from the permit. Two replacement generators will be included in this permit. Emissions from the plant were recalculated based on updated emissions factors and actual operating conditions.

Permitted Air Emissions

Permitted emissions from the unit in tons per year are as follows:

Pollutant	Permitted	Proposed	Change
PM_{10}	14.45	15.80	+ 1.35
SO_2	6.17	6.60	+ 0.43
NO_X	715.36	845.37	+ 130.01
CO	316.37	394.94	+ 78.57
VOC, total	43.32	112.59	+ 69.27

Prevention of Significant Deterioration (PSD) Applicability

Net emissions of the criteria pollutants from the project will not increase more than their PSD significance levels. Therefore, PSD analysis was not required. NO_X and CO emissions from the starting air compressor and two fire pump engines are above the limits of Permit PSD-LA-555. Operating rates of four compressor turbines are also increased above the maximum allowed in the same PSD permit. Because the emission increases are less than the significance level, the Title V permit was used to modify the PSD permit. All requirements of Permit PSD-LA-555 were included in the Title V permit.

Maximum Achievable Control Technology (MACT) requirements

Emissions of Class I and Class II Toxic Air Pollutants (TAP) from the amine sweetening unit are controlled by the thermal oxidizer which was determined as MACT. Upon the installation of the thermal oxidizer, the facility was reclassified as a minor source of TAP.

Air Modeling Analysis

Emissions from these units are not expected to cause or to contribute to any National Ambient Air Quality Standards (NAAQS) or Ambient Air Standards (AAS) exceedances.

Dispersion Model Used: None

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the proposed Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the proposed Part 70 permit. The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permit.

IV. PERMIT SHIELDS

The Permit does not include any Permit Shields

V. PERIODIC MONITORING

The Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permit.

VI. APLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS

ID No:	Requirement	Status	Citation	Explanation
EQT001, EQT002 EQT010, EQT011 EQT013 - EQT019	LAC 33:III.1503.C. Emission Standards for Sulfur Dioxide	Exempt	LAC 33:III.1503.C	SO_2 emissions < 250 tons/year
	LAC 33:III.1511 CEM for SO_2	Exempt	LAC 33:III.1511.A	SO_2 emissions < 100 tons/year
EQT003	LAC 33:III.1503.C. Emission Standards for Sulfur Dioxide	Exempt	LAC 33:III.1503.C	SO_2 emissions < 250 tons/year
	LAC 33:III.1511 CEM for SO_2	Exempt	LAC 33:III.1511.A	SO_2 emissions < 100 tons/year
	40 CFR 60 Subpart Dc	Does not apply	40 CFR 60.40c(a)	No modification after June 9, 1989

ID No:	Requirement	Status	Citation	Explanation
EQT004	LAC 33:III.1503.C. Standards for SO2	Exempt	LAC 33:III.1503.C	SO_2 emissions < 250 tons/year
	LAC 33:III.1511 CEM for SO_2	Exempt	LAC 33:III.1511.A	SO_2 emissions < 100 tons/year
	NSPS Subpart GG for turbines	Does not apply	40 CFR 60.330(b)	The turbine was constructed in 1970
EQT005, EQT009	LAC 33:III.2103 for VOC tanks	Exempt	LAC 33:III.2103.G.1	Existing storage tanks in Cameron Parish
	40 CFR 63 Subpart K	Does not apply	40 CFR 60.110(c)	The tanks were constructed in 1971
EQT006, EQT007	LAC 33:III.2103 for VOC tanks	Does not apply	LAC 33:III.2103.A	Vapor Pressure < 1.5 psia
	40 CFR 63 Subpart K	Does not apply	40 CFR 60.110(c)	Volume < 40,000 gallons
EQT008, EQT012	LAC 33:III.2103 for VOC tanks	Exempt	LAC 33:III.2103.G.2 LAC 33:III.2103.G.1	Existing tank in Cameron Parish and stores crude oil or condensate prior to lease custody transfer
	40 CFR 63 Subpart K, Ka	Does not apply	40 CFR 60.110(b) 60.110a(b)	The tank stores crude oil or condensate prior to lease custody transfer
FUG001	40 CFR 60 Subpart KKK for fugitives from gas plants	Does not apply	40 CFR 60	No construction/ modification after January 20, 1984
GRP005	40 CFR 60 Subpart LLL	Does not apply	40 CFR 60.640	Do not have an amine sweetening unit to recover sulfur compounds
The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section X of the permit				

VII. STREAMLINED REQUIREMENTS

The Permit does not include any streamlined requirements.

VIII. GLOSSARY

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of

production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

CAM - Compliance Assurance Monitoring rule – A federal air regulation under 40 CFR Part 64

Carbon Black - A black colloidal substance consisting wholly or principally of amorphous carbon and used to make pigments and ink.

Carbon Monoxide (CO) – (Carbon monoxide) a colorless, odorless gas produced by incomplete combustion of any carbonaceous (gasoline, natural gas, coal, oil, etc.) material.
Cooling Tower – A cooling system used in industry to cool hot water (by partial evaporation) before reusing it as a coolant.

Continuous Emission Monitoring System (CEMS) – The total combined equipment and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent.

Cyclone – A control device that uses centrifugal force to separate particulate matter from the carrier gas stream.

Duct Burner – A device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Federally Enforceable Specific Condition - A federally enforceable specific condition written to limit the potential to Emit (PTE) of a source that is permanent, quantifiable, and practically enforceable. In order to meet these requirements, the draft permit containing the federally enforceable specific condition must be placed on public notice and include the following conditions:

- A clear statement of the operational limitation or condition which limits the source's potential to emit;
- Recordkeeping requirements related to the operational limitation or condition;
- A requirement that these records be made available for inspection by LDEQ personnel;
- A requirement to report for the previous calendar year.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not

required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Heat Recovery Steam Generator (HRSG) – A steam generator that recovers exhaust heat from a gas turbine, and provides economizing and steam generation surfaces.

Hydrogen Sulfide (H_2S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NESHAP - National Emission Standards for Hazardous Air Pollutants –Air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

NSPS - New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: $\geq$10 tons per year of any toxic air pollutant; $\geq$25 tons of total toxic air pollutants; and $\geq$100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM_{10}- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.