PROPOSED

PERMIT to OPERATE 9136-R5
and
PART 70 OPERATING PERMIT 9136

E&B Natural Resources Management Corporation
South Cuyama Gas Plant 10

South Cuyama State Designated Oilfield
3 miles southwest of New Cuyama

OPERATOR

E&B Natural Resources Management Corporation

OWNERSHIP

E&B Natural Resources Management Corporation

Santa Barbara County
Air Pollution Control District

(APCD Permit to Operate)
(Part 70 Operating Permit)

TABLE OF CONTENTS

1.0 INTRODUCTION 1

1.1 PURPOSE 1
1.2 FACILITY OVERVIEW 1
1.3 EMISSION SOURCES 3
1.4 EMISSION CONTROL OVERVIEW 4
1.5 OFFSETS/EMISSION REDUCTION CREDIT OVERVIEW 4
1.6 PART 70 OPERATING PERMIT OVERVIEW 4

2.0 PROCESS DESCRIPTION 6

2.1 PROCESS SUMMARY 6
2.2 SUPPORT SYSTEMS 7
2.3 MAINTENANCE/DEGREASING ACTIVITIES 7
2.4 PLANNED PROCESS TURNAROUNDS 7
2.5 OTHER PROCESSES 7
2.6 DETAILED PROCESS EQUIPMENT LISTING 7

3.0 REGULATORY REVIEW 8

3.1 RULE EXEMPTIONS CLAIMED 8
3.2 COMPLIANCE WITH APPLICABLE FEDERAL RULES AND REGULATIONS 8
3.3 COMPLIANCE WITH APPLICABLE STATE RULES AND REGULATIONS 9
3.4 COMPLIANCE WITH APPLICABLE LOCAL RULES AND REGULATIONS 9
3.5 COMPLIANCE HISTORY 12

4.0 ENGINEERING ANALYSIS 18

4.1 GENERAL 18
4.2 STATIONARY COMBUSTION SOURCES 18
4.3 FUGITIVE HYDROCARBON SOURCES 19
4.4 OTHER EMISSION SOURCES 19
4.5 VAPOR RECOVERY/CONTROL SYSTEMS 19
4.6 BACT/NSPS/NESHAP/MACT 19
4.7 CEMS/PROCESS MONITORING/CAM 20
4.8 SOURCE TESTING/SAMPLING 20
4.9 PART 70 ENGINEERING REVIEW: HAZARDOUS AIR POLLUTANT EMISSIONS 21

5.0 EMISSIONS 22

5.1 GENERAL 22
5.2 PERMITTED EMISSION LIMITS - EMISSION UNITS 22
5.3 PERMITTED EMISSION LIMITS - FACILITY TOTALS 23
5.4 PART 70: FEDERAL POTENTIAL TO EMIT FOR THE FACILITY 23
5.5 PART 70: HAZARDOUS AIR POLLUTANT EMISSIONS FOR THE FACILITY 23
5.6 EXEMPT EMISSION SOURCES/PART 70 INSIGNIFICANT EMISSIONS 23
5.7 NET EMISSIONS INCREASE CALCULATION 23

6.0 AIR QUALITY IMPACT ANALYSES 32

6.1 MODELING 32
6.2 INCREMENTS 32
6.3 MONITORING 32
6.4 HEALTH RISK ASSESSMENT 32

7.0 CAP CONSISTENCY, OFFSET REQUIREMENTS AND ERCS 33

7.1 GENERAL 33

7.2 CLEAN AIR PLAN 33
7.3 OFFSET REQUIREMENTS 33
7.4 EMISSION REDUCTION CREDITS 33

8.0 LEAD AGENCY PERMIT CONSISTENCY 34

9.0 PERMIT CONDITIONS 34

9.A STANDARD ADMINISTRATIVE CONDITIONS 34
A.1 Compliance with Permit Conditions 34
A.2 Emergency Provisions 35
A.3 Compliance Plan 35
A.4 Right of Entry 35
A.5 Severability 35
A.6 Permit Life 35
A.7 Payment of Fees 35
A.8 Prompt Reporting of Deviations 36
A.9 Federally-Enforceable Conditions 36
A.10 Reporting Requirements/Compliance Certification 36
A.11 Recordkeeping Requirements 36
A.12 Conditions for Permit Reopening 36
9.B. GENERIC CONDITIONS 37
B.1 Circumvention (Rule 301) 37
B.2 Visible Emissions (Rule 302) 37
B.3 Nuisance (Rule 303) 38
B.4 Particulate Matter – Northern Zone (Rule 304) 38
B.5 Specific Contaminants (Rule 309) 38
B.6 Sulfur Content of Fuels (Rule 311) 38
B.7 Emergency Episode Plans (Rule 603) 38
B8 Adhesives and Sealants (Rule 353) 38
B.9 Emissions Of Oxides Of Nitrogen From Large Water Heaters And Small Boilers(Rule 360). 38
B.10 Small Boilers, Steam Generators, and Process Heaters (Rule 361) 38
B.11 Oil and Natural Gas Production MACT 39
B.12 CARB Registered Portable Equipment 39
9.C EQUIPMENT SPECIFIC CONDITIONS 39
C.1 External Combustion Equipment 39
C.2 Fugitive Hydrocarbon Emissions Components 41
C.3 Flare Emissions 42
C.4 Semi-Annual Monitoring/Compliance Verification Reports 43
C.5 Visible Emissions - Flare 44
C.6. Amine System Operational Restrictions 44
9.D APCD-ONLY CONDITIONS 44
D.1 Compliance with Permit Conditions 44
D.2 Condition Acceptance 44
D.3 Grounds for Revocation 44
D.4 Reimbursement of Costs 44
D.5 Access to Records and Facilities 45
D.6 Compliance 45
D.7 Consistency with Analysis 45
D.8 Consistency with Federal, State and Local Permits 45
D.9 Fugitive Hydrocarbon Emissions 45
D.10 Abrasive Blasting Equipment 45
D.11 Permitted Equipment 45
D.12 Mass Emission Limitations 45

D.13 Operation/Throughput Limitations *45*
D.14 Process Stream Sampling and Analysis *46*
D.15 Process Monitoring Systems - Operation and Maintenance *46*
D.16 Recordkeeping *46*
D.17 Odorous Organic Sulfides (Rule 310) *46*
D.18 Annual Compliance Verification Reports *46*
D.19 Documents Incorporated by Reference *46*

LIST OF FIGURES and TABLES

TABLE/ FIGURE **PAGE**

FIGURE 1.1 - LOCATION MAP FOR THE SOUTH CUYAMA STATIONARY SOURCE 2
TABLE 1.1 - PERMIT HISTORY 3
TABLE 3.1 - GENERIC FEDERALLY-ENFORCEABLE APCD RULES 13
TABLE 3.2 - UNIT-SPECIFIC FEDERALLY-ENFORCEABLE APCD RULES 14
TABLE 3.3 - NON-FEDERALLY-ENFORCEABLE APCD RULES 15
TABLE 3.4 - ADOPTION DATES OF APCD RULES APPLICABLE AT ISSUANCE OF PERMIT 15
TABLE 5.0 - STATIONARY SOURCE NET EMISSIONS INCREASE 24
TABLE 5.1-1 - EQUIPMENT DESCRIPTION 25
TABLE 5.1-2 - EMISSION FACTORS 26
TABLE 5.1-3 - HOURLY AND DAILY EMISSIONS 27
TABLE 5.1-4 - QUARTERLY AND ANNUAL EMISSIONS 28
TABLE 5.2 - TOTAL PERMITTED EMISSIONS 29
TABLE 5.3 - FEDERAL POTENTIAL TO EMIT 30
TABLE 5.4 - HAZARDOUS AIR POLLUTION EMISSIONS 31

ABBREVIATIONS/ACRONYMS

AOS	Alternative Operating Scenario
AP-42	USEPA's *Compilation of Emission Factors*
APCD	Santa Barbara County Air Pollution Control District
API	American Petroleum Institute
ASTM	American Society for Testing Materials
BACT	Best Available Control Technology
bpd	barrels per day (1 barrel = 42 gallons)
CAM	compliance assurance monitoring
CEMS	continuous emissions monitoring
dscf	dry standard cubic foot
E&B	E&B Natural Resources Management Corporation
EU	emission unit
°F	degree Fahrenheit
gal	gallon
gr	grain
Hallador	Hallador Production Company, the previous operator
HAP	hazardous air pollutant (as defined by CAAA, Section 112(b))
H_2S	hydrogen sulfide
I&M	inspection & maintenance
k	kilo (thousand)
l	liter
lb	pound
lbs/day	pounds per day
lbs/hr	pounds per hour
LACT	Lease Automatic Custody Transfer
LPG	liquid petroleum gas
M	mega (million)
MACT	Maximum Achievable Control Technology
MM	million
MW	molecular weight
NEI	net emissions increase
NG	natural gas
NGL	natural gas liquids
NSPS	New Source Performance Standards
O_2	oxygen
ppm(vd or w)	parts per million (volume dry or weight)
psia	pounds per square inch absolute
psig	pounds per square inch gauge
PRD	pressure relief device
PTO	Permit to Operate
RACT	Reasonably Available Control Technology
ROC	reactive organic compounds, same as "VOC" as used in this permit
RVP	Reid vapor pressure
scf	standard cubic foot
scfd (or scfm)	standard cubic feet per day (or per minute)
SIP	State Implementation Plan
STP	standard temperature (60°F) and pressure (29.92 inches of mercury)
THC	Total hydrocarbons
tpy, TPY	tons per year
TVP	true vapor pressure
USEPA	United States Environmental Protection Agency
VE	visible emissions
VRS	vapor recovery system

1.0 Introduction

1.1 Purpose

General: The Santa Barbara County Air Pollution Control District (APCD) is responsible for implementing all applicable federal, state and local air pollution requirements which affect any stationary source of air pollution in Santa Barbara County. The federal requirements include regulations listed in the Code of Federal Regulations: 40 CFR Parts 50, 51, 52, 55, 61, 63, 68, 70 and 82. The State regulations may be found in the California Health & Safety Code, Division 26, Section 39000 et seq. The applicable local regulations can be found in the APCD's Rules and Regulations. This is a combined permitting action that covers both the Federal Part 70 permit (*Part 70 Operating Permit 9136*) as well as the State Operating Permit (*Permit to Operate 9136-R5*).

The County is currently designated as a nonattainment area for the state ozone and PM_{10} ambient air quality standards.

Part 70 Permitting: The initial Part 70 permit for the E&B Natural Resources Management Corporation's (E&B) Gas Plant 10 was issued January 28, 1998 in accordance with the requirements of the APCD's Part 70 operating permit program. This permit is the third renewal of the Part 70 permit, and may include additional applicable requirements and associated compliance assurance conditions. Also, this permit incorporates any Part 70 minor modifications since the last renewal, and is being issued as a combined Part 70 and APCD reevaluation permit. Gas Plant 10 is a part of the E&B stationary source, which is a major source for VOC[1], NO_X and CO. Conditions listed in this permit are based on federally-enforceable rules and requirements. Sections 9.A, 9.B and 9.C of this permit are enforceable by the APCD, the USEPA and the public since these sections are federally-enforceable under Part 70. Where any reference contained in Sections 9.A, 9.B or 9.C refers to any other part of this permit, that part of the permit referred to is federally-enforceable.

Pursuant to the stated aims of Title V of the CAAA of 1990 (i.e., the Part 70 operating permit program), this permit has been designed to meet two objectives. First, compliance with all conditions in this permit would ensure compliance with all federally-enforceable requirements for the facility. Second, the permit would be a comprehensive document to be used as a reference by the permittee, the regulatory agencies and the public to assess compliance.

1.2 Facility Overview

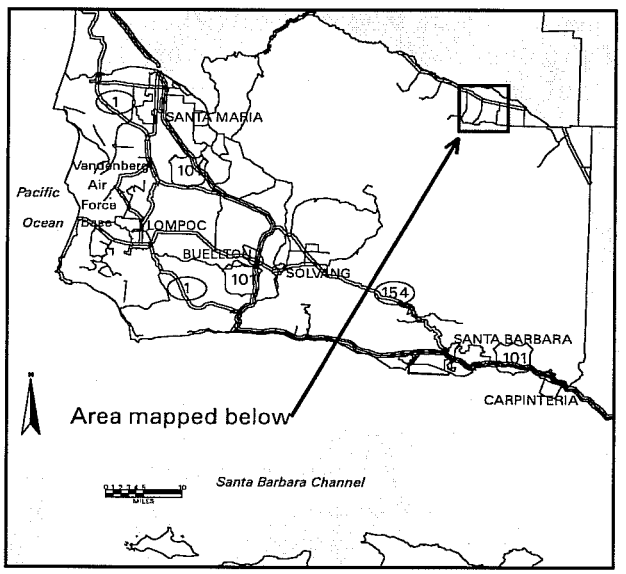
1.2.1 Facility Overview: E&B Natural Resources Management Corporation (E&B) is the sole owner and operator of the South Cuyama Stationary Source, which includes Gas Plant 10.

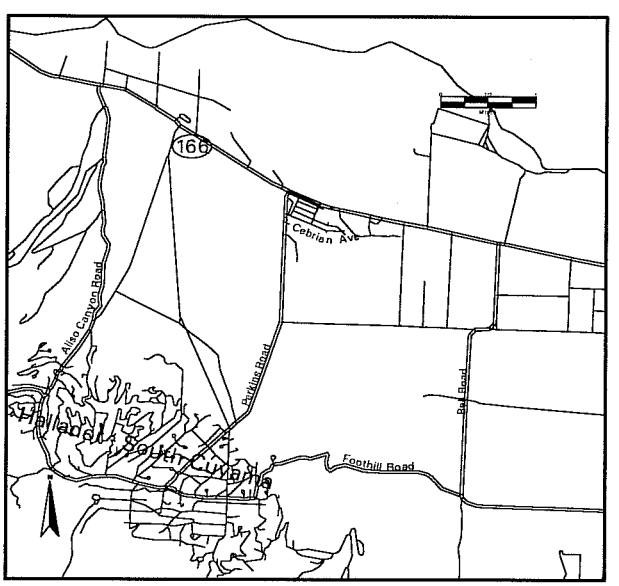
E&B Natural Resources Management Corporation
34740 Merced Avenue
Bakersfield, CA 93308

[1] VOC as defined in Regulation XIII has the same meaning as reactive organic compounds as defined in Rule 102. "ROC" is used in this document, but where used in the context of the Part 70 regulation, it means "VOC".

The South Cuyama Stationary Source, located at the South Cuyama State Designated Oilfield, is 3 miles southwest of the town of New Cuyama. For APCD regulatory purposes, the facility location is in the Northern Zone of Santa Barbara County[2]. Figure 1.1 shows the location of the facility.

Figure 1.1 - Location Map for the South Cuyama Stationary Source





[2] APCD Rule 102, Definition: "Northern Zone"

The E&B-South Cuyama Stationary Source (SSID 1073) was constructed in the late 1940's and consists of the following facilities:

- South Cuyama Unit (FID 1074)
- Gas Plant 10 (FID 3202)
- Internal Combustion Engines (FID 8916)

The source consists of oil and gas wells and tank batteries where oil is separated from gas and water. The oil is sold and shipped via pipeline from the lease. Produced water is reinjected into the formation. The gas plant removes sulfur compounds, carbon dioxide and water from the gas and strips out the NGLs. The NGLs are piped to Tank Battery #6 and blended with the produced oil. Dry gas is used for fuel, with residual gas sold to the utility or reinjected into one of the gas injection wells.

1.2.2 Facility Permit/New Source Review Overview: Although a gas plant was in place at this location prior to New Source Review, the entire gas plant was modified under an authority to construct issued in January 1990. The entire facility was subject to New Source Review requirements and therefore, the permit conditions are considered federally-enforceable. Table 1.1 provides a summary of the permits issued for this facility since April 2002.

Table 1.1 – Permit History

PERMIT TYPE	ISSUE DATE	DESCRIPTION
Permit to Operate 9136-R3	04/03/02	Facility operating permit.
Authority to Construct 10914	01/29/03	Operation of a skid mounted amine carbon dioxide (CO_2) removal system to bring sales gas quality to utility standards.
Part 70 Minor Revision 11006 and Permit to Operate 10914	11/10/03	Convert ATC 10914 to Permit to Operate and Part 70 Minor Revision.
Transfer of Ownership 9136-01	10/20/04	Ownership transferred from Hallador Production Company to E&B Natural Resources Management Corporation.
Permit to Operate 9136-R4	06/14/2005	Facility operating permit.

1.3 Emission Sources

The emissions from Gas Plant 10 come from two glycol reboilers, an emergency flare and fugitive emissions from components such as, such as compressor seals, pressure relief valves, process-line valves, and flanges. Section 4 of the permit provides the APCD's engineering analysis of these emission sources. Section 5 of the permit describes the allowable emissions from each permitted emissions unit and also lists the potential emissions from non-permitted emission units.

The emission sources include Natural Gas Liquid processing equipment consisting of the following:

- Propane refrigeration system
- Hydrogen sulfide removal equipment
- Vapor recovery unit
- Flare
- Other equipment such as loading racks, storage tanks, scrubbers, pumps, and compressors
- Fugitive emission sources including valves, fittings, flanges, and other components in gaseous and liquid service

A list of all permitted equipment is provided in Section 10.4.

1.4 Emission Control Overview

Air quality emission controls are utilized at Gas Plant 10 Unit for a number of emission units. The emission controls employed at the facility include:

- Vapor Recovery System serving the glycol reboiler and the amine reboiler.
- An Inspection & Maintenance program for detecting and repairing leaks of hydrocarbons from piping components, i.e., valves, flanges and seals, consistent with the requirements of the APCD Rule 331.
- Flare Minimization Plan Consistent with APCD Rule 359
- Compliance with fuel sulfur content levels per APCD Rule 311 by using gas with a sulfur content of 796 ppm to reduce SO_X emissions.

1.5 Offsets/Emission Reduction Credit Overview

Decision of Issuance (DOI) 0033 created NO_X, ROC, and CO ERCs from the electrification of the Clark #12 HRA-6T integral gas compressor engine. Refer to Section 1.5 of PTO 8010 for more details. There have been no offsets required for projects at the South Cuyama Unit.

1.6 Part 70 Operating Permit Overview

1.6.1 Federally-enforceable Requirements: All federally-enforceable requirements are listed in 40 CFR Part 70.2 (*Definitions*) under "applicable requirements." These include all SIP-approved APCD Rules, all conditions in the APCD-issued Authority to Construct permits, and all conditions applicable to major sources under federally promulgated rules and regulations. All these requirements are enforceable by the public under CAAA. (*See Tables 3.1 and 3.2 for a list of federally-enforceable requirements)*

1.6.2 Insignificant Emissions Units: Insignificant emission units are defined under APCD Rule 1301 as any regulated air pollutant emitted from the unit, excluding HAPs, that are less than 2 tons per year based on the unit's potential to emit and any HAP regulated under section 112(g) of the Clean Air Act that does not exceed 0.5 ton per year based on the unit's potential to emit. Insignificant activities must be listed in the Part 70 application with supporting calculations. Applicable requirements may apply to insignificant units. (*See Attachment 10.4*)

1.6.3 Federal Potential to Emit: The federal potential to emit (PTE) of a stationary source does not include fugitive emissions of any pollutant, unless the source is: (1) subject to a federal NSPS/NESHAP requirement, or (2) included in the 29-category source list specified in 40 CFR 51.166 or 52.21. Gas Plant 10 is subject to the provisions of 40 CFR 60 Subpart KKK. Therefore, fugitive emissions are included in the federal PTE. The federal PTE does include all emissions from any insignificant emissions units. *(See Section 5.4 for the federal PTE for this source)*

1.6.4 Permit Shield: The operator of a major source may be granted a shield: (a) specifically stipulating any federally-enforceable conditions that are no longer applicable to the source and (b) stating the reasons for such non-applicability. The permit shield must be based on a request from the source and its detailed review by the APCD. Permit shields cannot be indiscriminately granted with respect to all federal requirements. E&B has not made a request for a permit shield.

1.6.5 Alternate Operating Scenarios: A major source may be permitted to operate under different operating scenarios, if appropriate descriptions of such scenarios are included in its Part 70 permit application and if such operations are allowed under federally-enforceable rules. E&B made no request for permitted alternative operating scenarios.

1.6.6 Compliance Certification: Part 70 permit holders must certify compliance with all applicable federally-enforceable requirements including permit conditions. Such certification must accompany each Part 70 permit application; and, be re-submitted annually on or before March 1st or on a more frequent schedule specified in the permit. A "responsible official" of the owner/operator company whose name and address is listed prominently in the Part 70 permit signs each certification. *(See Section 1.6.9 below)*

1.6.7 Permit Reopening: Part 70 permits are re-opened and revised if the source becomes subject to a new rule or new permit conditions are necessary to ensure compliance with existing rules. The permits are also re-opened if they contain a material mistake or the emission limitations or other conditions are based on inaccurate permit application data.

1.6.8 MACT/HAPs: Part 70 permits also regulate emission of HAPs from major sources through the imposition of maximum achievable control technology (MACT), where applicable. The federal PTE for HAP emissions from a source is computed to determine MACT or any other rule applicability.

1.6.9 Responsible Official: The designated responsible official and his mailing address is:

Mr. Steve Layton, President
E&B Natural Resources Management Corporation
34740 Merced Avenue
Bakersfield, CA 93308

2.0 Process Description

2.1 Process Summary

Gas Plant 10 serves E&B's South Cuyama Unit oilfields. The plant removes hydrogen sulfide, carbon dioxide, water and liquid hydrocarbons from the produced gas stream and provides dry natural gas. The dry gas stream is used as fuel, re-injected, and/or sold. The natural gas liquids (NGLs) are piped to Tank Battery #6 and blended with the produced oil. During emergencies, gas can be re-injected or flared.

Hydrogen Sulfide Removal: The inlet gas stream is sweetened in the hydrogen sulfide removal unit and compressed prior to entering the inlet hydrocarbon and water knockout vessel.

Water Removal: Ethylene glycol is injected in the hydrocarbon stream after sweetening and the water in the gas is absorbed on contact with the ethylene glycol. The ethylene glycol/hydrocarbon stream is cooled and is routed to the ethylene glycol separator. The ethylene glycol is separated and routed to the field gas fired glycol reboiler where the absorbed water is removed. The dehydrated ethylene glycol is reinjected in the hydrocarbon stream. Regenerator stack vapors are recovered, compressed, and routed back into the gas handling system. The water recovered in the cooling stage of the compression is collected and routed to the water disposal system.

Carbon Dioxide Removal: Produced gas rich in carbon dioxide (CO_2) enters the inlet separator. Liquids that are collected by the separator are piped to an existing slop tank. The gas from the separator then enters the absorber, where it comes into contact with lean amine. The amine absorbs the CO_2 and a small amount of hydrocarbons and hydrogen sulfide from the gas stream. The gas that has been stripped of the CO_2 is piped from the absorber to E&B's existing LPG skid for removal of gas liquids.

The amine rich in CO_2 from the absorber is piped to the flash tank, where any entrained gases are flashed off. The flash gas is sent to the Gas Plant 10 vapor recovery system, which feeds into the high pressure side of the field fuel system. The rich amine stream is then processed through the charcoal and particulate sock filters before entering the amine still, which is connected to the amine reboiler.

Based on a produced gas flow of 2.0 MMscf/day into the system, the discharge of gasses from the amine still are anticipated to be 50,400 scf/day, consisting of 91% carbon dioxide, 8% water, 0.26% hydrocarbons, and 117 ppmv H_2S. These gasses are sent to the field fuel system, where they are mixed with produced gas and burned in internal combustion engines. The lean amine is returned to the absorber.

The dry gas from Gas Plant 10 is piped to the fuel system, reinjected and/or piped to the sales gas line. The sales gas is compressed by the Clark compressors. The liquid hydrocarbon stream from the ethylene glycol separator enters the stabilizer and is routed to Tank Farm #6 where it is blended with the produced crude.

ROC Control - A vapor recovery/gas collection system collects ROC from the glycol reboiler and the amine reboiler with an efficiency exceeding 95-percent. Fugitive ROC emissions from

valves, flanges and piping are reduced through the implementation of an APCD Rule 331-required inspection and maintenance (I&M) program.

2.2 Support Systems

Support units at Gas Plant 10 consist of the following:

2.2.1 Vapor Recovery Systems: Gas Plant 10 includes a vapor recovery system that collects vapors from the glycol reboiler. Recovered vapors are routed back to the plant inlet.

2.2.2 Flare: Gas Plant 10 includes a flare for disposing of gas during planned gas plant turn-around and emergency process upsets. This flare is subject to APCD Rule 359. On May 11, 1995, the APCD approved a Flare Minimization Plan for Gas Plant 10.

2.3 Maintenance/Degreasing Activities

Pollutant emitting maintenance activities such as coatings, degreasing, and coating surface preparation associated with the E&B Stationary Source are included in the permit for the South Cuyama Unit (PTO 7250).

2.4 Planned Process Turnarounds

Maintenance of critical components is carried out according to the requirements of Rule 331 (*Fugitive Emissions Inspection and Maintenance*). E&B has not listed any emissions from planned process turnarounds that should be permitted.

2.5 Other Processes

2.5.2 Unplanned Activities/Emissions: E&B does not anticipate or foresee any circumstances that would require use of special equipment and result in excess emissions other than emergency flaring as noted in Section 2.2.2.

2.6 Detailed Process Equipment Listing

Refer Attachment 10.4 for a complete listing of all permitted equipment.

3.0 Regulatory Review

3.1 Rule Exemptions Claimed

- APCD Rule 202 (*Exemptions to Rule 201*): Rule 202.D.6 requires E&B to maintain a record of each *de minimis* change, which shall include emission calculations demonstrating that each physical change meets the criteria listed in the Rule. Such records shall be made available to the APCD upon request. As of February 26, 2008, the de minimis totals at the E&B South Cuyama Stationary Source are: 10.528 lbs ROC/day.

- APCD Rule 202 (Exemptions to Rule 201): The following equipment are exempt from the requirements to obtain an APCD permit. An exemption from permit, however, does not grant relief from any applicable prohibitory rule unless specifically exempted by that prohibitory rule. (see Attachment 10.4 of this permit for a complete equipment list.):

    - Abrasive Blasting Unit (Rule 202.H.3).
    - Storage of drums of lubrication oils (Rule 202.V.3).
    - Storage of various types of oils with initial boiling point 300° F or greater (Rule 202.V.1).
    - Painting and solvent use for maintenance activities (Rule 202.D.3).

- APCD Rule 321 (Solvent Cleaning Operations): Rule 321.B.4 exempts solvent wipe cleaning operations.

- APCD Rule 331 (Fugitive Emission Inspection and Maintenance): The following exemptions were applied for in E&B's Inspection and Maintenance Plan and approved by the APCD:

    - Rule 331.B.2.b for components buried below the ground.
    - Rule 331.B.4 for components that are unsafe to monitor.

- APCD Rule 343 (*Petroleum Storage Tank Degassing*): Rule 343 provides an exemption for pressure vessels operated with a normal working pressure of at least 15 psig without vapor loss to the atmosphere provided documentation is provided according to the record keeping and reporting requirements of the rule. In addition the rule provides an exemption for fixed roof tanks without vapor recovery.

3.2 Compliance with Applicable Federal Rules and Regulations

3.2.1 40 CFR Parts 51/52 {*New Source Review (Nonattainment Area Review and Prevention of Significant Deterioration)*}: Compliance with APCD Regulation VIII (*New Source Review*), ensures that future modifications to the facility will comply with these regulations.

3.2.2 40 CFR Part 60 {*New Source Performance Standards*:} the ROC fugitive emission components at the facility are subject to NSPS Subpart KKK (Equipment Leaks of VOC at Onshore Natural Gas Processing Plants), because of modifications carried under ATC 7214A as issued in 1990.

3.2.3 40 CFR Part 61 {*NESHAP*}: This facility is not currently subject to the provisions of this Subpart.

3.2.4 40 CFR Part 63 {*MACT*}: On June 17, 1999, EPA promulgated Subpart HH, a National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Oil and Natural Gas Production and Natural Gas Transmission and Storage. This facility qualifies as a Natural Gas Processing Plant per the MACT, however the previous operator submitted information in July 2000 indicating its source is exempt from sections 63.764 (c)(1) *Glycol Dehydration Units* and section 63.760 (b)(2) *NGL Storage Tanks* of the MACT. On October 20, 2000 the APCD issued a letter to Hallador agreeing with these exemptions.

3.2.5 40 CFR Part 64 {*Compliance Assurance Monitoring*}: This rule became effective on April 22, 1998. Compliance with this rule is required during the first permit renewal or the next significant permit revision for sources that had initial Part 70 applications deemed complete before April 22, 1998. This rule affects emission units at the source subject to a federally-enforceable emission limit or standard that uses a control device to comply with the emission standard, and either pre-control or post-control emissions exceed the Part 70 source emission thresholds. Compliance with this rule was evaluated and it was determined that no emission units at this facility are currently subject to CAM. All emission units at this facility have a pre-control emission potential less than 100 tons/year.

3.2.6 40 CFR Part 70 {*Operating Permits*}: This Subpart is applicable to Gas Plant 10. Table 3.1 lists the federally-enforceable APCD promulgated rules that are "generic" and apply to the Gas Plant. Table 3.2 lists the federally-enforceable APCD promulgated rules that are "unit-specific" that apply to Gas Plant 10. These tables are based on data available from the APCD's administrative files and from E&B's Part 70 Operating Permit renewal application filed on December 14, 2007. Table 3.4 includes the adoption dates of these rules.

In its Part 70 permit application 9570, E&B certified compliance with all existing APCD rules and permit conditions. This certification is also required of E&B semi-annually.

3.3 Compliance with Applicable State Rules and Regulations

3.3.1 Division 26. Air Resources {California Health & Safety Code}: The administrative provisions of the Health & Safety Code apply to this facility and will be enforced by the APCD. These provisions are APCD-enforceable only.

3.3.2 California Administrative Code Title 17 Sub-Chapter 6, Sections 92000 through 92530: These sections specify the standards by which abrasive blasting activities are governed throughout the State. All abrasive blasting activities at Gas Plant 10 are required to conform to these standards. Compliance will be assessed through onsite inspections. These standards are APCD-enforceable only. However, CAC Title 17 does not preempt enforcement of any SIP-approved rule that may be applicable to abrasive blasting activities.

3.4 Compliance with Applicable Local Rules and Regulations

3.4.1 Applicability Tables: In addition to Tables 3.1 and 3.2, Table 3.3 lists the non-federally-enforceable APCD promulgated rules that apply to Gas Plant 10. Table 3.4 lists the adoption dates of all rules applicable to this permit at the date of the permit's issuance.

3.4.2 Rules Requiring Further Discussion: During the last three years onsite inspections of this facility have taken place on a routine basis. This section provides a detailed discussion regarding the applicability of and compliance with certain rules.

APCD Rule 201 (*Permits Required*): De –permitted equipment listed in Attachment 10.4 has been removed from service and removed from permit as part of this re-evaluation. Any use of the de-permitted equipment listed in Attachment 10.4 is subject to Rule 201 and may be subject to NSR.

APCD Rule 210 (*Fees*): Pursuant to Rule 201.G, APCD permits are reevaluated every three years. This includes the re-issuance of the underlying permit to operate. Fees for this facility are recovered under the cost reimbursement provisions of this rule. This rule is not federally-enforceable.

APCD Rule 301 (*Circumvention*): This rule prohibits the concealment of any activity that would otherwise constitute a violation of Division 26 (Air Resources) of the California H&SC and the SBCAPCD rules and regulations. To the best of the APCD's knowledge, E&B is operating in compliance with this rule.

APCD Rule 302 (*Visible Emissions*): This rule prohibits the discharge from any single source any air contaminants for which a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade than a reading of 1 on the Ringlemann Chart or of such opacity to obscure an observer's view to a degree equal to or greater than a reading of 1 on the Ringelmann Chart. The flare is subject to this rule. Compliance will be assured by requiring visible emissions inspections of the flare per Condition 9.B.2

APCD Rule 303 (*Nuisance*): Rule 303 prohibits any source from discharging such quantities of air contaminants or other material in violation of Section 41700 of the Health and Safety Code which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety or any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. Compliance with this rule is assessed through the APCD's enforcement staff's complaint response program. There is no history of complaints regarding nuisances at this facility.

APCD Rule 304 (*Particulate Matter - Northern Zone*): A person shall not discharge into the atmosphere from any source particulate matter in excess of 0.3 grain per cubic foot of gas at standard conditions.

APCD Rule 309 (*Specific Contaminants*): Under Section "A", no source may discharge sulfur compounds and combustion contaminants in excess of 0.2-percent as SO_2 (by volume) and 0.3 gr/scf (at 12% CO_2) respectively. Sulfur emissions due to the combustion of gas with sulfur content less than 796 ppmv as S will comply with the SO_2 limit.

APCD Rule 310 (*Odorous Organic Compounds*): This rule prohibits the discharge of H_2S and organic sulfides that result in a ground level impact beyond the property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour.

APCD Rule 311 (*Sulfur Content of Fuels*): This rule limits the sulfur content of fuels combusted at the Gas Plant to 0.5% (by wt) for liquids fuels and 50 gr/100 scf (calculated as H_2S) {or 796 ppmvd} for gaseous fuels. Sulfur content (calculated as H_2S) of the gas used as fuel by E&B usually contains no more than 4 ppmvd. The untreated field gas is typically under 200 ppmvd. In addition, E&B is required to provide the APCD annually with measured data on sulfur content of fuel used, liquid or gaseous.

APCD Rule 317 (*Organic Solvent*): This rule sets specific prohibitions against the usage of both photochemically and non-photochemically reactive organic solvents (40 lb/day and 3,000 lb/day respectively). Solvents may be used at Gas Plant 10 during normal operations for degreasing by wipe cleaning and for use in paints and coatings in maintenance operations. There is the potential to exceed the limits under Section B.2 during significant surface coating activities. To demonstrate compliance with this rule, E&B is required to maintain detailed daily solvent usage records (along with the solvent's MSDS) and submit them annually to the APCD. See note below.

APCD Rule 322 (*Metal Surface Coating Thinner and Reducer*): This rule prohibits the use of photochemically reactive solvents for use as thinners or reducers in metal surface coatings. E&B is required to maintain records to ensure compliance with this rule. See note below.

APCD Rule 323 (*Architectural Coatings*): This rule sets standards for many types of architectural coatings. The primary coating standard that will apply to the Gas Plant is for Industrial Maintenance Coatings which has a limit of 340 grams ROC per liter of coating, as applied. E&B will be required to comply with the Administrative requirements under Section F for each container at the facility. See note below.

APCD Rule 324 (*Disposal and Evaporation of Solvents*): This rule prohibits any source from disposing more that one and a half gallons of any photochemically reactive solvent per day by means that will allow the evaporation of the solvent into the atmosphere. E&B will be required to maintain records to ensure compliance with this rule. See note below.

Note: APCD solvent rules (317, 322, 323, & 324) are applicable to the stationary source. The compliance requirements for these rules are contained in PTO 7250, and are applicable to the solvent use on equipment covered by this permit.

APCD Rule 325 (*Crude Oil Production and Separation*): This rule requires emissions of produced gas to be controlled at all times. Gas at Gas Plant 10 is sold or used within the facility for fuel, re-injected or flared. Therefore, E&B is in compliance with this rule.

APCD Rule 331 (*Fugitive Emissions Inspection and Maintenance*): The piping components and pumps in hydrocarbon service are subjected to the latest APCD-approved Inspection and Maintenance (I&M) program. The APCD approved the original Hallador Fugitive Emissions I&M Plan on January 21, 1993 and has approved subsequent updates.

Rule 353 (*Adhesives and Sealants*): This rule applies to the use of adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers. Compliance shall be based on site inspections.

Rule 360 (*Emissions Of Oxides Of Nitrogen From Large Water Heaters And Small Boilers*): This rule applies to any person who supplies, sells, offers for sale, installs, or solicits the installation of any new water heater, boiler, steam generator or process heater for use within the APCD with a rated heat input capacity greater than or equal to 75,000 Btu/hour up to and including 2,000,000 Btu/hour.

Rule 361 (*Small Boilers, Steam Generators, and Process Heaters*): This rule shall apply to any boiler, steam generator, and process heater with a rated heat input capacity of greater than 2 million British thermal unit per hour and less than 5 million British thermal unit per hour.

Rule 505 (*Breakdown Conditions*): This rule describes the procedures that E&B must follow when a breakdown condition occurs to any emissions unit associated with this facility. A breakdown condition is defined as an unforeseeable failure or malfunction of (1) any air pollution control equipment or related operating equipment which causes a violation of an emission limitation or restriction prescribed in the APCD Rules and Regulations, or by State law, or (2) any in-stack continuous monitoring equipment, provided such failure or malfunction:

a. Is not the result of neglect or disregard of any air pollution control law or rule or regulation;

b. Is not the result of an intentional or negligent act or omission on the part of the owner or operator;

c. Is not the result of improper maintenance;

d. Does not constitute a nuisance as defined in Section 41700 of the Health and Safety Code;

e. Is not a recurrent breakdown of the same equipment.

3.5 Compliance History

This section contains a summary of the compliance history for this facility and was obtained from documentation contained in the APCD's Administrative file.

This facility was inspected on a routine basis and found to be in compliance with APCD rules and permit conditions during each inspection with the exceptions noted below.

Violations: The table below lists the enforcement actions taken at this facility since E&B Resource Management took over operation of this facility in 2004:

VIOLATION TYPE	NUMBER	ISSUE DATE	DESCRIPTION OF VIOLATION
NOV	8435	10/07/2005	Operating a portable air compressor driven by a 29 BHP gasoline fired ICE without first obtaining APCD permit approval or CARB PERP certification.
NOV	8436	10/27/2005	Failing to control emissions of produced gas from the glycol reboiler still at all times using the permitted glycol reboiler VRU.
NOV	8559	06/14/2006	Exceeding the number of allowable major gas leaks from "other" components.

VIOLATION TYPE	NUMBER	ISSUE DATE	DESCRIPTION OF VIOLATION
NOV	8733	12/26/2006	Failing to maintain the flare automatic ignition system operational at all times in lieu of maintaining a continuous pilot flame to prevent the release of uncombusted gas to the atmosphere.

Table 3.1 - Generic Federally-Enforceable APCD Rules

Generic Requirements	Affected Emission Units	Basis for Applicability
RULE 101: Compliance by Existing Installations	All emission units	Emission of pollutants
RULE 102: Definitions	All emission units	Emission of pollutants
RULE 103: Severability	All emission units	Emission of pollutants
RULE 201: Permits Required	All emission units	Emission of pollutants
RULE 202: Exemptions to Rule 201	Applicable emission units, as listed in form 1302-H of the Part 70 application.	Insignificant activities/emissions, per size/rating/function
RULE 203: Transfer	All emission units	Change of ownership
RULE 204: Applications	All emission units	Addition of new equipment of modification to existing equipment.
RULE 205: Standards for Granting Permits	All emission units	Emission of pollutants
RULE 206: Conditional Approval of Authority to Construct or Permit to Operate	All emission units	Applicability of relevant Rules
RULE 207: Denial of Applications	All emission units	Applicability of relevant Rules
RULE 208: Action on Applications – Time Limits	All emission units. Not applicable to Part 70 permit applications.	Addition of new equipment of modification to existing equipment.
RULE 212: Emission Statements	All emission units	Administrative
RULE 301: Circumvention	All emission units	Any pollutant emission
RULE 302: Visible Emissions	All emission units	Particulate matter emissions
RULE 303: Nuisance	All emission units	Emissions that can injure, damage or offend.
RULE 304: Particulate matter – Northern Zone	Each PM Source	Emission of PM in effluent gas
RULE 309: Specific Contaminants	All emission units	Combustion contaminant emissions

Generic Requirements	Affected Emission Units	Basis for Applicability
RULE 311: Sulfur Content of Fuel	All combustion units	Use of fuel containing sulfur
RULE 317: Organic Solvents	Emission units using solvents	Solvent used in process operations.
RULE 321: Solvent Cleaning Operations	Emission units using solvents.	Solvent used in process operations.
RULE 322: Metal Surface Coating Thinner and Reducer	Emission units using solvents.	Solvent used in process operations.
RULE 323: Architectural Coatings	Paints used in maintenance and surface coating activities.	Application of architectural coatings.
RULE 324: Disposal and Evaporation of Solvents	Emission units using solvents.	Solvent used in process operations.
RULE 353: Adhesives and Sealants	Emission units using adhesives and solvents.	Adhesives and sealants used in process operations.
RULE 505.A, B1, D: Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
RULE 603: Emergency Episode Plans	Stationary sources with PTE greater than 100 tpy	E&B South Cuyama is a major source.
REGULATION VIII: New Source Review	All emission units	Addition of new equipment of modification to existing equipment. Applications to generate ERC Certificates.
REGULATION XIII (RULES 1301-1305): Part 70 Operating Permits	All emission units	E&B South Cuyama is a major source.

Table 3.2 - Unit-Specific Federally-Enforceable APCD Rules

Unit-Specific Requirements	Affected Emission Units	Basis for Applicability
RULE 325: Crude Oil Production and Separation	All equipment used to handle and process natural gas.	Equipment that handles produced gas.
RULE 331: Fugitive Emissions Inspection & Maintenance	All components (valves, flanges, seals, compressors and pumps) used to handle oil and gas:	Components emit fugitive ROCs.
RULE 359: Flares and Thermal Oxidizers	Flare	Flare is in operation at a gas plant related to oil and gas production.
Rule 360: Emissions of Oxides of Nitrogen From Large Water Heaters and Small Boilers	Water heaters, boilers, steam generators or process heaters with a rated heat input capacity	Any new equipment item covered by this rule must certify compliance with the rule

	greater than or equal to 75,000 Btu/hour up to and including 2,000,000 Btu/hour.	emission limits.

Table 3.3 - Non-Federally-Enforceable APCD Rules

Requirement	Affected Emission Units	Basis for Applicability
RULE 210: Fees	All emission units	Administrative
RULE 212: Emission Statements	All emission units	Administrative
RULE 310: Odorous Org. Sulfides	All emission units	Emission of organic sulfides
RULES 501-504: Variance Rules	All emission units	Administrative
RULE 505.B2, B3, C, E, F, G: Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
RULES 506-519: Variance Rules	All emission units	Administrative

Table 3.4 – Adoption Dates of APCD Rules Applicable at Issuance of Permit

Rule No.	Rule Name	Adoption Date
Rule 101	Compliance by Existing Installations: Conflicts	June 1981
Rule 102	Definitions	May 20, 1999
Rule 103	Severability	October 23, 1978
Rule 201	Permits Required	April 17, 1997
Rule 202	Exemptions to Rule 201	April 17, 1997
Rule 203	Transfer	April 17, 1997
Rule 204	Applications	April 17, 1997
Rule 205	Standards for Granting Permits	April 17, 1997
Rule 206	Conditional Approval of Authority to Construct or Permit to Operate	October 15, 1991
Rule 208	Action on Applications – Time Limits	April 17, 1997
Rule 212	Emission Statements	October 20, 1992
Rule 301	Circumvention	October 23, 1978
Rule 302	Visible Emissions	June 1981

Rule No.	Rule Name	Adoption Date
Rule 303	Nuisance	October 23, 1978
Rule 304	Particulate Matter – Northern Zone	October 23, 1978
Rule 309	Specific Contaminants	October 23, 1978
Rule 310	Odorous Organic Sulfides	October 23, 1978
Rule 311	Sulfur Content of Fuels	October 23, 1978
Rule 317	Organic Solvents	October 23, 1978
Rule 321	Solvent Cleaning Operations	September 18, 1997
Rule 322	Metal Surface Coating Thinner and Reducer	October 23, 1978
Rule 323	Architectural Coatings	November 15, 2001
Rule 324	Disposal and Evaporation of Solvents	October 23, 1978
Rule 325	Crude Oil Production and Separation	January 25, 1994
Rule 331	Fugitive Emissions Inspection and Maintenance	December 10, 1991
Rule 353	Adhesives and Sealants	August 19, 1999
Rule 359	Flares and Thermal Oxidizers	June 28, 1994
Rule 360	Emissions of Oxides of Nitrogen From Large Water Heaters and Small Boilers	October 17, 2002
Rule 361	Small Boilers, Steam Generators, and Process Heaters	January 17, 2008
Rule 505	Breakdown Conditions (Section A, B1 and D)	October 23, 1978
Rule 603	Emergency Episode Plans	June 15, 1981
Rule 801	New Source Review	April 17, 1997
Rule 802	Nonattainment Review	April 17, 1997
Rule 803	Prevention of Significant Deterioration	April 17, 1997
Rule 804	Emission Offsets	April 17, 1997
Rule 805	Air Quality Impact and Modeling	April 17, 1997
Rule 806	Emission Reduction Credits	April 17, 1997
Rule 901	New Source Performance Standards (NSPS)	May 16, 1996
Rule 1001	National Emission Standards for Hazardous Air Pollutants (NESHAPS)	October 23, 1993

Rule No.	Rule Name	Adoption Date
Rule 1301	General Information	January 18, 2001
Rule 1302	Permit Application	November 9, 1993
Rule 1303	Permits	January 18, 2001
Rule 1304	Issuance, Renewal, Modification and Reopening	January 18, 2001
Rule 1305	Enforcement	November 9, 1993

4.0 Engineering Analysis

4.1 General

The engineering analyses performed for this permit were limited to the review of:

- facility process flow diagrams
- emission factors and calculation methods for each emissions unit
- emission control equipment (including RACT, BACT, NSPS, NESHAP, MACT)
- emission source testing, sampling, CAM
- process monitors needed to ensure compliance

Unless noted otherwise, default ROC/THC reactivity profiles from the APCD's "*VOC/ROC Emission Factors and Reactivities for Common Source Types*" dated 7/13/98 (ver 1.1) was used to determine non-methane, non-ethane fraction of THC.

4.2 Stationary Combustion Sources

The only stationary combustion sources at Gas Plant 10 are two glycol reboilers and an emergency flare.

External Combustion Units: There are three external combustion units at Gas Plant 10, a 0.675 MMBtu/hr glycol reboiler and a 0.175 MMBtu/hr glycol reboiler and a 0.650 MMBtu/hr amine reboiler. These units are rated below the applicability threshold for Rule 342 emission standards.

The emission factors for the glycol reboilers are based on USEPA AP-42, Section 1.4 (November, 1995). The calculation methodology is the same for all the units and follows below (see also Section 10.1):

$$ER = [(EF \times SCFPP \times HHV) \div 10^6]$$

where: ER = emission rate (lb/period)
EF = pollutant specific emission factor (lb/MMBtu)
SCFPP = gas flow rate per operating period (scf/period)
HHV = gas higher heating values (1050 Btu/scf)

Flare: The flare is rated at 262.5 MMBtu/hr. The flare is subject to Rule 359 standards and E&B has an APCD approved Flare Minimization and Flare Volume Monitoring Plan in place. The emission tables include permitted emissions for planned flaring based on the target flare volumes from the Flare Minimization Plan. No emissions estimates were given for unplanned flaring. Therefore permitted emissions are zero for unplanned flaring events.

The emission factors for the flare are based on USEPA AP-42, Section 13.5. The calculation methodology is the same as shown above for the glycol reboilers. SO_X emissions are calculated on a mass balance basis assuming total sulfur content of 796 ppmv as H_2S.

4.3 Fugitive Hydrocarbon Sources

Emissions of reactive organic compounds from piping components (e.g., valves and connections), pumps, compressors and pressure relief devices have been quantified using emission factors pursuant to APCD P&P 6100.061 (*Determination of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities Through the Use of Facility Component Counts - Modified for Revised ROC Definition*).

The component leak-path count was taken from ATC 7214 and updated based on information supplied by the previous operator because the original ATC estimate was in error. The components are in Gas/Condensate service at this facility. The calculation methodology for the fugitive emissions is:

$$ER = [(EF \times CLP \div 24) \times (1 - CE) \times (HPP)]$$

where:
- ER = emission rate (lb/period)
- EF = ROC emission factor (lb/clp-day)
- CLP = component leak-path (clp)
- CE = control efficiency
- HPP = operating hours per time period (hrs/period)

An emission control efficiency of 80-percent is credited to all components that are safe to monitor (as defined per Rule 331) due to the implementation of an APCD-approved I&M program for leak detection and repair consistent with Rule 331 requirements. Unsafe to monitor components are not eligible to receive I&M control credit. For the purposes of this calculation, all components are assumed safe to monitor. Ongoing compliance is determined in the field by inspection with an organic vapor analyzer and verification of operator records.

4.4 Other Emission Sources

4.4.1 General Solvent Cleaning/Degreasing: Solvent usage (not used as thinners for surface coating) may occur at the facility as part of normal daily operations. The usage includes cold solvent degreasing. These emissions are included in PTO 7250.

4.4.2 Surface Coating: Surface coating operations typically include normal touch up activities. Entire facility painting programs are also performed. These emissions are included in PTO 7250.

4.4.3 Abrasive Blasting: Abrasive blasting with CARB certified sands may be performed as a preparation step prior to surface coating. These emissions are included in PTO 7250.

4.5 Vapor Recovery/Control Systems

The vapor recovery system includes all piping, valves, and flanges associated with the vapor recovery system. Vapors from the glycol reboiler are collected and routed back to the plant inlet.

4.6 BACT/NSPS/NESHAP/MACT

The fugitive components triggered best available control technology (BACT) during the 1990/1991 gas plant modification. Implementation of a Fugitive Inspection and Maintenance plan constituted BACT for that modification. Future modifications at the Gas Plant will be subject to New Source Review including BACT review.

In addition, as described in Section 3.2 Gas Plant 10 is subject to Subpart KKK of the New Source Performance Standards. No other emission units are subject to New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, or Maximum Achievable Control Technology requirements.

4.7 CEMS/Process Monitoring/CAM

4.7.1 CEMS: There are no CEMS at this facility.

4.7.2 Process Monitoring: Compliance with the permitted heat input limitations for the glycol reboilers is determined through the use of fuel use meters. Compliance with throughput limitations for natural gas is determined with gas throughput meters. Truck tickets are used to determine compliance with throughput limitations for NGL production and NGL loading. It is important that fuel use and throughput meters are well maintained and calibrated to ensure that the required accuracy and precision of the devices are within specifications. The meters shall be calibrated and maintained in good working order. To implement the calibration and maintenance requirements E&B shall take into consideration manufacturer recommended maintenance and calibration schedules. Where manufacturer guidance is not available, the recommendations of comparable equipment manufacturers and good engineering judgment shall be utilized. E&B has an approved Process Monitor Calibration and Maintenance Plan.

Compliance with total sulfur limits expressed as H_2S is determined with a H_2S gas analyzer equipped with a continuous recording chart and an alarm. The alarm is required to be set to less than 10 ppmv. E&B may rely on the H_2S gas analyzer as operated by Southern California Gas Company as specified in Section 9.C.1 of this permit.

Compliance with E&B's Flare Minimization Plan is determined through flare volume monitoring pursuant to E&B's Flare Volume Monitoring Plan.

4.7.3 CAM: Gas Plant 10 is not subject to the USEPA's Compliance Assurance Monitoring (CAM) rule (40 CFR 64) requirements because none of the equipment at the facility emits more that 100 tons/year of NO_X or ROC, or 100 tons/year of CO. This is based on both pre-control and post-control emissions.

4.8 Source Testing/Sampling

Source testing and sampling are required in order to ensure compliance with permitted emission limits, prohibitory rules, control measures and the assumptions that form the basis for issuing operating permits.

At a minimum, the process streams below are required to be sampled and analyzed on a periodic basis, per APCD Rules and standards:

- Heating Value of Gaseous Fuels: *Annual* analysis for heating content of fuel burned
- Fuel Gas: Daily H_2S Draeger tube tests when the Southern California Gas analyzer is down or registering alarm conditions and annual total sulfur analysis by ASTM D-1072 or other method approved by the APCD.

All sampling and analyses are required to be performed according to APCD approved procedures and methodologies. Typically, the appropriate ASTM methods are acceptable. It is important that all sampling and analysis be traceable by chain of custody procedures.

4.9 Part 70 Engineering Review: Hazardous Air Pollutant Emissions

Hazardous air pollutant emissions from the different categories of emission units at Gas Plant 10 are based on emission factors listed in the USEPA's *AP-42 (5th Ed., 11/95 & 6/97)* guideline volumes. Factors listed in *California Air Toxics Emission Factors (April, 1995), (CATEF)* have been used where the *AP-42* does not list the appropriate factors. Finally, if neither *AP-42* nor *CATEF* addresses the applicable HAP emission factors, the HAP emissions are computed based on USEPA's *Air Emission Species Manual, Vol.1 (VOC Species Profiles, 2nd.Ed., 2/90).*

Potential HAP emissions from each emissions unit at the plant are computed and listed in Section 5. The emission factors for each emission category are shown in Section 5.

5.0 Emissions

5.1 General

This permit is a reevaluation of Permit to Operate 9136-R4 and the third renewal of Part 70 Operating Permit 9136 (both issued on June 14, 2005).

Section 5.2 details the permitted emissions for each emissions unit. Section 5.3 details the overall permitted emissions for the facility based on reasonable worst-case scenarios using the potential-to-emit for each emissions unit. Section 5.4 provides the federal potential to emit calculation using the definition of potential to emit used in Rule 1301. Section 5.5 provides the estimated HAP emissions from the facility. Section 5.6 (if applicable) provides the estimated emissions from permit exempt equipment and also serves as the Part 70 list of insignificant emissions. Section 5.7 provides the net emissions increase calculation for the facility and the stationary source. The APCD uses a computer database to accurately track the emissions from a facility. Attachment 10.4 contains the APCD's documentation for the information entered into that database.

5.2 Permitted Emission Limits - Emission Units

Each emissions unit associated with the facility was analyzed to determine the potential-to-emit for the following pollutants:

- Nitrogen Oxides (NO_X) [3]
- Reactive Organic Compounds (ROC)
- Carbon Monoxide (CO)
- Sulfur Oxides (SO_X) [4]
- Particulate Matter (PM) [5]
- Particulate Matter smaller than 10 microns (PM_{10})

Permitted emissions are calculated for both short term (daily) and long term (annual) time periods. Section 4.0 (Engineering Analysis) provides a general discussion of the basic calculation methodologies and emission factors used. The reference documentation for the specific emission calculations, as well as detailed calculation spreadsheets, may be found in Section 4 and Attachments 10.1 and 10.2 respectively. Table 5.1-1 provides the basic operating characteristics. Table 5.1-2 provides the specific emission factors. Table 5.1-3 shows the permitted short-term and permitted long-term emissions for each unit or operation. In the table, the last column indicates whether the emission limits are federally-enforceable. Those emissions limits that are federally-enforceable are indicated by the symbol "FE". Those emissions limits that are APCD-only enforceable are indicated by the symbol "A".

---

[3] Calculated and reported as nitrogen dioxide (NO_2)

[4] Calculated and reported as sulfur dioxide (SO_2)

[5] Calculated and reported as all particulate matter smaller than 100 μm

5.3 Permitted Emission Limits - Facility Totals

The total potential-to-emit for all emission units associated with the facility were analyzed. This analysis looked at the reasonable worst-case operating scenarios for each operating period. The equipment operating in each of the scenarios are presented below. Unless otherwise specified, the operating characteristics defined in Table 5.1-1 for each emission unit are assumed. Table 5.2 shows the total permitted emissions for the facility.

5.4 Part 70: Federal Potential to Emit for the Facility

Table 5.3 lists the federal Part 70 potential to emit. All project emissions, except fugitive emissions, are counted in the federal definition of potential to emit. However, fugitives are counted in the Federal PTE if the facility is subject to any applicable NSPS or NESHAP requirement. Because Gas Plant 10 is subject to 40 CFR 60 Subpart KKK, fugitive emissions are included in the federal PTE calculation.

5.5 Part 70: Hazardous Air Pollutant Emissions for the Facility

Total emissions of hazardous air pollutants (HAP) are computed based on the factors listed in Table 5.4 for each type of emissions unit. Potential HAP emissions, based on the worst-case scenario listed in Section 5.3 above, are shown in table 5.4.

5.6 Exempt Emission Sources/Part 70 Insignificant Emissions

Equipment/activities exempt pursuant to Rule 202 include maintenance operations involving surface coating. This E&B Stationary Source includes the following APCD permit-exempt and Part 70 insignificant equipment with emissions: (Re: APCD Rule 202). A complete list of exempt equipment is included in Section 10.4 of this permit.

- Abrasive Blasting Unit (Section H.3)
- Storage of Drums of Lubrication Oils (Section V.3)
- Storage of various types of oils with Initial Boiling Point 300° F or greater (Section V.1)

In addition, such as maintenance operations using paints and coatings contribute to the facility emissions.

5.7 Net Emissions Increase Calculation

This stationary source's net emissions increases since November 15, 1990 (the day the federal Clean Air Act Amendments were adopted) are listed in Table 5.0. This emissions history is relevant for any future modifications.

Table 5.0
Stationary Source Net Emissions Increase

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
PTO 7250-R5 - Issued April 3, 2002						
lbs/day	0.00	7.80	0.00	0.00	0.00	0.00
tons/year	0.00	1.42	0.00	0.00	0.00	0.00
PTO 10849 - Issued August 18, 2003 - Replace Tanks and Increase Throughput at Tank Farm #6						
lbs/day	0.00	3.11	0.00	0.00	0.00	0.00
tons/year	0.00	0.56	0.00	0.00	0.00	0.00
PTO 10954 - Issued August 18, 2003 - Add NGLs to Crude Oil at Tank Farm #6						
lbs/day	0.00	10.04	0.00	0.00	0.00	0.00
tons/year	0.00	1.84	0.00	0.00	0.00	0.00
PTO 10914 - Issued November 10, 2003 - A New Amine Unit at Gas Plant 10						
lbs/day	1.53	17.80	1.29	0.21	0.12	0.12
tons/year	0.28	3.25	0.23	0.04	0.02	0.02
PTO 11136 - Issued July 8, 2004 - Upgrade Gas Station Vapor Recovery						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 11129 - Issued March 22, 2004 - Electrification of the Clark Compressors						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 11558 - Issued April 21, 2006 - New 1,250 bbl Wash Tank at Tank Farm #6						
lbs/day	0.00	0.51	0.00	0.00	0.00	0.00
tons/year	0.00	0.09	0.00	0.00	0.00	0.00
PTO 11724 - Issued 10/19/05 - One Existing Diesel-fired Firewater Pump						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 11759 - Issued 05/17/06 - One Existing Diesel-fired Portable Air Compressor						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 12284 - Issued 02/04/08 - Add Fuel/Air Controllers to Four Existing ICEs						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00
PTO 12279 - Pending - New 5,000 bbl Wash Tank at Tank Farm #6						
lbs/day	0.00	1.65	0.00	0.00	0.00	0.00
tons/year	0.00	0.30	0.00	0.00	0.00	0.00
Total						
lbs/day	1.53	40.91	1.29	0.21	0.12	0.12
tons/year	0.28	7.46	0.23	0.04	0.02	0.02

Table 5.1-1
Permit to Operate 9136 - R5
E&B Gas Plant 10
Equipment Description

Equiment Category	Description	Device ID#	Usage Data Parameter	Capacity	Size	Units	Service	Load	Hours Per day	qtr	year
Fugitive Hydrocarbon Components - Gas/Condensate Service											
	Valves	008323	-	-	786	clp's	gas	1	24	2,190	8,760
	Valves (unsafe to monitor)	008325	-	-	15	clp's	gas	1	24	2,190	8,760
	Connections	008327	-	-	6,122	clp's	gas	1	24	2,190	8,760
	Connections (unsafe to monitor)	008328	-	-	62	clp's	gas	1	24	2,190	8,760
	Compressor seals (open)	008329	-	-	1	clp's	gas	1	24	2,190	8,760
	Compressor seals (sealed)	008330	-	-	18	clp's	gas	1	24	2,190	8,760
	Pump Seals	008331	-	-	4	clp's	gas	1	24	2,190	8,760
	Relief Valves (open)	008332	-	-	9	clp's	gas	1	24	2,190	8,760
Fugitive Hydrocarbon Components - Oil Service											
	Valves	105000	-	-	90	clp's	oil	1	24	2,190	8,760
	Connections	105001	-	-	80	clp's	oil	1	24	2,190	8,760
External Combustion Equipment			%S	MMscf							
	Glycol Reboiler: H-101.	008333	0.001	5.63	0.675	MMBtu/hr	na	1	24	2,190	8,760
	Glycol Reboiler.	008334	0.001	1.46	0.175	MMBtu/hr	na	1	24	2,190	8,760
	Amine Reboiler	105021	0.001		0.650	MMBtu/hr	na	1	24	2,190	8,760
Flare											
	Planned Flaring[1]	101060	0.0796	69.88	262.5	MMBtu/hr	na	1	na	na	279.5
	Unplanned/Emergency Flaring	101060	0.0796	0.00	262.5	MMBtu/hr	na	0	0	0	0

1. The volume of gas flared is consistent with E&B's Flare Minimization Plan.

Table 5.1-2
Permit to Operate 9136 - R5
E&B Gas Plant 10
Emission Factors

Equipment Category	Description	Device ID#	Emission Factors NOx	ROC	CO	SOx	PM	PM10	Units	Section 10.1 Reference
Fugitive Hydrocarbon Components - Gas/Condensate Service										
	Valves	008323		0.080					lb/day/clp	C
	Valves (unsafe to monitor)	008325		0.402					lb/day/clp	C
	Connections	008327		0.005					lb/day/clp	C
	Connections (unsafe to monitor)	008328		0.025					lb/day/clp	C
	Compressor seals (open)	008329		0.432					lb/day/clp	C
	Compressor seals (sealed)	008330		0.000					lb/day/clp	C
	Pump Seals	008331		0.521					lb/day/clp	C
	Relief Valves (open)	008332		0.139					lb/day/clp	C
Fugitive Hydrocarbon Components - Oil Service										
	Valves (Oil Service)	105000		0.028					lb/day/clp	C
	Connections (Oil Service)	105001		0.005					lb/day/clp	C
External Combustion Equipment										
	Glycol Reboiler: H-101.	008333	0.100	0.0053	0.0021	0.00171	0.012	0.012	lb/MMBtu	A
	Glycol Reboiler.	008334	0.094	0.0073	0.040	0.00171	0.011	0.011	lb/MMBtu	A
	Amine Reboiler	105021	0.098	0.0054	0.082	0.0137	0.008	0.008	lb/MMBtu	A
'Flare										
	Planned Flaring	101060	0.068	0.0057	0.370	0.1362	0.02	0.02	lb/MMBtu	B
	Unplanned/Emergency Flaring	101060	0.068	0.0057	0.370	0.1362	0.02	0.02	lb/MMBtu	B

Table 5.1-3
Permit to Operate 9136 - R5
E&B Gas Plant 10
Hourly and Daily Emissions

Equipment Category	Emissions Unit	Device ID #	NOx		ROC		CO		SOx		PM		PM_{10}		Federal Enforceability	
			lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day		
Fugitive Hydrocarbon Components - Gas/Condensate Service																
	Valves	008323	-	-	2.63	63.20	-	-	-	-	-	-	-	-	FE	
	Valves (unsafe to monitor)	008325	-	-	0.25	6.03	-	-	-	-	-	-	-	-	FE	ATC
	Connections	008327	-	-	1.27	30.54	-	-	-	-	-	-	-	-	FE	7214A
	Connections (unsafe to monitor)	008328	-	-	0.06	1.55	-	-	-	-	-	-	-	-	FE	
	Compressor seals (open)	008329	-	-	0.02	0.43	-	-	-	-	-	-	-	-	FE	
	Compressor seals (sealed)	008330	-	-	0.00	0.00	-	-	-	-	-	-	-	-	FE	
	Pump Seals	008331	-	-	0.09	2.09	-	-	-	-	-	-	-	-	FE	
	Relief Valves (open)	008332	-	-	0.05	1.25	-	-	-	-	-	-	-	-	FE	
Fugitive Hydrocarbon Components - Oil Service																
	Valves (Oil Service)	105000	-	-	0.11	2.56	-	-	-	-	-	-	-	-	FE	ATC 10914
	Connections (Oil Service)	105001	-	-	0.02	0.37	-	-	-	-	-	-	-	-	FE	ATC 10914
External Combustion Equipment																
	Glycol Reboiler: H-101.	008333	0.07	1.68	0.01	0.20	0.01	0.24	0.01	0.20	0.01	0.24	0.01	0.24	FE	
	Glycol Reboiler.	008334	0.02	0.39	0.01	0.24	0.01	0.17	0.01	0.24	0.01	0.24	0.01	0.24	FE	
	Amine Reboiler	105021	0.06	1.53	0.00	0.02	0.05	1.29	0.01	0.21	0.00	0.12	0.00	0.12	FE	ATC 10914
Flare																
	Planned Flaring[1]	101060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	A	
	Unplanned/Emergency Flaring	101060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	A	

1. Flaring is on an event basis, therefore emission limits are only given in terms of tons per year.

Table 5.1-4
Permit to Operate 9136 - R5
E&B Gas Plant 10
Quarterly and Annual Emissions

Equipment Category	Emissions Unit	Device ID #	NOx TPQ	NOx TPY	ROC TPQ	ROC TPY	CO TPQ	CO TPY	SOx TPQ	SOx TPY	PM TPQ	PM TPY	PM10 TPQ	PM10 TPY	Federal Enforceability and	
Fugitive Hydrocarbon Components - Gas/Condensate Service																
	Valves	008323	-	-	2.88	11.53	-	-	-	-	-	-	-	-	FE	
	Valves (unsafe to monitor)	008325	-	-	0.28	1.10	-	-	-	-	-	-	-	-	FE	ATC
	Connections	008327	-	-	1.39	5.57	-	-	-	-	-	-	-	-	FE	7214A
	Connections (unsafe to monitor)	008328	-	-	0.07	0.28	-	-	-	-	-	-	-	-	FE	
	Compressor seals (open)	008329	-	-	0.02	0.08	-	-	-	-	-	-	-	-	FE	
	Compressor seals (sealed)	008330	-	-	--	--	-	-	-	-	-	-	-	-	FE	
	Pump Seals	008331	-	-	0.10	0.38	-	-	-	-	-	-	-	-	FE	
	Relief Valves (open)	008332	-	-	0.06	0.23	-	-	-	-	-	-	-	-	FE	
Fugitive Hydrocarbon Components - Oil Service																
	Valves (Oil Service)	105000	-	-	0.12	0.47	-	-	-	-	-	-	-	-	FE	ATC 10914
	Connections (Oil Service)	105001	-	-	0.02	0.07	-	-	-	-	-	-	-	-	FE	ATC 10914
External Combustion Equipment																
	Glycol Reboiler: H-101.	008333	0.08	0.31	0.00	0.01	0.01	0.04	0.01	0.04	0.01	0.04	0.01	0.04	FE	
	Glycol Reboiler.	008334	0.01	0.04	0.01	0.04	0.01	0.04	0.01	0.04	0.01	0.04	0.01	0.04	FE	
	Amine Reboiler	105021	0.07	0.28	0.01	0.02	0.06	0.23	0.01	0.04	0.01	0.02	0.01	0.02	FE	ATC 10914
Flare																
	Planned Flaring[1]	101060	NA	2.49	NA	0.21	NA	13.57	NA	5.00	NA	0.73	NA	0.73	A	
	Unplanned/Emergency Flaring	101060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	A	

1. Flaring is on an event basis, therefore emission limits are only given in terms of tons per year.

Table 5.2
Permit to Operate 09136 - R5

Total Permitted Emissions

A. Hourly (lb/hr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitives	-	4.50	-	-	-	-
Boilers	0.15	0.02	0.07	0.03	0.02	0.02
Flare	-	-	-	-	-	-
Totals	0.15	4.52	0.07	0.03	0.02	0.02

B. Daily (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitives	-	108.01	-	-	-	-
Boilers	3.60	0.46	1.70	0.65	0.60	0.60
Flare	-	-	-	-	-	-
Totals	3.60	108.47	1.70	0.65	0.60	0.60

C. Quarterly (Tons/Qtr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitives	-	4.93	-	-	-	-
Boilers	0.16	0.02	0.08	0.03	0.03	0.03
Flare	-	-	-	-	-	-
Totals	0.16	4.95	0.08	0.03	0.03	0.03

D. Annual (Ton/yr)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Fugitives	-	19.71	-	-	-	-
Boilers	0.63	0.07	0.31	0.12	0.10	0.10
Flare	2.49	0.21	13.57	5.00	0.73	0.73
Totals	3.12	19.99	13.88	5.12	0.83	0.83

Table 5.3
PTO 9136 - R5 / Part 70 Permit 9136
Federal Potential to Emit

Federal PTE - Peak Annual (Ton/yr)						
Equipment Category	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**PM10**
Fugitives	0.00	19.71	0.00	0.00	0.00	0.00
Boilers	0.63	0.07	0.31	0.12	0.10	0.10
Flare	2.49	0.21	13.57	5.00	0.73	0.73
Totals	**3.12**	**19.99**	**13.88**	**5.12**	**0.83**	**0.83**

Table 5.4
PTO 9136 - R5 / Part 70 Permit 9136
HAPS Emissions

HAP EMISSION FACTORS							
	Formaldehyde	Hexane	Benzene	Toluene	Xylene	Units	Reference
Fugitives	0.0000	0.1688	0.0032	0.0000	0.0000	lb/lb-ROC	CA-ARB (1991) VOC Spec. Prof. 757
Boilers	0.00000452	0.00000000	0.00000223	0.00003076	0.00001781	lb/MMBtu	CATEF (1995) Factors for SCC# 3-10-004-04
Flare	0.4102	0.0000	0.0000	0.0000	0.0000	lb/lb-ROC	CA-ARB (1991) VOC Spec. Prof. 51

DAILY HAP EMISSIONS							
	Formaldehyde	Hexane	Benzene	Toluene	Xylene	Units	Reference
Fugitives	0.00000000	18.23528268	0.35067851	0.00000000	0.00000000	lb/day	CA-ARB (1991) VOC Spec. Prof. 757
Boilers	0.00000208	0.00000000	0.00000103	0.00001415	0.00000819	lb/day	CATEF (1995) Factors for SCC# 3-10-004-04
Flare	NA	NA	NA	NA	NA		
Totals	**0.000**	**18.235**	**0.351**	**0.000**	**0.000**	**lb/day**	

ANNUAL HAP EMISSIONS							
	Formaldehyde	Hexane	Benzene	Toluene	Xylene	Units	Reference
Fugitives	0.00	3.33	0.06	0.00	0.00	tons/year	CA-ARB (1991) VOC Spec. Prof. 757
Boilers	0.00	0.00	0.00	0.00	0.00	tons/year	CATEF (1995) Factors for SCC# 3-10-004-04
Flare	0.09	0.00	0.00	0.00	0.00	tons/year	CA-ARB (1991) VOC Spec. Prof. 51
Totals	**0.09**	**3.33**	**0.06**	**0.00**	**0.00**	**tons/year**	

Note: The HAP emissions in these tables are estimates only and are not enforceable limits.

Table 5.4 – Hazardous Air Pollution Emissions

6.0 Air Quality Impact Analyses

6.1 Modeling

Air quality modeling has not been required for this stationary source.

6.2 Increments

An air quality increment analysis has not been required for this stationary source.

6.3 Monitoring

Air quality monitoring is not required for this stationary source.

6.4 Health Risk Assessment

The E&B stationary source is subject to the Air Toxics Hot-Spots Program (AB-2588). A health risk assessment (HRA) for the facilities was prepared by the APCD on March 12, 1996 under the requirements of the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588). The HRA is based on 1994 toxic emissions inventory data submitted to the APCD by Hallador. An earlier HRA, based on 1991 emission data was also prepared by the APCD for Hallador on November 10, 1993.

Based on the 1994 toxic emissions inventory, a cancer risk of 6 per million off the property was estimated for the E&B Stationary Source. This risk is primarily due to emissions of polycyclic aromatic hydrocarbon (PAH) from internal combustion devices. Additionally, a chronic risk of 0.3 and an acute risk of 0.07 have been estimated by the APCD and are mainly due to formaldehyde and acrolein emissions from internal combustion devices. The cancer and non-cancer chronic risk projections are less than the APCD's AB-2588 significance thresholds of 10 in a million and 1.0, respectively. Approximately 4.7 pounds of PAH, 6000 pounds of formaldehyde and 190 pounds of acrolein were emitted from internal combustion devices in 1994.

The health risk assessment based on the 1991 inventory showed a cancer risk of 5 per million. Emissions of benzene and PAH contributed to a majority of the risk. Chronic and acute non-cancer risks were estimated to be 0.2 and 0.1 respectively in 1991.

7.0 CAP Consistency, Offset Requirements and ERCs

7.1 General

The E&B stationary source is located in an ozone nonattainment area. Santa Barbara County is nonattainment for the state ozone ambient air quality standards. In addition, the County is nonattainment with the state PM_{10} ambient air quality standard. Therefore, emissions from all emission units at the stationary source and its constituent facilities must be consistent with the provisions of the USEPA and State approved Clean Air Plans (CAP) and must not interfere with progress towards attainment of federal and state ambient air quality standards. Under APCD regulations, any modifications at Gas Plant 10 (or the E&B stationary source) that result in an emissions increase of any nonattainment pollutant exceeding 25 lbs/day must apply BACT (NAR). Additional increases may trigger offsets at the source or elsewhere so that there is a net air quality benefit for Santa Barbara County. These offset threshold levels are 55 lbs/day for all non-attainment pollutants except PM_{10} for which the level is 80 lbs/day.

7.2 Clean Air Plan

Santa Barbara County has historically violated both the federal (0.12 ppm) and state (0.09 ppm) one-hour ambient air quality standards for ozone. The county also violates the new state (0.070 ppm) eight hour ambient ozone standard. Ambient air quality data collected since 1999 show that Santa Barbara County has attained the federal one-hour ozone standard. The APCD developed, adopted, and submitted the 2001 Clean Air Plan (2001 Plan) to USEPA to demonstrate that the County will maintain the federal standard through 2015 and officially requested that the County be re-designated to an attainment area for federal purposes. On July 9, 2003, USEPA published a final rule approving the 2001 Clean Air Plan and re-designating Santa Barbara County as an attainment area for the federal one-hour ozone standard. This action became effective on August 8, 2003. On December 16, 2004, the APCD adopted the 2004 Clean Air Plan providing a three year update to the 2001 Plan for state purposes only. Santa Barbara County was designated attainment for the federal 8-hour ozone standard (0.08 ppm) effective June 15, 2004.

7.3 Offset Requirements

The E&B stationary source does not currently require emission offsets.

7.4 Emission Reduction Credits

Decision of Issuance (DOI) 0033 created NO_X, ROC, and CO ERCs from the electrification of the #12 Clark HRA-6T integral gas compressor engine. See Section 1.5 of PTO 8010-R6.

8.0 Lead Agency Permit Consistency

To the best of the APCD's knowledge, no other governmental agency's permit require air quality mitigation.

9.0 Permit Conditions

This section lists the applicable permit conditions for E&B Gas Plant 10. Section 9.A lists the standard administrative conditions. Section 9.B lists 'generic' permit conditions, including emission standards, for all equipment in this permit. Section 9.C lists conditions affecting specific equipment. Section 9.D lists non-federally-enforceable (i.e., APCD only) permit conditions. Conditions listed in Sections 9.A, 9.B and 9.C are enforceable by the USEPA, the APCD, the State of California and the public. Conditions listed in Section 9.D are enforceable only by the APCD and the State of California. Where any reference contained in Sections 9.A, 9.B or 9.C refers to any other part of this permit, that part of the permit referred to is federally-enforceable. In case of a discrepancy between the wording of a condition and the applicable federal or APCD rule(s), the wording of the rule shall control.

For the purposes of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this permit, nothing in the permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

9.A Standard Administrative Conditions

The following federally-enforceable administrative permit conditions apply to Gas Plant 10:

A.1 **Compliance with Permit Conditions:**

(a) The permittee shall comply with all permit conditions in Sections 9.A, 9.B and C.

(b) This permit does not convey property rights or exclusive privilege of any sort.

(c) Non-compliance with any permit condition is grounds for permit termination, revocation and re-issuance, modification, enforcement action, or denial of permit renewal. Any permit non-compliance constitutes a violation of the Clean Air Act and its implementing regulations or of APCD Rules or of both, as applicable.

(d) The permittee shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for noncompliance with any permit condition.

(e) A pending permit action or notification of anticipated noncompliance does not stay any permit condition.

(f) Within a reasonable time period, the permittee shall furnish any information requested by the Control Officer, in writing, for the purpose of determining:

(i) compliance with the permit, or
(ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action.

[*Re: 40 CFR Part 70.5.(a)(6)(iii), APCD Rules 1303.D.1.j, 1303.D.1.n, 1303.D.1.l, 1303.D.1.k, 1303.D.1.o*]

A.2 **Emergency Provisions:** The permittee shall comply with the requirements of the APCD, Rule 505 (Upset/Breakdown rule) and/or APCD Rule 1303.F, whichever is applicable to the emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the permittee shall provide the APCD, in writing, a "notice of emergency" within 2 days of the emergency. The "notice of emergency" shall contain the information/documentation listed in Sections (1) through (5) of Rule 1303.F. [*Re: 40 CFR 70.6(g), APCD Rule 1303.F*]

A.3 **Compliance Plan:**

(a) The permittee shall comply with all federally-enforceable requirements that become applicable during the permit term, in a timely manner.

(b) For all applicable equipment, the permittee shall implement and comply with any specific compliance plan required under any federally-enforceable rules or standards.

[*Re: APCD Rule 1302.D.2*]

A.4 **Right of Entry:** The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises where a Part 70 Source is located or where records must be kept:

(a) To inspect at reasonable times the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;

(b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;

(c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times.

[*Re: APCD Rule 1303.D.2.a*]

A.5 **Severability:** The provisions of this Permit to Operate are severable and if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby. [*Re: APCD Rules 103, 1303.D.1.i*]

A.6 **Permit Life:** The Part 70 permit shall become invalid three years from the date of issuance unless a timely and complete renewal application is submitted to the APCD. Any operation of the source to which this Part 70 permit is issued beyond the expiration date of this Part 70 permit and without a valid Part 70 operating permit (or a complete Part 70 permit renewal application) shall be a violation of the CAAA, §502(a) and 503(d) and of the APCD rules.

The permittee shall apply for renewal of the Part 70 permit not later than 6-months before the date of the permit expiration. Upon submittal of a timely and complete renewal application, the Part 70 permit shall remain in effect until the Control Officer issues or denies the renewal application. [*Re: 1304.D.1*]

A.7 **Payment of Fees:** The permittee shall reimburse the APCD for all its Part 70 permit processing and compliance monitoring expenses for the stationary source on a timely basis. Failure to reimburse on a timely basis shall be a violation of this permit and of applicable requirements and

can result in forfeiture of the Part 70 permit. Operation without a Part 70 permit subjects the source to potential enforcement action by the APCD and the USEPA pursuant to section 502(a) of the Clean Air Act. [*Re: APCD Rules 1303.D.1.p, 1304.D.11 and 40 CFR 70.6(a)(7)*]

A.8 **Prompt Reporting of Deviations:** The permittee shall submit a written report to the APCD documenting each and every deviation from the requirements of this permit or any applicable federal requirements within 7 days after discovery of the violation, but not later than 180-days after the date of occurrence. The report shall clearly document 1) the probable cause and extent of the deviation 2) equipment involved, 3) the quantity of excess pollutant emissions, if any, and 4) actions taken to correct the deviation. The requirements of this condition shall not apply to deviations reported to APCD in accordance with Rule 505. *Breakdown Conditions,* or Rule 1303.F *Emergency Provisions.* [APCD Rule 1303.D.1, 40 CFR 70.6(a) (3)]

A.9 **Federally-Enforceable Conditions:** Each federally-enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the APCD-only enforceable section of this permit are federally-enforceable or subject to the public/USEPA review [*Re: CAAA, § 502(b)(6), 40 CFR 70.6(b)*]

A.10 **Reporting Requirements/Compliance Certification:** The permittee shall submit compliance certification reports to both the USEPA and the Control Officer every six-months. These reports shall be submitted on APCD forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations (excluding emergency upsets) from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1st and March 1st , respectively, each year. Supporting monitoring data shall be submitted in accordance with the "Semi-Annual Monitoring/Compliance Verification Report" condition in section 9.C. The permittee shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [*Re: APCD Rules 1303.D.1, 1302.D.3, 1303.2.c*]

A.11 **Recordkeeping Requirements:** Records of required monitoring information that includes the following:

(a) The date, place as defined in the permit, and time of sampling or measurements;
(b) The date(s) analyses were performed;
(c) The company or entity that performed the analyses;
(d) The analytical techniques or methods used;
(e) The results of such analyses; and
(f) The operating conditions as existing at the time of sampling or measurement;

The records (electronic or hard copy), as well as all supporting information including calibration and maintenance records, shall be maintained for a minimum of five (5) years from date of initial entry by the permittee and shall be made available to the APCD upon request. [*Re: APCD Rule 1303.D.1.f, 40CFR70.6(a)(3)(ii)(A)*]

A.12 **Conditions for Permit Reopening:** The permit shall be reopened and revised for cause under any of the following circumstances:

(a) Additional Requirements: If additional applicable requirements (e.g., NSPS or MACT) become applicable to the source which has an unexpired permit term of three (3) or more years, the permit shall be reopened. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. However, no such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended. All such re-openings shall be initiated only after a 30-day notice of intent to reopen the permit has been provided to the permittee, except that a shorter notice may be given in case of an emergency.

(b) Inaccurate Permit Provisions: If the APCD or the USEPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

(c) Applicable Requirement: If the APCD or the USEPA determines that the permit must be revised or revoked to assure compliance with any applicable requirement including a federally-enforceable requirement, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

Administrative procedures to reopen and revise/revoke/reissue a permit shall follow the same procedures as apply to initial permit issuance. Re-openings shall affect only those parts of the permit for which cause to reopen exist.

If a permit is reopened, the expiration date does not change. Thus, if the permit is reopened, and revised, then it will be reissued with the expiration date applicable to the re-opened permit. [*Re: 40 CFR 70.7(f)(1)-(3), 40 CFR 70.6(a)(2)*]

9.B. Generic Conditions

The generic conditions listed below apply to all emission units, regardless of their category or emission rates. These conditions are federally-enforceable. Compliance with these requirements is discussed in Section 3. In case of a discrepancy between the wording of a condition and the applicable federal or APCD rule(s), the wording of the rule shall control.

B.1 **Circumvention (Rule 301):** A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of APCD Rule 303. [*Re: APCD Rule 301]*

B.2 **Visible Emissions (Rule 302):** The permittee shall not discharge into the atmosphere from any single source of emission or air contaminants for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection B.2.(a) above.

The permittee shall determine compliance with this Rule in accordance with the monitoring and recordkeeping procedures in Condition 9.C.5. [*Re: APCD Rule 302*].

B.3 **Nuisance (Rule 303):** No pollutant emissions from any equipment at this facility shall create nuisance conditions. No operations shall endanger health, safety or comfort, nor shall they damage any property or business. [*Re: APCD Rule 303*]

B.4 **Particulate Matter – Northern Zone (Rule 304):** The permittee shall not discharge into the atmosphere, from any source, particulate matter in excess 0.3 grain per cubic foot of gas at standard conditions. [*Re: APCD Rule 304*]

B.5 **Specific Contaminants (Rule 309):** The permittee shall not discharge into the atmosphere from any single source sulfur compounds and combustion contaminants in excess of the standards listed in Sections A and G of Rule 309. [*Re: APCD Rule 309.A.2.b, 309.A.1*].

B.6 **Sulfur Content of Fuels (Rule 311):** The permittee shall not burn fuels with a sulfur content in excess of 0.5% (by weight) for liquid fuels and 796 ppmvd or 50 gr/100 scf (calculated as H_2S) for gaseous fuel. Compliance with this condition shall be based on measurements of the fuel gas using Draeger tubes, ASTM, or other APCD-approved methods and diesel fuel billing records or other data showing the certified sulfur content for each shipment. [*Re: APCD Rule 311.B*]

B.7 **Emergency Episode Plans (Rule 603):** During emergency episodes, the permittee shall implement the APCD approved Emergency Episode Plan. [*Reference APCD Rule 603*]

B8 **Adhesives and Sealants (Rule 353):** The permittee shall not use adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers, unless the permittee complies with the following:

(a) Such materials used are purchased or supplied by the manufacturer or suppliers in containers of 16 fluid ounces or less; or alternately

(b) When the permittee uses such materials from containers larger than 16 fluid ounces and the materials are not exempt by Rule 353, Section B.1, the total reactive organic compound emissions from the use of such material shall not exceed 200 pounds per year unless the substances used and the operational methods comply with Sections D, E, F, G, and H of Rule 353. Compliance shall be demonstrated by recordkeeping in accordance with Section B.2 and/or Section O of Rule 353. *[Re: APCD Rule 353]*

B.9 **Emissions Of Oxides Of Nitrogen From Large Water Heaters and Small Boilers (Rule 360)**: This rule applies to any person who supplies, sells, offers for sale, installs, or solicits the installation of any new water heater, boiler, steam generator or process heater for use within the APCD with a rated heat input capacity greater than or equal to 75,000 Btu/hour up to and including 2,000,000 Btu/hour. There are no new units at this facility that are subject to this rule.

B.10 **Small Boilers, Steam Generators, and Process Heaters (Rule 361)**: The permittee shall comply with the requirements of APCD Rule 361: *Small Boilers, Steam Generators, and Process*

Heaters whenever a new boiler, process heater or other external combustion device is added or an existing unit is replaced.

B.11 **Oil and Natural Gas Production MACT:** The permittee shall comply with the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Oil and Natural Gas Production and Natural Gas Transmission and Storage (promulgated June 17, 1999). At a minimum, the permittee shall maintain records in accordance with 40 CFR Part 63, Subpart A, Section 63.10 (b) (1) and (3). Full compliance shall be achieved by no later than June 17, 2002. The permittee shall maintain records of the actual annual average natural gas throughput (gas flow rate to the glycol dehydration unit per day) as determined in accordance with 63.772(b)(1) of the MACT. In addition the permittee shall maintain records identifying ancillary equipment and components subject to and controlled under 40 CFR Part 60 Subpart KKK. [*Re:* 40 CFR 63, Subpart HH]

B.12 **CARB Registered Portable Equipment:** State registered portable equipment shall comply with State registration requirements. A copy of the State registration shall be readily available whenever the equipment is at the facility. [*Re: APCD Rule 202*]

9.C *Equipment Specific Conditions*

This section contains non-generic federally-enforceable conditions, including emissions and operations limits, monitoring, recordkeeping and reporting for each specific equipment group. This section may also contain other non-generic conditions.

C.1 **External Combustion Equipment:** The following equipment is included in this emissions unit category:

Device #	Description
008333	Glycol reboiler, designation: H-101, maximum heat input rating: 0.675 MMBtu/hr, fuel: field gas.
008334	Glycol reboiler, maximum heat input rating: 0.175 MMBtu/hr, fuel: field gas.
105021	Amine reboiler, maximum heat input rating: 0.650 MMBtu/hr, fuel: field gas.

(a) Emission Limits: The following equipment-specific emission limits apply to the external combustion units listed above:

Mass emission rates resulting from the operation of the equipment listed above shall not exceed the corresponding values listed for each in Table 5.1. Compliance with this condition shall be based on the fuel usage, the total sulfur content of fuel and through compliance with other conditions listed below.

(b) Operation Limits:

(i) *Heat Input Limits*: The daily and annual heat input to the following combustion equipment shall not exceed those values listed below. These limits are based on the design rating of the equipment and the annual heat input values as listed in the table below . Compliance with this condition shall be based on fuel usage and/or fuel

testing. Unless otherwise designated by the APCO, the fuel heat content (Field gas – 1,050 Btu/scf) shall be used for determining compliance:

Equipment	Fuel	Hourly Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
Glycol Reboiler	Field Gas	16.200	5,913
Glycol Reboiler	Field Gas	4.200	1,533
Amine Reboiler	Field Gas	15.600	5,694

(ii) *Gaseous Fuel Sulfur Limit*: The total sulfur content (calculated as H_2S at standard conditions, 60°F and 14.7 psia) of the gaseous fuel shall not exceed 10 ppmv.

(iii) The vapor recovery system that serves the glycol reboilers shall be in operation when the glycol reboilers are in use. The vapor recovery system includes piping, valves, and flanges associated with the vapor recovery system. The vapor recovery system shall be maintained and operated to minimize the release of emissions from the glycol reboilers.

(c) Monitoring: The following monitoring requirements only apply:

(i) *Throughput Monitoring*: The permittee shall operate, calibrate and, maintain a meter with a continuous recording chart that serves the glycol and amine reboilers to measure the volume of gas consumed. The records shall be made available to the APCD upon request. The meter shall be calibrated on an annual basis. The meter shall be calibrated and maintained in accordance with the manufacturer's recommended procedures. For reporting purposes, the fuel used by each reboiler shall be allocated per the approved *Fuel Use Monitoring Plan*. The Plan may be updated only upon approval by the APCD.

(ii) *Hydrogen Sulfide Monitoring*: The existing Southern California Gas Company H_2S gas analyzer shall be used to monitor the H_2S content of processed field gas combusted in fuel burning equipment. The existing analyzer is alarmed at 4.0 ppmv and H_2S monitored concentrations above 4 ppmv will trigger the plant gas reinjection alarm. The permittee shall take H_2S detector tube samples at both the inlet and outlet of the Gas Plant within one-hour of the gas reinjection alarm. The outlet sample should be at a point representative of the inlet to the reboilers. The permittee shall repeat these detector tube readings daily if the reinjection event lasts for more than 12-hours. Immediately after a gas reinjection event is over, E&B shall take another H_2S detector tube reading at the gas plant outlet to ensure H_2S concentrations are less than 10 ppmv. If the gas company monitor is permanently removed or shutdown for longer than a 45-day period, the permittee shall install, operate, and properly maintain an H_2S gas analyzer downstream of the LPG facility. The permittee shall notify the APCD within 10-days after gas company monitor removal or a monitor shutdown exceeding 45-days, and install an analyzer within 60-days after notification.

(d) Recordkeeping: The following record keeping requirements apply:

E&B must maintain all records for a minimum of five (5) years. The following records (electronic or hard copy) shall be maintained by the permittee and shall be made available to the APCD upon request:

(i) *Volume of fuel:* The volume, in standard cubic feet, of gaseous fuel burned each month and the number of days that gas was burned;

(ii) *Heating value of fuel:* On an annual basis, record and measure the heating value of the gaseous fuel (Btu/scf). The heating value shall be measured, by ASTM D 3588 or other method acceptable to the APCD, and recorded;

(iii) *Peak Sulfur Content:* Date and time of plant gas reinjection alarm and date, time, and results in parts per million by volume of daily detector tube readings when measurement is required pursuant to 9.C.1.(c).

(iv) *Maintenance logs:* Maintenance logs for the throughput meters.

(e) Reporting: On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the APCD. The report must list all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition of this permit. [*Reference: APCD ATC 7214, ATC 10914 and 40 CFR 70.6.a*]

C.2 **Fugitive Hydrocarbon Emissions Components:** The following equipment is included in this emissions unit category:

Device #	Equipment Item Name, Number of Component Leak Paths/Item
	Gas/Light Liquid Service CLPs
008323	Valves: 786 clps
008325	Valves (unsafe to monitor): 15 clps
008327	Connections: 6,122 clps
008328	Connections (unsafe to monitor): 62 clps
008329	Compressor Seals (open w/o vapor recovery): 1 clps
008330	Compressor Seals (sealed w/ vapor recovery): 18 clps
008331	Pump Seals 4 clps
008332	Relief Valves (open) 9 clps
	Oil Service CLPs
105000	Valves: 90 clps
105001	Connections: 80 clps

(a) Emission Limits: The fugitive emissions were subject to New Source Review under ATC 7214A and ATC 10914. Thus emissions from these equipment are federally-enforceable. These emissions are listed in Table 5.1-3 and 5.2. Compliance with these limits is met when E & B complies with the provisions of Subpart KKK and Rule 331.

(b) Operational Limits: Operation of the equipment listed in this section shall conform to the requirements listed in APCD Rule 331.D and E. Compliance with these limits shall be

assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. In addition E & B shall meet the following requirement:

No later than 30-days after the issuance of this permit, E & B shall submit an updated *Inspection and Maintenance Plan* to the APCD for review and approval. The updated plan shall include the modifications included in this permit and shall include a description of the identification system required by Rule 331.G.1. including the physical identification method required by 331.G.1.a., the diagrams required by 331.G.1.b, and the component list required by 331.G.1.c.

All piping, valves, and fittings must be vapor tight. E & B shall implement the requirements of APCD Rule 331 and adhere to the January 1993 (and subsequent updates) *Inspection and Maintenance Plan* for control of fugitive reactive organic compound emissions.

(c) Monitoring: The equipment listed in this section are subject to all the monitoring requirements listed in NSPS Subpart KKK and in APCD Rule 331.F. The test methods in Subpart KKK and Rule 331.H shall be used, when applicable.

(d) Recordkeeping: All inspection and repair records shall be retained at the source for a minimum of five years. The equipment listed in this section are subject to all the recordkeeping requirements listed in NSPS Subpart KKK and APCD Rule 331.G.

(e) Reporting: On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the APCD. The report must list all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition of this permit. [*Re: 40 CFR 60, Subpart KKK, 40 CFR 70.6(a)(3), APCD ATC 7214, ATC 10914 and APCD Rule 331*]

C.3 **Flare Emissions:** The following equipment is included in this emissions category:

Device #	Equipment Description
101060	Flare, diameter: 1.0 foot, height: 30.0 feet, maximum heat input rating: 262.5 MMBtu/hr, equipped with manual electronic ignition and non-continuous flare pilot.

(a) Emission Limits: There are no federally-enforceable emissions limits associated with this equipment.

(b) Operational Limits:

(i) The flare shall operate in a smokeless manner per Rule 359.D.2.a. The flare shall also comply with all applicable requirements of Rule 359.

(ii) The volume of gas flared through the flare (ID# 101060) shall not exceed the volumes listed in the table below. Compliance shall be determined through flare volumes monitored pursuant to the E&B Flare Minimization Plan and E&B Flare Monitoring Plan.

Device #	Equipment Description	MMSCF/month	MMSCF/year
101060	Planned Flaring	5.823	69.876

(b) Monitoring: Monitoring shall be performed in accordance with E&B's APCD Approved Flare Monitoring Plan.

(c) Recordkeeping: Recordkeeping shall be performed in accordance with E&B's APCD Approved Flare Monitoring Plan.

(e) Reporting: On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the APCD. The report must list all data required by the *Semi-Annual Monitoring/Compliance Verification Reports* condition of this permit. [*Re: APCD Rule 359, E&B Flare Minimization Plan*]

C.4 **Semi-Annual Monitoring/Compliance Verification Reports:** E&B shall submit a report to the APCD every six-months to verify compliance with the emission limits and other requirements of this permit. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1st and March 1st, respectively, each year, and shall be in a format approved by the APCD. All logs and other basic source data not included in the report shall be available to the APCD upon request. The second report shall also include an annual report for the prior four quarters. The report shall include the following information:

(a) **External Combustion Equipment**

(i) *Volume of fuel*: The volume, in standard cubic feet, of gaseous fuel burned by each external combustion device each month and the number of days that gas was burned in each;

(ii) *Heating value of fuel*: Results of the annual measurement of the heating value of the gaseous fuel (Btu/scf).

(iii) *Peak sulfur content:* Date and time of E&B gas reinjection alarm and date, time, and results in parts per million by volume of daily detector tube readings when measurement is required pursuant to Condition 9.C.1.(c).

(b) **Fugitive Hydrocarbon Emissions**

(i) All the reporting requirements listed in NSPS Subpart KKK and APCD Rule 331.G, and shall include:

- inspection summary.
- record of leaking components.
- record of leaks from critical components.
- record of leaks from components that incur five repair actions within a continuous 12-month period.
- record of component repair actions including dates of component re-inspections.

(c) **Flare Emissions:** All data required to be submitted by the permittee's APCD Approved Flare Monitoring Plan.

(d) **Emissions:** Annual NO_X and ROC emissions from both permitted and exempt equipment.

C.5 **Visible Emissions - Flare**: There shall be no visible emissions from the flare. The permittee shall perform a visible emissions inspection for a one-minute period once per quarter during a planned flaring event. The start-time and end-time of each visible emissions inspection shall be recorded in a log, along with a notation identifying whether visible emissions were detected. The permittee shall obtain APCD approval of the Visible Emissions Log required by this condition. All records shall be maintained consistent with the recordkeeping condition of this permit. [*Re: APCD Rule 302*].

C.6. **Amine System Operational Restrictions:** The equipment permitted herein is subject to the following operational restrictions:

(a) All gas from the flash tank shall be vented to the field fuel gas system. At no time shall this gas be vented to the atmosphere or combusted in the flare.

(b) The vapor recovery system connected to the amine still shall be in operation at all times that produced gas is being processed through the permitted equipment. The vapor recovery system includes associated valves, fittings, and flanges. The vapor recovery system shall be maintained and operated to minimize the release of emissions. At no time shall this gas be vented to the atmosphere or combusted in the flare. *[Re: ATC 10914]*

9.D APCD-Only Conditions

The following section lists permit conditions that are not federally-enforceable (i.e., not enforceable by the USEPA or the public). However, these conditions are enforceable by the APCD and the State of California. These conditions have been determined as being necessary to ensure that operation of the facility complies with all applicable local and state air quality rules, regulations and laws. Failure to comply with any of these conditions shall be a violation of APCD Rule 206, this permit, as well as any applicable section of the California Health & Safety Code.

D.1 **Compliance with Permit Conditions:** The permittee shall comply with all permit conditions in Section 9.D.

D.2 **Condition Acceptance:** Acceptance of this operating permit by the permittee shall be considered as acceptance of all terms, conditions, and limits of this permit. [*Re: APCD Rule 206*]

D.3 **Grounds for Revocation:** Failure to abide by and faithfully comply with this permit shall constitute grounds for revocation pursuant to California Health & Safety Code Section 42307 *et seq.*

D.4 **Reimbursement of Costs**: All reasonable expenses, as defined in APCD Rule 210, incurred by the APCD, APCD contractors, and legal counsel for all activities related to the implementation of Regulation XIII (*Part 70 Operating Permits*) that follow the issuance of this PTO permit, including but not limited to permit condition implementation, compliance verification and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the permittee as required by Rule 210.

D.5 **Access to Records and Facilities:** As to any condition that requires for its effective enforcement the inspection of records or facilities by the APCD or its agents, the permittee shall make such records available or provide access to such facilities upon notice from the APCD. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A.

D.6 **Compliance:** Nothing contained within this permit shall be construed to allow the violation of any local, State or Federal rule, regulation, ambient air quality standard or air quality increment.

D.7 **Consistency with Analysis:** Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application and supplements thereof (as documented in the APCD's project file) and the APCD's analyses under which this permit is issued.

D.8 **Consistency with Federal, State and Local Permits:** Nothing in this permit shall relax any air pollution control requirement imposed on E&B by any other governmental agency.

D.9 **Fugitive Hydrocarbon Emissions:** In addition to requirements specified in Section 9.C, the following requirements are applicable:

(a) Emissions from fugitive hydrocarbon components (e.g., valves and flanges) shall not exceed the emission limits set forth in Table 5.1-3.

(b) The total component leak-path count listed in the permittee's most recent I&M component leak-path inventory shall not exceed the total component leak-path count listed in Table 5.1-1 by more than five-percent. This five-percent range is to allow for minor differences due to component counting methods and does not constitute allowable emissions growth due to the addition of new equipment.

(c) All routine venting of hydrocarbons shall be routed to a compressor, flare header or other APCD-approved control device.

D.10 **Abrasive Blasting Equipment:** All abrasive blasting activities performed at the facility shall comply with the requirements of the California Administrative Code Title 17, Sections 92000 through 92530.

D.11 **Permitted Equipment:** Only those equipment items listed in Attachment 10.4 are covered by the requirements of this permit and APCD Rule 201.B.

D.12 **Mass Emission Limitations**: Mass emissions for each equipment item (i.e., emissions unit) associated with Gas Plant 10 shall not exceed the values listed in Table 5.1-3. Emissions for the entire facility shall not exceed the total limits listed in Table 5.2.

D.13 **Operation/Throughput Limitations:** The following throughput limitations shall not be exceeded at Gas Plant 10:

NGL Production:	24,000	gallons/day
Gas Processed:	6.000	MMscf/day
Gas Consumption:	0.019	MMscf/day

Note: For combustion equipment, based upon maximum design input rating of burners of the glycol reboilers and fuel heat content of 1,050 Btu/scf

D.14 **Process Stream Sampling and Analysis:** The permittee shall sample and analyze the process streams listed in Section 4.8 of this permit consistent with the requirements of that section. All process stream samples shall be taken according to APCD-approved ASTM methods and must follow traceable chain of custody procedures.

D.15 **Process Monitoring Systems - Operation and Maintenance:** All facility process monitoring devices listed in Section 4.7 shall be properly operated and maintained according to manufacturer recommended specifications and the APCD approved *Process Monitor Calibration and Maintenance Plan.*

D.16 **Recordkeeping:** All records and logs required by this permit and any applicable APCD, state or federal rule or regulation shall be maintained for a minimum of five calendar years at the facility. These records or logs shall be readily accessible and be made available to the APCD upon request.

D.17 **Odorous Organic Sulfides (Rule 310):** The permittee shall not discharge into atmosphere H_2S and organic sulfides that result in a ground level impact beyond the stationary source property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour. [*Re: APCD Rule 310*]

D.18 **Annual Compliance Verification Reports:** The permittee shall submit a report to the APCD, by March 1st of each year containing the information listed below and shall document compliance with all applicable permit requirements. These reports shall be in a format approved by the APCD. All logs and other basic source data not included in the report shall be available to the APCD upon request. Pursuant to Rule 212, a completed *APCD Annual Emissions Inventory Questionnaire* shall be included in the annual report or submitted electronically via the APCD website. The report shall include the following information:

(a) Operations of all permit exempt activities including all parameters necessary to calculate emissions.

(b) Throughput records indicating the volume of NGL produced, gas processed and gas consumed in the reboilers.

(c) The annual emissions totals of all pollutants in tons per year for each emission unit and summarized for the entire facility.

D.19 **Documents Incorporated by Reference:** The documents listed below, including any APCD-approved updates thereof, are incorporated herein and shall have the full force and effect of a permit condition for this operating permit:

(a) *Generic Inspection and Maintenance Plan for Independent Operators* (dated January 14, 1993 and approved for Hallador January 21, 1993 and all subsequent approved updates)

(b) *Tank Degassing Plan - Hallador Production Company (dated September 7, 1995 and approved by the APCD September 20, 1995)*

(c) *Fuel Use Monitoring Plan (dated September 16, 1993 and approved by the APCD March 24, 1994)*

(d) *Hallador Flare Volume Monitoring Plan* (dated September 21, 1994 and approved May 11, 1995)

(e) *Hallador Flare Minimization Plan* (dated September 21, 1994 and approved May 11, 1995)

(f) *Process Monitor Calibration and Maintenance Plan – Hallador Production Company (dated August 4, 2000 and approved August 16, 2000,)*

(g) *Hallador Emergency Episode Plan approved March 3, 2000.*

AIR POLLUTION CONTROL OFFICER

_____

_____

Date

NOTES:

a. This permit supersedes PTO 9136-R4 / Part 70 Permit 9136 issued June 14, 2005.
b. Permit Reevaluation Due Date: April 20011
c. Part 70 Operating Permit Expiration Date: April 20011

RECOMMENDATION

It is recommended that this PTO be issued with the conditions as specified in the permit.

Phil Sheehan		Brian Shafritz	
AQ Engineer	Date	Engineering Supervisor	Date

10.0 Attachments

10.1 Emission Calculation Documentation

10.2 Emission Calculation Spreadsheets

10.3 Fee Statement

10.4 Equipment List

10.5 Comments on the Draft Permit and APCD Responses

10.1 EMISSION CALCULATION DOCUMENTATION:

This attachment contains all relevant emission calculation documentation used for the emission tables in Section 5. Refer to Section 4 for the general equations. Detailed calculation spreadsheet are attached as Attachment 10.2. The letters A-D refer to Tables 5.1-1 and 5.1-2.

Reference A - External Combustion Devices (Glycol Reboilers)

- The maximum operating schedule is in units of hours

- The gaseous fuel default characteristics are:
  - ⇒ HHV = 1,050 Btu/scf
  - ⇒ Fuel S = 10 ppmvd as H_2S for all equipment
    = 10.6 ppmvd as S
  - ⇒ Emission factors, shown below, are based on USEPA AP-42, Tables 1.4-2 & 1.4-1, (5th Edition, 2/96).

Residential Emission Factors (0.175 MMBtu/hr Reboiler)

NOx	ROC	CO	SOX	PM	PM10	Units
0.094	0.0073	0.040	0.0017	0.0112	0.0122	Lb/MMBtu

Commercial Emission Factors (0.675 MMBtu/hr Reboiler)

NOx	ROC	CO	SOX	PM	PM10	Units
0.1	0.00528	0.021	0.0017	0.012	0.012	Lb/MMBtu

SO_2 emission factor is based on mass balance equation, based on fuel S. Thus:

⇒ SO_2 (lb/MMBtu) = 0.169 lb SO_2/scf of H_2S * 1/HHV * (ppmvd S in fuel)

Reference B – Flare:

- The operating schedule and fuel input are based on Hallador's Flare Minimization Plan
- The gaseous fuel default characteristics are:
  - HHV = 1,050 Btu/scf
  - Fuel S = 796 ppmvd as H_2S
  - = 846 ppmvd as S
- Emission factors, shown below, are based on USEPA AP-42, Tables 13.5-1 and 13.5-2.
- No emergency flaring is allowed under this permit thus the emissions for **emergency flaring** is zero for all pollutants.

NOx	ROC	CO	SOx	PM	PM10	Units
0.068	0.057	0.37	0.13613	0.02	0.02	lb/MMBtu

SO_2 emission factor is based on mass balance equation based on fuel S. Thus:
SO_2 (lb/MMBtu) = 0.169 lb SO_2/scf of H_2S * 1/HHV * (ppmvd S in fuel)

Reference C - Components Emitting Fugitive ROCs

- Emission factors are based on the *APCD P&P 6100.061* guidelines.
- An 80-percent reduction in fugitive emissions was assumed due to the implementation of a fugitive inspection and maintenance plan pursuant to Rule 331 with a 100-percent reduction for components maintained as non-detectable emitters (less than 500 ppm).
- Components that are unsafe to monitor receive a zero emission reduction.

Reference D -- Solvents

All Solvent and coating use at the E&B Stationary Source is covered under PTO 7250.

10.2 Emission Calculation Spreadsheets

Attachment: A

Date: *04/10/08*

BOILER / STEAM GENERATOR CALCULATION WORKSHEET (ver. 6.0)

DATA

Permit No.	10914	
Owner/Operator	E&B Natural Resources	
Facility/Lease	Gas Plant 10	
Boiler Type	Firetube	
Boiler Mfg.	North Country	
Boiler Model No.	no data	
Boiler Serial/ID No.	no data	
Boiler Horsepower	no data	Bhp
Burner Type	Gas	
Burner Mfg.	B&W	
Burner Model No.	no data	
Max. Firing Rate of Burner	0.650	MMBtu/hr
Max. Annual Heat Input	5,694.000	MMBtu/yr
Daily Operating schedule	24	hrs/day
Yearly Load factor (%)	100	%
Fuel Type	PUC Natural Gas	
High Heating Value	1,050	Btu/scf
Sulfur Content of Fuel	80.00	ppmvd as H2S
Nitrogen Content of Fuel	-	wt. % N
Boiler Classification	Commercial	
Firing Type	Other Type	
PM Emission Factor	0.0075	lb/MMBtu
PM_{10} Emission Factor	0.0075	lb/MMBtu
NO_x Emission Factor	0.0980	lb/MMBtu
SO_x Emission Factor	0.0137	lb/MMBtu
CO Emission Factor	0.0824	lb/MMBtu
ROC Emission Factor	0.0054	lb/MMBtu

RESULTS

	lb/hr	lb/day	TPY
Nitrogen Oxides (as NO_2)	0.06	1.53	0.28
Sulfur Oxides (as SO_2)	0.01	0.21	0.04
PM_{10}	0.00	0.12	0.02
Total Suspended Particulate (PM)	0.00	0.12	0.02
Carbon Monoxide	0.05	1.29	0.23
Reactive Organic Compounds (ROC)	0.00	0.08	0.02

Hourly Heat Release	0.650	MMBtu/hr
Daily Heat Release	15.600	MMBtu/day
Annual Heat Release	5,694.000	MMBtu/yr
Rule 342 Applicability	5.7	Billion Btu/yr

FUGITIVE ROC EMISSIONS CALCULATION

ADMINISTRATIVE INFORMATION
Attachment: B - NEI Fugitives
Company: E&B Natural Resources
Facility: Gas Plant 10
Processed by: PES
Date: April 2, 2008
Path & File Name:

Facility Type: (Choose one)									
Production Field									
Gas Processing Plant	x	ROC[2]		Uncontrolled		Controlled	Controlled	Controlled	Controlled
Refinery		Emission	ROC/THC	ROC	ROC	ROC	ROC	ROC	ROC
Offshore Platform		Factor	Ratio	Emission	Control	Emission	Emission	Emission	Emission
Component	Count[1]	(lbs/day-clp)		(lbs/day)	Eff	(lbs/hr)	(lbs/day)	(Tons/Qtr)	(Tons/year)
Gas Condensate Service									
Valves - Acc/Inacc	165	1.058	0.38	66.34	0.80	0.55	13.27	0.61	2.42
Valves - Bellows		1.058	0.38	0.00	1.00	0.00	0.00	0.00	0.00
Valves - Unsafe		1.058	0.38	0.00	0.00	0.00	0.00	0.00	0.00
Valves - Low Emitting		1.058	0.38	0.00	0.00	0.00	0.00	0.00	0.00
Valves - E-500		1.058	0.38	0.00	0.85	0.00	0.00	0.00	0.00
Valves - E-100		1.058	0.38	0.00	0.90	0.00	0.00	0.00	0.00
Flanges - Acc/Inacc	240	0.058	0.43	5.99	0.80	0.05	1.20	0.05	0.22
Flanges - Unsafe	2	0.058	0.43	0.05	0.00	0.00	0.05	0.00	0.01
Flanges - E-500		0.058	0.43	0.00	0.85	0.00	0.00	0.00	0.00
Flanges - E-100		0.058	0.43	0.00	0.90	0.00	0.00	0.00	0.00
Compressor Seals - To Atm		10.794	0.20	0.00	0.80	0.00	0.00	0.00	0.00
Compressor Seals - To VRS		10.794	0.20	0.00	1.00	0.00	0.00	0.00	0.00
Compressor Seals - E-500		10.794	0.20	0.00	0.85	0.00	0.00	0.00	0.00
Compressor seals - E-100		10.794	0.20	0.00	0.90	0.00	0.00	0.00	0.00
PSV - To Atm	2	9.947	0.07	1.39	0.80	0.01	0.28	0.01	0.05
PSV - To VRS		9.947	0.07	0.00	1.00	0.00	0.00	0.00	0.00
PSV - E-500		9.947	0.07	0.00	0.85	0.00	0.00	0.00	0.00
PSV - E-100		9.947	0.07	0.00	0.90	0.00	0.00	0.00	0.00
Pump Seals		3.3	0.79	0.00	0.80	0.00	0.00	0.00	0.00
Pump Seals - E-500		3.3	0.79	0.00	0.85	0.00	0.00	0.00	0.00
Pump Seals - E-100		3.300	0.79	0.00	0.90	0.00	0.00	0.00	0.00
Sub Total	409			73.76		0.62	14.79	0.67	2.70

FUGITIVE ROC EMISSIONS CALCULATION

ADMINISTRATIVE INFORMATION
Attachment: B - NEI Fugitives
Company: E&B Natural Resources
Facility: Gas Plant 10
Processed by: PES
Date: April 2, 2008
Path & File Name:

Facility Type: (Choose one)									
Production Field									
Gas Processing Plant	x								
Refinery									
Offshore Platform									
Component	Count[1]	ROC[2] Emission Factor (lbs/day-clp)	ROC/THC Ratio	Uncontrolled ROC Emission (lbs/day)	ROC Control Eff	Controlled ROC Emission (lbs/hr)	Controlled ROC Emission (lbs/day)	Controlled ROC Emission (Tons/Qtr)	Controlled ROC Emission (Tons/year)
Oil Service									
Valves - Acc/Inacc	90	0.4306	0.33	12.79	0.80	0.11	2.56	0.12	0.47
Valves - Unsafe		0.4306	0.33	0.00	0.00	0.00	0.00	0.00	0.00
Valves - E-500		0.4306	0.33	0.00	0.85	0.00	0.00	0.00	0.00
Valves - E-100		0.4306	0.33	0.00	0.90	0.00	0.00	0.00	0.00
Flanges - Acc/Inacc	80	0.0694	0.33	1.83	0.80	0.02	0.37	0.02	0.07
Flanges - Unsafe		0.0694	0.33	0.00	0.00	0.00	0.00	0.00	0.00
Flanges - E-500		0.0694	0.33	0.00	0.85	0.00	0.00	0.00	0.00
Flanges - E-100		0.0694	0.33	0.00	0.90	0.00	0.00	0.00	0.00
Pump Seals - Single		1.308	0.33	0.00	0.80	0.00	0.00	0.00	0.00
Pump Seals - E-500		1.308	0.33	0.00	0.85	0.00	0.00	0.00	0.00
Pump Seals - E-100		1.308	0.33	0.00	0.90	0.00	0.00	0.00	0.00
PSV - To Atm		1.7400	0.33	0.00	0.80	0.00	0.00	0.00	0.00
PSV - To VRS		1.7400	0.33	0.00	1.00	0.00	0.00	0.00	0.00
PSV - E-500		1.7400	0.33	0.00	0.85	0.00	0.00	0.00	0.00
PSV - E-100		1.7400	0.33	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	170			14.621		0.12	2.92	0.13	0.53
Total	**579**			**88.39**		**0.74**	**17.72**	**0.81**	**3.23**

Notes:
1. Source:
2. APCD P&P # 6100.060.1998.
3. APCD P&P # 6100.061.1998
4. A 80% efficiency is assigned to fugitive components Rule 331 implementation.

10.3 Fee Statement

Fees for the permit reevaluation of PTO 9136 are based on Fee Schedule A of APCD Rule 210. The fees are detailed in the attached table.

FEE STATEMENT
PT-70/Reeval No. 09136 - R5
FID: 03202 Gas Plant 10 / SSID: 01073

Santa Barbara County
Air Pollution Control District

Device Fee

Device No.	Device Name	Fee Schedule	Qty of Fee Units	Fee per Unit	Fee Units	Max or Min. Fee Apply?	Number of Same Devices	Pro Rate Factor	Device Fee	Penalty Fee?	Fee Credit	Total Fee per Device
101061	H2S Removal Vessels	A6	1.000	3.26	Per 1000 gallons	Min	2	1.000	113.16	0.00	0.00	113.16
101062	H2S Removal Solution/Gas Scrubbing Vessel	A6	1.000	3.26	Per 1000 gallons	Min	1	1.000	56.58	0.00	0.00	56.58
105009	Inlet Filter Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105010	Absorber with Integral Scrubber	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105011	Flash Tank	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105013	Amine Still	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105015	Still Overhead Reflux Accumulator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105016	Amine Storage Tank	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105017	Amine Booster Pumps	A2	1.000	29.53	Per total rated hp	Min	2	1.000	113.16	0.00	0.00	113.16
105018	Amine Charge Pumps	A2	1.000	29.53	Per total rated hp	Min	2	1.000	113.16	0.00	0.00	113.16
105019	Charcoal Filter	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105020	Particulate Sock Filter	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105022	Still Reflux Pumps	A2	1.500	29.53	Per total rated hp	Min	2	1.000	113.16	0.00	0.00	113.16
008333	Glycol Reboiler	A3	0.670	427.25	Per 1 million Btu input	No	1	1.000	286.26	0.00	0.00	286.26
008334	Glycol Reboiler	A3	0.170	427.25	Per 1 million Btu input	No	1	1.000	72.63	0.00	0.00	72.63
101060	Flare	A3	262.500	427.25	Per 1 million Btu input	Max	1	1.000	5,716.84	0.00	0.00	5,716.84
105021	Amine Reboiler	A3	0.650	427.25	Per 1 million Btu input	No	1	1.000	277.71	0.00	0.00	277.71
101064	Inlet Separator	A6	1.000	3.26	Per 1000 gallons	Min	1	1.000	56.58	0.00	0.00	56.58
101068	Three-phase Vertical Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101070	Oil/Propane Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101075	Line Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101063	Fuel Gas Scrubber	A6	1.000	3.26	Per 1000 gallons	Min	1	1.000	56.58	0.00	0.00	56.58
101076	Line Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101083	Filter Separator	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101078	Vapor Recovery Unit Suction Scrubber	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101082	Primary Gas Condensation Inlet Scrubber	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101087	First-stage Inlet Gas Condensate Scrubber	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95

101089	Second-stage Inlet Gas Condensate Scrubber	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101091	Fuel Gas Condensate Scrubber	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105255	Sales Gas Scrubber	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
105030	Clark Compressor #10	A2	600.000	29.53	Per total rated hp	Max	1	1.000	5,716.84	0.00	0.00	5,716.84
105031	Clark Compressor #12	A2	600.000	29.53	Per total rated hp	Max	1	1.000	5,716.84	0.00	0.00	5,716.84
101074	Condensate Pump	A2	10.000	29.53	Per total rated hp	No	1	1.000	295.30	0.00	0.00	295.30
101079	Vapor Recovery Compressor	A2	3.000	29.53	Per total rated hp	No	1	1.000	88.59	0.00	0.00	88.59
101080	Vapor Recovery Unit Scrubber Pump	A2	1.000	29.53	Per total rated hp	Min	1	1.000	56.58	0.00	0.00	56.58
101088	Condensate Pump	A2	10.000	29.53	Per total rated hp	No	1	1.000	295.30	0.00	0.00	295.30
101065	Propane Surge Tank	A6	33.000	3.26	Per 1000 gallons	No	1	1.000	107.58	0.00	0.00	107.58
101067	Economizer	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101069	Gas Chiller	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101071	Stabilizer	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101073	Stabilizer Reboiler	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
101077	Propane Condensers	A1.a	1.000	56.95	Per equipment	No	2	1.000	113.90	0.00	0.00	113.90
101086	Loading Rack	A1.a	1.000	56.95	Per equipment	No	1	1.000	56.95	0.00	0.00	56.95
	Device Fee Sub-Totals =								**$20,733.55**	**$0.00**	**$0.00**	
	Device Fee Total =											**$20,733.55**

Permit Fee

Fee Based on Devices **20,733.55**

Fee Statement Grand Total = $20,733

Notes:

(1) Fee Schedule Items are listed in APCD Rule 210, Fee Schedule "A".

(2) The term "Units" refers to the unit of measure defined in the Fee Schedule.

10.4 Equipment List

Wednesday, April 09, 2008
Santa Barbara County APCD – Equipment List

PT-70/Reeval 09136 R5 / FID: 03202 Gas Plant 10 / SSID: 01073

A PERMITTED EQUIPMENT

1 H2S Removal Equipment

1.1 H2S Removal Vessels

Device ID #	**101061**	***Device Name***	**H2S Removal Vessels**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-304 & V-305
Model		*Serial Number*	
Location Note			
Device Description	Diameter (each): 6.0 feet, height (each): 20.0 feet, scrubbing medium (each): sulfa-check (or equivalent).		

1.2 H2S Removal Solution/Gas Scrubbing Vessel

Device ID #	**101062**	***Device Name***	**H2S Removal Solution/Gas Scrubbing Vessel**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-303
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 2.0 feet, length: 10.0 feet.		

2 CO2 Removal Equipment

2.1 Inlet Filter Separator

Device ID #	**105009**	***Device Name***	**Inlet Filter Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-300
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 8 inches, height: 6 feet seam to seam.		

2.2 Absorber with Integral Scrubber

Device ID #	**105010**	***Device Name***	**Absorber with Integral**

			Scrubber
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-400
Model		*Serial Number*	
Location Note			
Device Description	(V-400), diameter: 18 inches, height: 41 feet 1 inch seam to seam, contains two 15 foot tall sections packed with 5/8 inch diameter 304 SS pall rings.		

2.3 Flash Tank

Device ID #	**105011**	***Device Name***	**Flash Tank**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-500
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 30 inches, height: 8 feet seam to seam.		

2.4 Amine Still

Device ID #	**105013**	***Device Name***	**Amine Still**
Rated Heat Input		*Physical Size*	
Manufacturer	High Country Fabricators	*Operator ID*	V-700
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 12.75 inches, height: 45 feet 1 inch seam to seam, contains two 15 foot tall sections packed with 1 inch 304 SS nutter rings.		

2.5 Still Overhead Reflux Accumulator

Device ID #	**105015**	***Device Name***	**Still Overhead Reflux Accumulator**
Rated Heat Input		*Physical Size*	
Manufacturer	High Country Fabricators	*Operator ID*	V-710
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 18 inches, height: 5 feet seam to seam.		

2.6 Amine Storage Tank

Device ID #	**105016**	***Device Name***	**Amine Storage Tank**
Rated Heat Input		*Physical Size*	
Manufacturer	High Country Fabricators	*Operator ID*	V-800
Model		*Serial Number*	
Location Note			

Device Description	Diameter: 36 inches, length: 12 feet seam to seam.

2.7 Amine Booster Pumps

Device ID #	**105017**	***Device Name***	**Amine Booster Pumps**
Rated Heat Input		*Physical Size*	10.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	P-800A & B
Model		*Serial Number*	
Location Note			
Device Description			

2.8 Amine Charge Pumps

Device ID #	**105018**	***Device Name***	**Amine Charge Pumps**
Rated Heat Input		*Physical Size*	10.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	P-801A & B
Model		*Serial Number*	
Location Note			
Device Description			

2.9 Charcoal Filter

Device ID #	**105019**	***Device Name***	**Charcoal Filter**
Rated Heat Input		*Physical Size*	
Manufacturer	High Country Fabricators	*Operator ID*	F-100
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 30 inches, height: 6 feet 10 inches seam to seam.		

2.10 Particulate Sock Filter

Device ID #	**105020**	***Device Name***	**Particulate Sock Filter**
Rated Heat Input		*Physical Size*	
Manufacturer	High Country Fabricators	*Operator ID*	F-300
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 10.75 inches, height: 3 feet 3.5 inches seam to seam.		

2.11 Still Reflux Pumps

Device ID #	**105022**	***Device Name***	**Still Reflux Pumps**
Rated Heat Input		*Physical Size*	1.50 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	P-700A & B
Model		*Serial Number*	
Location Note			
Device Description			

3 Heat Service Equipment

3.1 Glycol Reboiler

Device ID #	**008333**	***Device Name***	**Glycol Reboiler**
Rated Heat Input	0.670 MMBtu/Hour	*Physical Size*	0.67 MMBtu/Hour
Manufacturer		*Operator ID*	H-101
Model		*Serial Number*	
Location Note			
Device Description	The vent stack is connected to the vapor recovery unit suction scrubber V-601 and vapor recovery compressor.		

3.2 Glycol Reboiler

Device ID #	**008334**	***Device Name***	**Glycol Reboiler**
Rated Heat Input	0.170 MMBtu/Hour	*Physical Size*	0.17 MMBtu/Hour
Manufacturer		*Operator ID*	H-102
Model		*Serial Number*	
Location Note			
Device Description			

3.3 Flare

Device ID #	**101060**	***Device Name***	**Flare**
Rated Heat Input	262.500 MMBtu/Hour	*Physical Size*	262.50 MMBtu/Hour
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 1.0 foot, height: 30.0 feet, equipped with automatic electronic ignition and non-continuous flare pilot.		

3.4 Amine Reboiler

Device ID #	**105021**	***Device Name***	**Amine Reboiler**
Rated Heat Input	0.650 MMBtu/Hour	*Physical Size*	0.65 MMBtu/Hour

Manufacturer	High Country Fabricators	*Operator ID*	H-700
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 36 inches, length: 21 feet seam to seam, burner manufacturer: B&W Inc.		

4 Scrubbers & Separators

4.1 Inlet Separator

Device ID #	**101064**	***Device Name***	**Inlet Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-101
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 1.0 foot, length: 4.0 feet.		

4.2 Three-phase Vertical Separator

Device ID #	**101068**	***Device Name***	**Three-phase Vertical Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-103
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 3.0 feet, length: 8.5 feet.		

4.3 Oil/Propane Separator

Device ID #	**101070**	***Device Name***	**Oil/Propane Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-105
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 0.5 foot, length: 1.5 feet.		

4.4 Line Separator

Device ID #	**101075**	***Device Name***	**Line Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-301
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 14.0 inches, length: 38.0 inches.		

4.5 Fuel Gas Scrubber

Device ID #	**101063**	***Device Name***	**Fuel Gas Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-104
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 6.0 inches, length: 15.0 inches. Serving glycol reboiler H-101.		

4.6 Line Separator

Device ID #	**101076**	***Device Name***	**Line Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-302
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 6.6 inches, length: 29.0 inches.		

4.7 Filter Separator

Device ID #	**101083**	***Device Name***	**Filter Separator**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-120
Model		*Serial Number*	
Location Note			
Device Description	Consisting of two connected vessels [one on top of the other], diameter (each): 16.0 inches, length (each): 16.3 feet.		

4.8 Vapor Recovery Unit Suction Scrubber

Device ID #	**101078**	***Device Name***	**Vapor Recovery Unit Suction Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-601
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 1.0 foot, length: 3.0 feet. Serving glycol reboiler H-101.		

4.9 Primary Gas Condensation Inlet Scrubber

Device ID #	**101082**	***Device Name***	**Primary Gas Condensation Inlet**

			Scrubber
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-110
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 3.0 feet, height: 13.0 feet.		

4.10 First-stage Inlet Gas Condensate Scrubber

Device ID #	**101087**	***Device Name***	**First-stage Inlet Gas Condensate Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-51
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 6.0 feet, height: 26.0 feet.		

4.11 Second-stage Inlet Gas Condensate Scrubber

Device ID #	**101089**	***Device Name***	**Second-stage Inlet Gas Condensate Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-61
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 6.0 feet, height: 20.0 feet.		

4.12 Fuel Gas Condensate Scrubber

Device ID #	**101091**	***Device Name***	**Fuel Gas Condensate Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-150
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 2.0 feet, height: 12.0 feet.		

4.13 Sales Gas Scrubber

Device ID #	**105255**	***Device Name***	**Sales Gas Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-105B
Model		*Serial Number*	
Location Note			

Device Description	Diameter: 24", Height: 8 feet, Connected to the gas gathering system.

5 Pumps and Compressors

5.1 Clark Compressor #10

Device ID #	**105030**	***Device Name***	**Clark Compressor #10**
Rated Heat Input		*Physical Size*	600.00 Horsepower (Electric Motor)
Manufacturer	Clark	*Operator ID*	#10
Model	HRA-6T	*Serial Number*	
Location Note			
Device Description	Driven exclusively by an electric motor.		

5.2 Clark Compressor #12

Device ID #	**105031**	***Device Name***	**Clark Compressor #12**
Rated Heat Input		*Physical Size*	600.00 Horsepower (Electric Motor)
Manufacturer	Clark	*Operator ID*	#12
Model	HRA-6T	*Serial Number*	
Location Note			
Device Description	Driven exclusively by an electric motor. The removal of the gas-fired ICE from Clark #12 resulted in the creation of NOx, ROC, and CO ERCs per Decision of Issuance (DOI) #0033.		

5.3 Condensate Pump

Device ID #	**101074**	***Device Name***	**Condensate Pump**
Rated Heat Input		*Physical Size*	10.00 Horsepower (Electric Motor)
Manufacturer	Gardener-Denver	*Operator ID*	P-50
Model		*Serial Number*	
Location Note	Located next to the 1 inch and 2 inch stage inlet scrubbers.		
Device Description			

5.4 Vapor Recovery Compressor

Device ID #	**101079**	***Device Name***	**Vapor Recovery Compressor**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Dresser	*Operator ID*	

Model	100	*Serial Number*	
Location Note			
Device Description	Serving glycol reboiler H-101 and amine reboiler H-700.		

5.5 Vapor Recovery Unit Scrubber Pump

Device ID #	**101080**	***Device Name***	**Vapor Recovery Unit Scrubber Pump**
Rated Heat Input		*Physical Size*	1.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	P-103
Model		*Serial Number*	
Location Note			
Device Description	Electric motor horsepower rating: 1.0.		

5.6 Condensate Pump

Device ID #	**101088**	***Device Name***	**Condensate Pump**
Rated Heat Input		*Physical Size*	10.00 Horsepower (Electric Motor)
Manufacturer	Gardener-Denver	*Operator ID*	P-50
Model		*Serial Number*	
Location Note			
Device Description			

6 Tanks

6.1 Propane Surge Tank

Device ID #	**101065**	***Device Name***	**Propane Surge Tank**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-201
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 3.0 feet, length: 8.2 feet.		

7 Fugitive Hydrocarbon Components - Gas/Condensate Svc - CLP

7.1 Valves

Device ID #	**008323**	***Device Name***	**Valves**
Rated Heat Input		*Physical Size*	786.00 Component Leakpath
Manufacturer		*Operator ID*	

Model		*Serial Number*	
Location Note			
Device Description			

7.2 Valves - UTM

Device ID #	**008325**	***Device Name***	**Valves - UTM**
Rated Heat Input		*Physical Size*	15.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Major valves utm: 0 clp Minor valves utm: 15 clp		

7.3 Connections

Device ID #	**008327**	***Device Name***	**Connections**
Rated Heat Input		*Physical Size*	6122.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

7.4 Connections - UTM

Device ID #	**008328**	***Device Name***	**Connections - UTM**
Rated Heat Input		*Physical Size*	62.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

7.5 Compressor seals (open)

Device ID #	**008329**	***Device Name***	**Compressor seals (open)**
Rated Heat Input		*Physical Size*	1.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Gas/Light Liquid Service Components		

7.6 Compressor Seals (sealed)

Device ID #	**008330**	***Device Name***	**Compressor Seals (sealed)**
Rated Heat Input		*Physical Size*	18.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Gas/Light Liquid Service Components		

7.7 Pump Seals

Device ID #	**008331**	***Device Name***	**Pump Seals**
Rated Heat Input		*Physical Size*	4.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Gas/Light Liquid Service Components		

7.8 Relief Valves (open)

Device ID #	**008332**	***Device Name***	**Relief Valves (open)**
Rated Heat Input		*Physical Size*	9.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note	Installed on NGL Storage tanks which were removed from service.		
Device Description	Gas/Light Liquid Service Components		

8 Fugitive Hydrocarbon Components - Oil Service - CLP

8.1 Valves

Device ID #	**105000**	***Device Name***	**Valves**
Rated Heat Input		*Physical Size*	90.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

8.2 Connections

Device ID #	**105001**	***Device Name***	**Connections**
Rated Heat Input		*Physical Size*	80.00 Component Leakpath

Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

9 Economizer

Device ID #	**101067**	***Device Name***	**Economizer**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-202
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 2.0 feet, length: 7.0 feet.		

10 Gas Chiller

Device ID #	**101069**	***Device Name***	**Gas Chiller**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	E-102
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 26.0 inches, length: 14.0 feet.		

11 Stabilizer

Device ID #	**101071**	***Device Name***	**Stabilizer**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	T-101
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 16.0 inches, length: 44.0 feet.		

12 Stabilizer Reboiler

Device ID #	**101073**	***Device Name***	**Stabilizer Reboiler**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	E-104
Model		*Serial Number*	
Location Note			
Device Description	Diameter: 10.0 inches, length: 10.0 feet.		

13 Propane Condensers

Device ID #	**101077**	***Device Name***	**Propane Condensers**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	C-56A & C-56B
Model		*Serial Number*	
Location Note			
Device Description	Total area: 15,500 square feet.		

14 Loading Rack

Device ID #	**101086**	***Device Name***	**Loading Rack**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Used to load NGL into highway tanker truck.		

B EXEMPT EQUIPMENT

1 Still Overhead Condenser and Amine Cooler

Device ID #	**105014**	***Device Name***	**Still Overhead Condenser and Amine Cooler**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	AE-100A & 100B
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:* 202.L.1 Heat Exchangers	
Location Note			
Device Description	100A: Duty: 0.432 MMBtu/hour and 100B duty: 0.224 MMBtu/hour, equipped with a 10 hp electric motor.		

2 Amine to Amine Heat Exchanger

Device ID #	**105012**	***Device Name***	**Amine to Amine Heat Exchanger**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	E-600
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:* 202.L.1 Heat Exchangers	
Location Note			

Device Description	Duty: 0.438 MMBtu/hour.

3 Gas/Gas Heat Exchanger

Device ID #	**101066**	***Device Name***	**Gas/Gas Heat Exchanger**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	E-101
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:* 202.L.1 Heat Exchangers	
Location Note			
Device Description	Diameter: 16.0 inches, length: 20.0 feet.		

4 NGL/Gas Heat Exchanger

Device ID #	**101072**	***Device Name***	**NGL/Gas Heat Exchanger**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	E-107
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:* 202.L.1 Heat Exchangers	
Location Note			
Device Description	Diameter: 4.0 inches, length: 8.0 feet.		

5 Fin Fan Cooler

Device ID #	**101081**	***Device Name***	**Fin Fan Cooler**
Rated Heat Input		*Physical Size*	20.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	C-56D & C-56E
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:* 202.L.1 Heat Exchangers	
Location Note			
Device Description	Cooler C-56D serves the first stage gas discharge from the gas compressors and C-56E serves the second stage gas discharge from the gas compressors; driven by electric motors (2), horsepower rating (each): 20.0.		

6 Abrasive Blasting Unit

Device ID #	**101092**	***Device Name***	**Abrasive Blasting Unit**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.H.3 Portable Abrasive Blast Equipment
Location Note			
Device Description			

7 Storage of Drums of Lubrication Oils

Device ID #	**101093**	***Device Name***	**Storage of Drums of Lubrication Oils**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.U.3 Equipment Used In Wipe Cleaning Operations (<55 Gal/Yr At T He Source)
Location Note			
Device Description			

8 Storage of Oils with IBP 300° F or Greater

Device ID #	**101094**	***Device Name***	**Storage of Oils with IBP 300° F or Greater**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.1 Unheat Storage Of Lqd Org Mtls W/Bp >=300 @ 1 Atm
Location Note			
Device Description			

9 Painting and Solvent Use for Maintenance

Device ID #	**101095**	***Device Name***	**Painting and Solvent Use for**

			Maintenance
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.4 Storage Of Org Lqds Except Gasoline <=1500 Gal
Location Note			
Device Description			

10 Compressor Jacket Water Fin Fan Cooler

Device ID #	**101096**	***Device Name***	**Compressor Jacket Water Fin Fan Cooler**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.L.1 Heat Exchangers
Location Note			
Device Description			

11 Fresh Water Storage Tank

Device ID #	**101097**	***Device Name***	**Fresh Water Storage Tank**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	201.A No Potential To Emit Air Contaminants
Location Note			
Device Description			

12 Lubrication Oil Storage Tanks

Device ID #	**101098**	***Device Name***	**Lubrication Oil Storage Tanks**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-59A & V-59B

Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.3 Storage Of Lubricating Oils
Location Note			
Device Description	diameter (each): 6.0 feet, height (each): 10.0 feet.		

13 Lubrication Oil Storage Tanks

Device ID #	**101099**	***Device Name***	**Lubrication Oil Storage Tanks**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-55A & V-55B
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.3 Storage Of Lubricating Oils
Location Note			
Device Description	Diameter (each): 9.0 feet, height (each): 15.0 feet.		

14 Lubrication Oil Dispensing Pump

Device ID #	**101100**	***Device Name***	**Lubrication Oil Dispensing Pump**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	P-56A
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.3 Storage Of Lubricating Oils
Location Note			
Device Description			

15 Lubrication Oil Transfer Pump

Device ID #	**101101**	***Device Name***	**Lubrication Oil Transfer Pump**
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer		*Operator ID*	P-56
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.3 Storage Of Lubricating Oils
Location Note			
Device Description			

16 Lubrication Oil Unloading Station

Device ID #	**101102**	***Device Name***	**Lubrication Oil Unloading Station**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.3 Storage Of Lubricating Oils
Location Note			
Device Description			

17 Compressed Air Storage Vessel

Device ID #	**101103**	***Device Name***	**Compressed Air Storage Vessel**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	201.A No Potential To Emit Air Contaminants
Location Note			
Device Description			

18 Above Ground Diesel Fuel Oil Storage Tank

Device ID #	**101104**	***Device Name***	**Above Ground Diesel Fuel Oil Storage Tank**
Rated Heat Input		*Physical Size*	10000.00 Gallons
Manufacturer		*Operator ID*	V-19
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.2 Storage Of Refined Fuel Oil W/Grav <=40 Api
Location Note			
Device Description			

19 Single-Product Diesel Dispenser

Device ID #	**101105**	***Device Name***	**Single-Product**

			Diesel Dispenser
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	201.A No Potential To Emit Air Contaminants
Location Note			
Device Description	Nozzles: 1.		

20 Above Ground Solvent Storage Tank

Device ID #	**101106**	***Device Name***	**Above Ground Solvent Storage Tank**
Rated Heat Input		*Physical Size*	10000.00 Gallons
Manufacturer		*Operator ID*	V-20
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.1 Unheat Storage Of Lqd Org Mtls W/Bp >=300 @ 1 Atm
Location Note			
Device Description	Material stored: mineral spirits.		

21 Glycol Filters

Device ID #	**101107**	***Device Name***	**Glycol Filters**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	201.A No Potential To Emit Air Contaminants
Location Note			
Device Description			

22 Glycol Pump

Device ID #	**101108**	***Device Name***	**Glycol Pump**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Roper	*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	

	201.A No Potential To Emit Air Contaminants
Location Note	
Device Description	

23 Glycol Storage Vessel

Device ID #	**101109**	***Device Name***	**Glycol Storage Vessel**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-21B
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	201.A No Potential To Emit Air Contaminants
Location Note			
Device Description	Diameter: 108 inches, Height: 20 feet 6 inches.		

24 Amine Storage Vessel

Device ID #	**105256**	***Device Name***	**Amine Storage Vessel**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	V-21A
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	201.A No Potential To Emit Air Contaminants
Location Note			
Device Description	Diameter 108 inches, Height 20 feet 6 inches		

25 Refrigerant Propane Storage Vessel

Device ID #	**105257**	***Device Name***	**Refrigerant Propane Storage Vessel**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*APCD Rule Exemption:*	202.V.8 Storage Of Liquefied/Compressed Gases
Location Note			
Device Description	Serving V-201, Diameter: 36 inches, Length: 12 feet.		

10.5 Comments on the Draft Permit and APCD Responses