State of New Mexico
ENVIRONMENT DEPARTMENT
Air Quality Bureau
2048 Galisteo St.
Santa Fe, NM 87505
Phone (505) 827-1494
Fax (505) 827-1523
www.nmenv.state.nm.us

BILL RICHARDSON
Governor

RON CURRY
Secretary

DERRITH WATCHMAN-MOORE
Deputy Secretary

February 28, 2006

Ed Rios
General Manager
Ciniza Refinery
Route 3, Box 7
Gallup, NM 87301

Ref: Operating Permit Application No. P021-M1
Ciniza Refinery

Dear Mr. Rios:

Enclosed are Final Operating Permit and the attachments for the above refinery. The refinery is located at Section 33, Range: 15-W, Township: 15-N in Mckinley County, New Mexico.

If you have any questions please contact me in Santa Fe at (505) 955-8003.

Sincerely,

Imam Imanuddin
Permit Specialist
Operating Permits Unit

Encl: Attachments

RECEIVED
MAR - 6 2006
BY:

State of New Mexico
ENVIRONMENT DEPARTMENT
Air Quality Bureau
2048 Galisteo St.
Santa Fe, NM 87505
Phone (505) 827-1494
Fax (505) 827-1523
www.nmenv.state.nm.us

BILL RICHARDSON
Governor

RON CURRY
Secretary

DERRITH WATCHMAN-MOORE
Deputy Secretary

Certified Mail No: 7004 0750 0001 3305 2238
Return Receipt Requested

OPERATING PERMIT NO:	**P021-M1**
TEMPO/IDEA ID NO:	888 - PRT20040001
AIRS NO:	350310008
FACILITY NAME:	Ciniza Refinery
PERMITTEE:	Giant Industries, Arizona, Inc. Route 3, Box 7 Gallup, NM 87301
RESPONSIBLE COMPANY OFFICIAL:	Ed Rios General Manager

ISSUED BY: New Mexico Environment Department

M. A. Uhl
Mary Uhl
Acting Air Quality Bureau Chief

FEB 27 2006
Date of Issuance

INTRODUCTION

Operating Permit Number **P021-M1** is issued by the Air Quality Bureau of the New Mexico Environment Department ("Department") to **Giant Industries, Arizona, Inc.** pursuant to the federal Clean Air Act ("federal Act"), the New Mexico Air Quality Control Act ("state Act") and regulations adopted pursuant to the state and federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits. This permit authorizes the operation of this facility located at UTM Zone 12, UTMH 733.60 km, UTMV 3930.10 km, approximately 17 miles east of Gallup, New Mexico in McKinley County.

This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.

This facility is engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, or other petroleum products through distillation of petroleum or through re-distillation, cracking, or reforming of unfinished petroleum derivatives pursuant to 40CFR60.101 (a).

This modification consists of incorporation of the following changes:

1. Revised emission rates of the flare (Unit FL-1).
2. Modification of two benzene strippers (Units Z84-V1, and Z84-V2).
3. Installation of a new benzene stripper (Unit Z84-V7).
4. Applicability of 40CFR63, Subpart UUU to Fluid Catalytic Cracking Unit (Unit FCCU), and Reformer (Unit REF).
5. Installation of a new furnace (Unit D-H3.

This permit P021-M1 supercedes permit P021, and will expire five years from the date of issuance of the original permit P021, pursuant to 20.2.70.302.B NMAC. Application for renewal of this permit is due twelve (12) months prior to the date of expiration, pursuant to 20.2.70.300.B.2 NMAC.

Pursuant to 20.2.70.302.A.1 NMAC, the Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued.

Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department. Pursuant to 20.2.70.302.A.5 NMAC, all terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the federal Act.

PERMIT SHIELD

Pursuant to 20.2.70.302.J NMAC, compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in Table A.1 of Appendix A. The requirements in Table A.1 are applicable to this facility with specific requirements identified for individual emission units.

The Department has determined that the requirements in Table A.2 of Appendix A as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.

This permit shield does not extend to administrative amendments, to minor permit modifications, to changes made under Section 502(b)(10) of the federal Act, or to permit terms for which notice has been given to reopen or revoke all or part.

TOTAL POTENTIAL EMISSIONS

The total potential emissions from this facility, excluding insignificant or trivial activities, are shown in the following table. Emission limitations for individual units are shown in section 3.2

Table 1: Total Potential Criteria Pollutant Emissions from Entire Facility (for information only, not an enforceable condition):

Pollutant	**Emissions** (tons per year)
Nitrogen Oxides (NOx)	664.82
Carbon Monoxide (CO)	2,152.95
Volatile Organic Compounds (VOC)	414.62*
Sulfur Dioxide (SO2)	1,852.04
Total Suspended Particulate (TSP)	122.02
Fugitive VOC (facility wide)	670.1

* The total VOC includes Tanks VOC emissions

Total Potential HAPS that exceed one ton per year (for information only, not an enforceable condition):

Pollutant	**Emission Rates** (tons per year)*
2-2-4-Trimethyl Pentane	10.5
Hexane	25.1
Benzene	4.15
Ethylbenzene	5.5
Toluene	2.62
MTBE	1.2
Naphthalene	1.1
Xylene	1.0
Total HAPS	51.17

*HAP emissions are already included in the total VOC emissions above.

PERMIT TERMS AND CONDITIONS

1.0 GENERAL CONDITIONS

1.1 The following permit terms and conditions are placed upon the permittee in accordance with 20.2.70.301.B NMAC and 20.2.70.302.A.2 NMAC.

1.1.1 The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the federal Act.

1.1.2 It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

1.1.3 If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC.

1.1.4 The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee.

1.1.5 A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit.

1.1.6 This permit does not convey property rights of any sort, or any exclusive privilege.

1.1.7 In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA.

1.2 The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or federal Acts, or any applicable state or federal regulation or law. This condition is pursuant to 20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2.

1.3 If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. This condition is pursuant to 20.2.70.302.A.1.d NMAC.

1.4 The permittee shall pay fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. This condition is pursuant to 20.2.70.302.A.1.e NMAC.

1.5 A responsible official (as defined in 20.2.70 NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. This condition is pursuant to 20.2.70.300.E NMAC.

1.6 Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. This condition is pursuant to 20.2.70.201.B NMAC.

1.7 Upon request by the Department, the permittee shall submit an emissions inventory for this facility. This condition is pursuant to 20.2.73 NMAC and 20.2.70.302.A.1 NMAC.

1.8 The source will continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the source will meet such requirements on a timely basis. This condition is pursuant to sections 300.D.11.c and 302.G.3 of 20.2.70 NMAC.

1.9 Compliance with this operating permit is sufficient to comply with all NSR permits listed in Table A.1 of Appendix A. This condition is pursuant to 20.2.70.302.A.1 NMAC.

2.0 FACILITY INFORMATION

The following conditions are placed upon the permittee pursuant to 20.2.70.302.A.7 NMAC, and NSR permits 0633-M4, 0633-M4-R1, 0633-M5-R1, 0633-M6, 0633-M6-R1.

2.1 All of the process equipment authorized for this facility is listed in the tables shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Table 2.1.1: Cogen Turbines & Boilers

Emission Unit No.	Equipment Type	Equipment Manufacturer & Model
Z-81-B104/G104	Gas Turbine Cogen. And Seam Boiler	U.S Turbine/Deltak
Z-81-B105/G105	Gas Turbine Cogen. and Steam Boiler	U.S. Turbine/Deltak
Z-81-B102	Boiler	Vogt
Z-81-B106	Boiler	Holman
F-B1	CO Boiler	Babcock & Wilcox

Table 2.1.2: Compressor Engines

Emission Unit No.	Equipment Type	Equipment Manufacturer & Model
G-C1A	Gas Compressor Engine	Worthington (330 HP)
G-C1B	Gas Compressor Engine	Worthington (330 HP)
G-C1C	Gas Compressor Engine	Worthington (330 HP)
P-C1A	Gas Compressor Engine	Worthington (450 HP)
P-C1B	Gas Compressor Engine	Worthington (450 HP)

*Natural gas fueled, reciprocating internal combustion engine

Table 2.1.3: Furnaces & Flare

Emission Unit No.	Equipment Type	Equipment Manufacturer & Model
C-H1	Furnace	W-K-M Mfg. Co - 60MMBTU/hr
C-H2	Furnace	W-K-M Mfg. Co - 25MMBTU/hr
C-H5	Furnace	Petrochem - 30MMBTU/hr
D-H1	Furnace	Broach - 2MMBTU/hr
D-H2	Furnace	Broach - 7.5MMBTU/hr
D-H3	Furnace	Broach - 7.5MMBTU/hr
H-F1	Furnace	K.W. Anderson, G.C. BROACH - 12MMBTU/hr
H-F2	Furnace	K.W. Anderson, G.C. BROACH - 12MMBTU/hr
P-H1	Furnace	U.O.P. Design - 49MMBTU/hr
P-H2	Furnace	Optimized Process Furnace Design - 33MMBTU/hr
A-H2	Furnace	K.W. Anderson - 20MMBTU/hr
I-H1	Furnace	Radco - 13.4MMBTU/hr
I-H2	Furnace	Petrochem - 7.3MMBTU/hr
I-H3	Furnace	Optimized Process Furnace Design- 41MMBTU/hr
FL-1	Flare	1 MMBTU/hr

Table 2.1.4: Liquid Storage Tanks

Emission Unit Nos.	Liquid Stored	Max. Storage Capacity (gallons)
T-2	Gasoline	168,000
T-3	Gasoline	168,000
T-4	Gasoline	168,000
T-5	Ethanol Blendstock	75,700
T-6	MTBE	73,900
T-7	Reformate	13,900
T-101	Crude Oil	3,360,000
T-102	Crude Oil	3,360,000
T-107	Recovered Oil	210, 600
T-108	Alkylate	210,900
T-225	Naphtha	1,029,000
T-337	Ethanol Blendstock	840,000
T-338	Naphtha	1,029,000
T-339	Naphtha	1,029,000
T-344	Reformate	882,700
T-345	Ethanol Blendstock	800,600
T-451	Gasoline	38,900
T-452	Gasoline	38,900
T-562	Isomerate	878,200
T-563	Natural Gasoline	878,200
T-567	Gasoline	840,000
T-568	MTBE	84,500
T-569	Gasoline	1,043,000
T-570	Gasoline	1,043,000
T-571	Gasoline	1,043,000

Emission Unit Nos.	Liquid Stored	Max. Storage Capacity (gallons)
T-572	Gasoline	1,043,000
T-574	Straight Run Gasoline	1,678,000
T-576	Light Cat. Gasoline	1,677,000
T-581	Diesel	1,053,000
T-582	Gasoline	1,053,000
T-701	FCC Feed	1,536,000

Table 2.1.5: Other Regulated Equipment

Unit No.	Description	Capacity
Z84-T5	API Oil-Water Separator	500 gpm
Z84-V1	Benzene Stripper	500 gpm
Z84-V2	Benzene Stripper	500 gpm
Z84-V7	Benzene Stripper	500 gpm
FCCU	Fluid Catalytic Cracking Unit (regulated process)	
REF	Reformer (regulated process)	
ISOM	Isomerization Unit (regulated process)	
SATS	Saturates Gas Unit (regulated process)	
Fugitive Emissions	Valves, Pump seals, Compressor seals, Pressure relief valves, Connectors, Open ended lines	
DHT	Refinery Waste Water System	
Truck Rack	Tank Truck Loading Rack	

2.2 All the pollution control equipment required for this facility is listed in the table shown below. Each emission point is identified by the same number that was assigned to it in the permit application.

Emission Control Equipment

Emission Unit No.	Control Equipment Type	Control Equipment Manufacturer and Model	Control For Unit(s)
FL-1	Smokeless Flare	John Zink/Callidus BTZ-15-24/20	None
Truck Rack	Vapor Recovery Unit	John Zink - Series 2000	VRU

The control equipment is located within the facility and serves the following functions: The flare is designed to handle the facility flaring events and is used to combust excess gases. The Vapor Recovery Unit (VRU) captures and recovers VOC emissions associated with truck loading operations.

3.0 REQUIREMENTS FOR INDIVIDUAL EMISSION UNITS

Information regarding applicable requirements, emission limits, operational limitations and requirements, work practices, and monitoring, testing and recordkeeping requirements is provided below for each emissions unit or set of similar units.

3.1 Applicable Requirements
All applicable requirements for this facility are listed in Appendix A, Table A.1. This condition is pursuant to 20.2.70.302.A.1 NMAC.

3.2 Emissions Limits
Tables 3.2.1 to 3.2.5 list the emission units and their allowable emission limits. This condition is pursuant to 40CFR50, Paragraphs 1, 7 and 8 of 20.2.70.302.A NMAC, and NSR permits 0633-M4, 0633-M4-R1, 0633-M5-R1, 0633-M6, and 0633-M6-R1.

Table 3.2.1: Allowable Emissions-Cogen Turbines & Boilers

Emission Unit No.	Maximum Allowable Emission Rates for Each Unit in PPH/TPY*									
	TSP lb/hr	TSP ton/y	NOx Lb/hr	NOx ton/y	SO2 lb/hr	SO2 ton/y	CO lb/hr	CO ton/y	VOC lb/hr	VOC ton/y
Z-81-B104/G104	2.0	8.7	10.0	43.8	0.1	0.3	7.3	31.8	0.2	0.9
Z-81-B105/G105	2.0	8.7	10.0	43.8	0.1	0.3	7.3	31.8	0.2	0.9
Z-81-B102	1.3	5.8	10.9	47.6	32.5	142.2	2.1	9.2	0.2	1.0
Z-81-B106	0.4	1.8	8.0	35.0	0.1	0.3	1.0	4.2	1.3	5.6
F-B1	17.0	74.5	25.9	113.4	280.0	1,226.4	446.4	1,955.0	0.3	1.1

Table 3.2.2: Allowable Emissions-Compressor Engine

Emission Unit No.	Maximum Allowable Emission Rates in PPH/TPY*							
	NOx lb/hr	NOx ton/y	CO lb/hr	CO ton/y	VOC lb/hr	VOC ton/y	TSP lb/hr	TSP ton/y
G-C1A	7.8	34.3	1.1	4.8	0.3	1.4	0.2	0.6
G-C1B	7.8	34.3	1.1	4.8	0.3	1.4	0.2	0.6
G-C1C	7.8	34.3	1.1	4.8	0.3	1.4	0.2	0.6
P-C1A	10.5	46.1	1.5	6.5	0.4	1.9	0.2	0.9
P-C1B	10.5	46.1	1.5	6.5	0.4	1.9	0.2	0.9

Table 3.2.3: Allowable Emissions-Furnace & Flare

Emission Unit No.	Maximum Allowable Emission Rates in PPH/TPY*									
	TSP lb/hr	TSP ton/y	NOx lb/hr	NOx ton/y	SO2 lb/hr	SO2 ton/y	CO lb/hr	CO ton/y	VOC lb/hr	VOC ton/y
C-H1	0.8	3.6	6.0	26.3	30.3	132.6	2.4	10.5	0.2/	0.7
C-H2	0.3	1.5	3.5	15.3	12.6	55.3	0.9	3.8	0.1	0.3
C-H5	0.4	1.8	3.0	13.1	0.1	0.1	1.2	5.3	0.1	0.4
H-F1	0.2	0.7	1.2	5.3	6.1	26.5	0.3	1.1	0.1	0.2
H-F2	0.2	0.7	1.2	5.3	6.1	26.5	0.3	1.1	0.1	0.2
P-H1	0.7	2.9	12.5	55.0	24.7	108.3	2.0	8.6	0.5	2.2
P-H2	0.5	2.0	3.0	13.0	0.1	0.1	1.3	5.8	0.3	1.5
A-H2	0.3	1.2	2.8	12.3	10.1	44.2	0.7	3.1	0.1	0.2
I-H1	0.2	0.8	1.9	8.2	0.1	0.1	0.5	2.1	0.1	0.2
I-H2	0.1	0.4	0.7	3.2	3.7	16.1	0.2	0.7	0.1	0.1
I-H3	0.6	2.5	4.1	18.0	0.1	0.1	1.6	7.2	0.4	1.8
D-H1	0.1	0.1	0.2	0.9	0.1	0.1	0.1	0.2	0.1	0.1
D-H2			1.0	4.4			1.0	4.4	1.0	4.4
D-H3	0.12	0.52	0.3	1.3			0.45	1.95	0.12	0.52
FL-1 (flare)	0.1	0.1	1.69	7.42	16.58	72.62	9.21	40.30	24.69	108.1

*Pounds per hour/tons per year

Table 3.2.4: Allowable Emissions – Liquid Storage Tank

Emission Unit No.	Maximum Allowable Emission Rates in TPY*
	VOC
T-2	0.8
T-3	1.2
T-4	1.0
T-5	1.6
T-7	1.8
T-101	1.7
T-102	8.8
T-107	2.5
T-225	22.2
T-338	20.3
T-339	22.2
T-451	5.1
T-452	5.1
T-567	18.6
T-569	11.3
T-570	19.8
T-571	23.2
T-572	23.2
T-574	23.5
T-576	7.9
T-582	1.1
T-701	2.7

*ton per year

Table 3.2.5: Allowable Emissions: Oil-Water Separator, Benzene Stripper & Truck Rack

Emission Unit No.	Maximum Allowable Emission Rates in TPY*
	VOC
Z84-T5 Z84-V1 Z84-V2 Z84-V7	34.6**
Truck Rack (VRU)	2.9/12.9

*ton per year

** Total emissions from Units Z84-T5 through Z84-V7

3.2.2 The NOx emissions from the operation of each turbine (B104/G104 and B105/G105) by itself or in combination with each boiler for cogeneration shall not exceed 150 ppmv at 15% oxygen on a dry basis. Reference- NSR 633-M4, condition 2a.

3.2.3 Particulate Emissions - The permittee shall not permit, cause, suffer or allow particulate matter emission to the atmosphere in excess of 0.05 grains per dry standards cubic foot of exit gas exclusive of emissions from the FCCU. This condition is pursuant to 20.2.37 NMAC, Section 202.A, and is state enforceable only.

3.2.4 The total mercaptan emissions from the entire refinery shall not exceed 0.25 pound per hour or the gas stream containing mercaptan has passed through a combustion device to achieve complete combustion or any other device which is at least as efficient to prevent mercaptan emissions to the atmosphere. This condition is pursuant to 20.2.37 NMAC, Section 200.A, and NSR permit 0633-M4, condition 2.f.

3.2.5 The ammonia emissions from the entire refinery shall not exceed 25 ppmv in the undiluted effluent gas stream or streams. This condition is pursuant to 20.2.37 NMAC, Section 203, and NSR permit number 633-M4, condition 2.g.

3.2.6 The hydrogen sulfide emissions from refinery stacks shall not exceed 10 ppmv in the undiluted effluent gas stream or streams or the effluent gas stream containing hydrogen sulfide is passed through a device capable of oxidizing the hydrogen sulfide to SO2. This condition is pursuant to NSR permit number 633-M4, condition 2.h.

3.2.7 The SO_2 emissions in the exhaust gases of each cogeneration turbine shall not exceed 150 ppmv at 15 percent oxygen on a dry basis, or the fuel burned in the turbine shall not contain sulfur in excess of 0.8 percent by weight. This condition is pursuant to NSR permit number 633-M4, condition 2d.

3.2.8 Total volatile organic compounds (VOC) emissions from the API oil-water separator (Z84-T5) and the benzene strippers (Z84-V1, Z84-V2, and Z84-V7) shall be determined by the method specified below. This limit shall apply on a rolling 12 month basis. Reference – NSR permit number 633-M6, Condition 2.a.

3.2.8.1 Methods of Emission Determination (Units Z84-T5, Z84-V1, Z84-V2, and Z84-V7): The following conditions are brought forward from NSR permit 0633-M6, Conditions 7.a through 7.f.

a. Compliance with the VOC emission limits shall be determined using the method specified in conditions b through f below.

b. Once per calendar month the permittee shall calculate the mass of VOC emitted from Unit No. Z84-T5 during the preceding calendar month. This value shall be calculated as the number which results from the calculation method specified in condition i) below (term "A") multiplied by the number which results from the calculation method specified in condition ii) below (term "B"):

   i) Term "A", the concentration of VOC in the exhaust vent stream of the unit, shall be equal to the VOC concentration in the exhaust gas stream during the previous calendar month, and expressed as a mass fraction. If the Department has reason to believe that the measured concentration of VOC in the exhaust vent stream may not be representative of actual operating conditions (e.g., due to extensive control system downtime or noncompliance with the emission standards of 40 CFR 60 Subpart QQQ), the Department may require the permittee to use a different number for the exhaust vent stream VOC concentration.

   ii) Term "B", the mass flow rate of the exhaust vent stream of the unit, shall be equal to the maximum design flow rate of the exhaust vent stream calculated pursuant to 40 CFR 60 Subpart QQQ, expressed in tons per hour, and multiplied by the number of hours in that calendar month. Upon approval by the Department the permittee may use a measured mass flow rate for this calculation and may use the actual number of hours in the calendar month that the unit operated.

c. Once per calendar month the permittee shall calculate the total mass of VOC emitted by Unit Nos. Z84-V1, Z84-V2, and Z84-V7 during the preceding calendar month. This value shall be calculated as the number which results from the calculation method specified in condition i) below (term "A") multiplied by the number which results from the calculation method specified in condition ii) below (term "B"):

i) Term "A", twice the wastewater benzene load per barrel of crude charge, shall be equal to the measured benzene in wastewater over the most recent 12 calendar months (calculated pursuant to the requirements of 40 CFR 61 Subpart FF and condition 3.4.2.14 above), expressed in tons, divided by the measured crude oil charge to the facility over the most recent 12 calendar months, expressed in barrels, and multiplied by 2 to account for non-benzene VOC emitted by the units.

ii) Term "B", the crude charge for the preceding calendar month, shall be equal to the number of barrels of crude oil delivered to the facility during the preceding calendar month.

d. Once per calendar month the permittee shall calculate the total mass of VOC emitted from Unit No. Z84-T5 during the previous 12 month period. This value shall be the sum of the 12 values calculated pursuant to condition b above during the preceding 12 consecutive calendar months.

e. Once per calendar month the permittee shall calculate the total mass of VOC emitted from Unit Nos. Z84-V1, Z84-V2, and Z84-V7 during the previous 12 month period. This value shall be the sum of the 12 values calculated pursuant to condition c above during the preceding 12 consecutive calendar months.

f. Once per calendar month the value calculated in condition d shall be added to the value calculated in condition e above to determine the permittee's compliance during the preceding year with the emission limit specified in condition 3.2.8 above.

3.3 Operational Requirements
The following conditions are pursuant to Paragraphs 1, 7 and 8 of 20.2.70.302.A NMAC, and NSR permit 0644-M4, and 0633-M5-R1.

3.3.1 FCCU Opacity - The permittee shall not permit, cause, suffer or allow emissions during regeneration or cleaning to:

(1) equal or exceed an opacity of 40% except for a period not to exceed five minutes during which the opacity is not to exceed 60%. The five minute period during which the opacity exceeds 40% may not occur more frequently than three times a day; or

(2) consist of one hundred pounds or more of particulate matter per hour.

The conditions of section 3.3.1 are pursuant to 20.2.37 NMAC, Section 202.B.

3.3.2 Carbon Monoxide: The permittee shall not permit, cause, suffer or allow carbon monoxide emissions to the atmosphere from a catalyst cracking recirculation or a regeneration unit in

excess of 20,000 ppm by volume in the undiluted effluent gas stream or streams. This condition is pursuant to 20.2.37 NMAC, Section 201.A.

3.3.3 The refinery's maximum crude oil processing rate shall not exceed 23,000 barrels per day on a daily basis and total feed stock charge shall not exceed 32,200 barrels per day on a daily basis unless such increases can be accomplished with no increase in the potential emission rate of pollutants to the atmosphere. Reference – NSR permit 0633-M4, condition 3.h.

3.3.4 The elevated flare (Unit no. FL-1) is subject to 40 CFR Part § 60.18 (and 40 CFR § 63.11) and shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. This design and operational requirement for the elevated flare shall not apply during those periods specifically excluded by 40 CFR § 63.11 and § 63.6.h. As specified in 40 CFR §60.18(f), and its referenced subparts, EPA Reference Method 22, conducted with an observation period of 2 hours, shall be the approved procedure for demonstrating compliance with the no visible emissions requirement. Reference – NSR permit 0633-M5-R1, condition 1.k.

3.3.5 The FCCU is subject to the requirements of 40 CFR 63 Subpart UUU, including specific emission limits of Table 1, Subpart UUU; and Table 8, Subpart UUU. This requirement is pursuant of 40 CFR 63.1564 (c)(1).

3.3.6 The Reformer, including P-H1, P-H2, and associated process equipment, is subject to the requirements of 40 CFR 63 Subpart UUU, including specific emission limits of Table 15, Subpart UUU and Table 22, Subpart UUU. This requirement is pursuant to 40 CFR 63.1567(a)(1).

3.3.7 Oil-Water Separator (Unit Z84-T5) - Compliance Determination Method for VOC Emission Limits: Compliance with the VOC emission limits is specified in condition 3.2.8 above and shall be determined using the method specified in condition 3.2.8.1.

3.3.8 The Unit No. D-H3 shall only combust pipeline quality natural gas with a hydrogen sulfide (H2S) content of 0.25 grains/100 dscf or less, equivalent to 4 ppmv.

Combustion of refinery fuel gas in this unit is not authorized unless a continuous emission monitoring system is installed in accordance with 40 CFR 60, Subpart J, to ensure the H2S content of the gas is not greater than 10 grains/100 dscf and a significant permit revision is obtained from the Department in accordance with 20 NMAC 2.72. Reference - NSR permit 0633-M6-R1, condition 3.c.

3.3.9 The Unit No. D-H3, a unit in VOC service within the diesel hydrodesulfurization unit, is subject to a leak detection, maintenance, and repair (LDMAR) program in accordance with 40 CFR 60, Subpart GGG. The equipment in hazardous air pollutant (HAP) service is subject to an

LDMAR program in accordance with 40 CFR 63, Subpart CC. Reference - NSR permit 0633-M6-R1, condition 3.d.

3.3.10 This facility is subject to 20.2.37 NMAC – Petroleum Processing Facilities, and shall comply with all applicable requirements of that regulation. Pursuant to 20.2.37.7.C NMAC Unit No. Z84-T5 qualifies as a "new petroleum processing facility" and shall comply with the provisions of 20.2.37.204.B NMAC – Hydrocarbon Separation Facility. Reference - NSR permit 0633-M6, condition 1.e.

3.3.11 Once per calendar month the permittee shall record the number of barrels of crude oil delivered to the facility during the preceding calendar month.

3.3.12 The 80,000 barrel storage tank (#102) shall be equipped with an external floating roof with a primary and secondary seal. Reference – NSR permit 0633-M4, condition 3.i.

3.4 Emissions Monitoring and Testing Requirements
The conditions of Section 3.4 are pursuant to 20.2.70.302.C NMAC, and NSR permits 0633-M5-R1, 0633-M6, and 0633-M6-R1.

3.4.1 General Monitoring Requirements

3.4.1.1 The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.

3.4.1.2 If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

3.4.1.3 The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated as follows:

3.4.1.3.1 If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.

3.4.1.3.2 If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

3.4.1.3.3 A minimum of one of each type of monitoring activity shall be conducted during the five-year term of this permit.

3.4.1.4 The permittee is not required to report a deviation for any monitoring or testing that is consistent with the monitoring requirements and permit conditions.

3.4.1.5 For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the full normal load as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% load cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report that is required to be furnished to the Department.

3.4.1.6 When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

3.4.1.7 Monitoring shall become effective 120 days after the date of permit issuance if the monitoring is new or in addition to monitoring imposed by an existing applicable requirement. Any preexisting monitoring requirements shall continue to be in force from the date of permit issuance.

3.4.1.8 Startup, Shutdown and Malfunction Conditions: For operations and equipment subject to 40CFR60, excess emissions, or operations under startup, shutdown, or malfunction shall be addressed in accordance with the requirements of 40CFR60.7(c) or 40CFR60.8(c), as appropriate. This facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40CFR63.6(e)(3). This condition is pursuant to 20.2.70.302.A.1 NMAC.

3.4.2 Unit Specific Monitoring Requirements: The following table lists emission units and their required monitoring. Descriptions of required monitoring follow the table.

Table 3.4.2: Required Monitoring:

Emission Unit Nos.	Parameters To Monitor	To Comply With	Monitoring Required	Monitoring Description
General Monitoring				
All Combustion Equipment	Visible Emissions	20.2.37.202.A NMAC, and Section 3.2	Particulate Matter	3.4.2.1
Monitoring for IC Engines				
G-C1A, G-C1B, G-C1C, P-C1A, and P-C1B (IC engine)	NOx, VOC, and CO	Emission limits specified in section 3.2	Maintenance and Repair	3.4.2.2
Monitoring for Furnace, and Boiler				
F-B1 (CO boiler), Z-81-B104/G104, Z-81-B105/G105 (cogen. turbine & boiler) -BOILER PART, and Z-81-B102, Z-81-B106 (boiler), C-H1, C-H2, C-H5, H-F1, H-F2, P-H2, A-H2, I-H1, I-H2, I-H3, D-H1, D-H2, D-H3, and P-H1 (furnace)	Flame Characteristics, and Excess Air Check & Flue Gas Temperature	Emission limits specified in section 3.2	Operational Inspection	3.4.2.3
Z-81-B106 (boiler)	Fuel Usage, and Analysis	40CFR60, Subparts A and Dc	NSPS Monitoring	3.4.2.4
Monitoring for Cogen. Turbine				
Z-81-B104/G104, and Z-81-B105/G105 (cogen. turbine & boiler)-TURBINE PART	Fuel Usage, and Analysis	40CFR60, Subpart GG	NSPS Monitoring at 60.334	3.4.2.5
F-B1 (CO boiler)	NOx, CO, VOC, SO2, and TSP	Emission limits specified in section 3.2	Periodic Emission Tests	3.4.2.6
Monitoring for Liquid Storage Tanks				
T-337, T-344, and T-345 (Ka), and T-102, T-108, T-562, T-563, and T-581 (Kb)	Roof Seals, cover, seal gaps and Tank True Vapor Pressure	40CFR60, Subpart Ka, and Kb	NSPS Recordkeeping and Reporting	3.4.2.7
T-2, T-3, T-4, T-6, T-101, T-102, T-108, T-567, T-568, T-569, T-570, T-571, T-572, T-574, T-576, and T-582	Roof Seals, cover, seal gaps and Tank True Vapor Pressure	40CFR63, Subpart CC, Section 646	MACT Recordkeeping and Reporting	3.4.2.8

Emission Unit Nos.	Parameters To Monitor	To Comply With	Monitoring Required	Monitoring Description
Floating Roof Tanks that are not regulated by 40CFR60, Subpart K, Ka, and Kb	Roof Seals, cover, and seal gaps	Non NSPS Monitoring	Visual Inspection for Leaks	3.4.2.9
Monitoring for Flare				
FL-1 (flare)	Visible Emissions	40CFR63, Subpart A, Section 63.11 40CFR60.18(f)	MACT Monitoring Method 22	3.4.2.10
Other NSPS Monitoring				
Truck Loading	Total Organic compounds (TOC)	40CFR63, Subpart CC and Subpart R	NESHAP Monitoring	3.4.2.11
I-H1, I-H3, D-H1, D-H2, D-H3, P-H2, ISOM, and SATS	Fugitive VOC (Leak Detection and Repair)	40CFR60, Subpart GGG	NSPS Monitoring	3.4.2.12
Process Units and Emission Points pursuant to 40CFR63, Subpart CC, Section 640	HAPS Emissions	40CFR63, Subpart CC	NESHAP Monitoring	3.3.2.13
Benzene Containing Waste Streams	Benzene	40CFR61, Subpart FF	NESHAP Monitoring	3.4.2.14
Refinery Waste Water Systems (DHT), and Oil-Water Separator (Z84-T5)	VOC	40CFR60, Subpart QQQ	NSPS Monitoring	3.4.2.15
NESHAP Monitoring				
FCCU, and Reformer (REF)	HAPs	40 CFR 63 Subpart UUU	NESHAP Monitoring and Compliance Testing	3.4.2.16

Note: The numbering of conditions in this table are in the same sequence for the next three major Sections of the permit: Monitoring, Recordkeeping, and Reporting.

3.4.2.1 Opacity Monitoring (For all combustion equipment): Use of pipeline quality natural gas fuel or natural gas liquids constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20%. At such time as fuel other than pipeline quality natural gas or natural gas liquids is used, opacity shall be measured in accordance with the procedures at 40CFR60, Appendix A, Method 9. Opacity measurements shall continue on a quarterly basis until such time as pipeline quality natural gas or natural gas liquids are used.

3.4.2.1.1 Pipeline quality natural gas is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (scf) and is either composed of at least 70% methane by volume or has a gross calorific value between 950 and 1100 Btu per standard cubic foot.

3.4.2.1.2 For the purposes of Condition 3.4.2.1 of this permit, "natural gas liquids" means those substances meeting the definition in 40 CFR 60.631.

3.4.2.2 Maintenance and Repair Monitoring (For IC Engines, Units G-C1A, G-C1B, G-C1C, P-C1A, and P-C1B): Maintenance and repair activities that involve adjustment, replacement, or repair of functional components with the potential to affect operation of an emission unit shall be documented as they occur for the following events:

(a) Routine Maintenance that takes a unit out of service for more than two hours during any twenty-four hour period.

(b) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.

3.4.2.3 Operational Inspection & Excess air Check - (Boiler/Furnace)

The units listed below shall undergo operational inspections and excess air check at the following frequencies, and by the method described below:

Unit No.	Operational Inspection	Excess Air Check
F-B1 (boiler)	weekly	weekly
Z81-B102, Z81-B104, Z81-B105, and Z81-B106 (boiler), and C-H1, P-H1 (furnace)	monthly	semiannual
C-H2, C-H5, D-H1, D-H2, D-H3, H-F1, H-F2, P-H2, A-H2, I-H1, I-H2, and I-H3 (furnace)	annual	

Operational Inspection

The permittee shall conduct operational inspections of the boiler/furnace to determine that the equipment is operating properly. The operational inspections shall include operational checks for indications of insufficient excess air, or too much excess combustion air. These operational checks shall include observation of common physical indications of improper combustion, including indications specified by the boiler manufacturer, and indications based on operational experience with these units.

Excess Air Check

The boiler/furnace shall have the excess air level and temperature in the flue gas measured at the frequency indicated in the table using a portable oxygen analyzer, an ORSAT analyzer, or other

method approved in advance by the Department. If an ORSAT apparatus or other gas absorption analyzer is used, the permittee must follow the procedures described in Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III, Stationary Source Specific Methods, US EPA, Publication no. EPA-600/4-77-02 (or later), Section 3.2.

Excess air measurements that use an electronic analyzer must conform to the procedures in the most current version of the Bureau's Standard Operating Procedure: Use of Portable Analyzers in Performance Tests. The permittee needs only to observe the steps that: a) require submission of a protocol, b) specify a minimum instrument response time, c) require instrument calibration, and d) specify the method of sampling the flue gas. The permittee shall carry out a minimum of five minutes of uninterrupted sampling for each stack.

3.4.2.4 NSPS Monitoring - Fuel Usage and Analysis-Boiler (Unit Z-81-B106):

The permittee shall comply with the monitoring requirements of 40CFR60, Subpart Dc.

3.4.2.5 NSPS Monitoring-turbine: Fuel Usage and Analysis - (Units Z-81-G104, Z-81-G105)

The permittee shall comply with the monitoring requirements of 40CFR60, Subpart GG, Section 60.334. The cogeneration turbines shall utilize steam injection to keep NOx emissions at or below the levels allowed in condition 3.2.2. In accordance with 40 CFR 60.334(a), each turbine shall be outfitted with a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine.

3.4.2.6 Periodic Emissions Tests Monitoring (For Boiler, Unit F-B1):
Periodic portable analyzer emission tests shall be performed for NO_x and CO at the intervals in the following schedule:

First Test --- six (6) months of permit issuance.
Second Test --twelve (12) months of permit issuance.
All subsequent testing shall be done annually.

Test results that demonstrate compliance with the NO_x and CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

3.4.2.7 NSPS Monitoring of Tanks: The Permittee shall comply with the monitoring requirements of 40CFR60, Subpart Ka, Section 60.113a for the units T-337, T-344, and T-345; and Subpart Kb, Section 60.113b for the units T-102, T108, T-562, T-563, and T-581 specified in section 3.3.1 above.

3.4.2.8 MACT Monitoring of Tanks (For Units T-2, T-3, T-4, T-6, T-101, T-102, T-108, T-567, T-568, T-569, T-570, T-571, T-572, T-574, T-576, and T-582): The Permittee shall comply with the monitoring requirements of 40CFR63, Subpart CC, Section 63.646.

3.4.2.9 Non-NSPS Tanks Monitoring -Visual Inspection, Leak Detection, and Maintenance and Repair (Floating Roof Tanks that are not regulated by 40CFR60, Subpart K, Ka, and Kb):
The permittee shall visually inspect the floating roof seals for holes, tears, leaks, and other openings **once** a year, **or** before each refilling of the tanks with crude oil or product. The permittee shall repair the items as necessary to minimize evaporation losses.

3.4.2.10 Monitoring of Flare (For Unit FL-1): The permittee shall comply with the monitoring requirements of 40CFR63, Subpart A, Section 63.11.

3.4.2.10.1 In accordance with 20 NMAC 2.37, the flare shall be operated and maintained to oxidize hydrogen sulfide in any refinery gas that does not fuel a combustion device. This condition is brought forward from NSR permit 0633-M4, condition 3.g.

3.4.2.11 MACT Monitoring of Truck Loading: The permittee shall comply with the monitoring requirements of 40CFR63, Subpart R, and Subpart CC.

3.4.2.11.1 A carbon bed adsorber vapor recovery unit (VRU) shall be used to control VOC and HAP emissions from the loading rack. The VRU shall comply with applicable federal MACT standards in 40 CFR 63.640 et seq., Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries. This condition is brought forward from NSR permit 0633-M4, condition 3.j.

3.4.2.12 NSPS Monitoring (For Units I-H1, I-H3, D-H1, D-H2, D-H3, P-H2, ISOM, and SATS): The permittee shall comply with the monitoring requirements of 40CFR60, Subpart GGG, Section 592 for Fugitive Equipment Leaks.

3.4.2.13 NESHAP Monitoring of Fugitive Equipment Leaks (Process Units and Emission Points): The permittee shall comply with the monitoring requirements of 40CFR63, Subpart CC, Section 648.

3.4.2.14 NESHAP Monitoring of Benzene Containing Waste Stream: The permittee shall comply with the monitoring requirements of 40CFR61, Subpart FF.

3.4.2.15 Monitoring of Oil-Water Separator (Unit Z84-T5) & Refinery Waste Water System (Unit DHT):

a) The permittee shall comply with all applicable monitoring requirements of 40 CFR 60 Subpart QQQ, including 40 CFR 60.695(a)(3)(ii). Reference – NSR permit number 633-M6, condition 3.a and 3d.

b) Once per calendar month the permittee shall measure the VOC concentration in the exhaust vent stream from Unit. No.Z84-T5. This measurement shall be performed under operating conditions that are representative of the actual operating conditions of the unit during that calendar month, and shall be performed using a method approved by the department. Reference – NSR permit number 633-M6, condition 3.c and 3.d.

3.4.2.16 NESHAP Monitoring (For Units FCCU, and REF): The permittee shall comply with the monitoring and compliance testing requirements of 40 CFR 63 Subpart UUU.

3.5 Emission Test Equipment and Procedures (For Boiler, Unit F-B1):

3.5.1 Test Equipment

Portable Emission Analyzers - A portable analyzer may be used instead of the EPA method tests of 40 CFR 60 for periodic emissions tests, but it must be capable of measuring the specified pollutants and O_2 over the full range of expected allowable emissions measurements. The manufacturer's specifications of the analyzer(s) to be used shall be submitted to the Department for review as part of the emissions test protocol that is submitted to the Department prior to testing.

3.5.2 Analysis and Test Methods

The following analysis procedures and test methods shall be performed as part of the periodic emissions monitoring requirement for the emission unit number F-B1. The permittee shall elect to use either EPA Reference Test Method or sampling by portable analyzer, subject to the requirements and limitations of section 3.4.

Portable Analyzer Emission Sampling: When a portable emission analyzer is used to measure emissions from the CO Boiler F-B1, it shall be setup and operated in accordance with the manufacturer's instructions, with the Department's most current Standard Operating Procedure for use of Portable Analyzers in Performance Tests, and with the following conditions:

(a) The CO boiler shall be tested in the "as found" condition. The CO boiler may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.

(b) Three test runs shall be conducted at 90% or greater of the full normal load as stated in this permit or, in the application if not in the permit, and at additional loads when requested by the Department. The permittee may request exceptions

to this loading (such as loading necessitated by operating conditions) from the Enforcement Section of the Air Quality Bureau. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the test report that is required to be furnished to the Department.

(c) During emission tests the moisture content, O_2 concentration, flow rate and temperature of the exhaust gas shall be monitored (or calculated by an acceptable method) and recorded. This information shall be included with the test report that is required to be furnished to the Department.

(d) After the time a correlation is established between emission rate and concentration of a pollutant, the periodic emission test may consist of measuring the pollutant concentration. Exhaust flow rate at the time of correlation (by 40CFR60-method 19, by manufacturer's correlation, or by initial testing) may be used to calculate emission rates at later tests.

4.0 RECORDKEEPING
Conditions of 4.0 are pursuant to 20.2.70.302.D NMAC.

4.1 General Recordkeeping Requirements:
Conditions of 4.1 are pursuant to 20.2.70.302.D.1 NMAC.

4.1.1 All sampling and measured data required by this permit for the emissions units in this facility shall be recorded. The minimum information to be included in these records is:

4.1.1.1 equipment identification (include make, model and serial number for all tested equipment and emission controls),
4.1.1.2 date, and time of sampling or measurements,
4.1.1.3 date analyses were performed,
4.1.1.4 the company or entity that performed the analyses,
4.1.1.5 analytical or test methods used,
4.1.1.6 results of analyses or tests,
4.1.1.7 operating conditions existing at the time of sampling or measurement

4.1.2 The permittee shall keep copies of all monitoring and measurement data, equipment calibration and maintenance records, Data Acquisition and Handling System (DAHS) if used, other supporting information, and reports required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall show clearly to which emissions unit and/or piece of monitoring equipment it applies, and the date the data was gathered. This condition is pursuant to 20.2.70.302.D.2 NMAC.

4.1.3 The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not

otherwise regulated under this permit, and the emissions resulting from those changes. This condition is pursuant to 20.2.70.302.I.2 NMAC.

4.2 Unit Specific Recordkeeping Requirements:
Conditions are pursuant to Subsection C and Paragraph D(1) of 20.2.70.302 NMAC.

4.2.1 Particulate Matter Recordkeeping (for all the combustion equipment): The permittee shall record dates and duration of use of any fuel other than pipeline quality natural gas and the corresponding opacity measurements.

4.2.2 Maintenance and Repair Activities Recordkeeping (For Units specified in section 3.4.2.2): Records of maintenance and repair activities shall be maintained for the reciprocating engines. Records of maintenance and repair activities shall include identification of emission units and the work involved.

4.2.3 Operational Inspections & Excess Air Check (For Boiler/Furnace, Units specified in section 3.4.2.3):

Records of operational inspections shall describe the results of visual and other sensory observations for insufficient or excessive combustion air for the boilers in accordance with sections 3.4.2.3. The permittee shall also note the type of fuel fired (pipeline quality natural gas, field gas, etc.), and append a contemporaneous fuel analysis if the gas is other than pipeline quality natural gas.

Excess Air Recordkeeping - Records of monitoring of excess combustion air shall include the equipment's fuel flow rate and stack temperature. If an electronic O_2 sensor is used, records shall be kept of instrument calibration data, and the make and model of the instrument. If an ORSAT apparatus or other gas absorption analyzer is used, the permittee must record all calibration results.

4.2.4 NSPS Recordkeeping (For Unit specified in section 3.4.2.4): The permittee shall comply with the recordkeeping requirements of 40CFR60, Subpart Dc, Section 60.48c.

4.2.5 NSPS Recordkeeping - Fuel Usage and Analysis (For Units specified in section 3.4.2.5): The permittee shall determine and record daily the sulfur content of the fuel being burned in each of the cogeneration turbines, and other recordkeeping requirements pursuant to 40CFR60, Subpart GG.

4.2.6 Periodic Emission Tests (For Boiler, Unit F-B1): Records of periodic emission test results of this unit shall be maintained properly.

4.2.7 NSPS Recordkeeping of Tanks: The Permittee shall comply with the recordkeeping requirements of 40CFR60, Subpart Ka, Section 60.115a for the units T-337, T-344, T-345, and Subpart Kb, Sections 60.115b and 60.116b for the units T-102, T108, T-562, T-563, and T-581.

4.2.8 MACT Recordkeeping of Tanks (For Units specified in section 3.4.2.8): The Permittee shall comply with the recordkeeping requirements of 40CFR63, Subpart CC, Sections 653 and 654.

4.2.9 Non NSPS Tanks Recordkeeping -Visual Inspection (Floating Roof Tanks that are not regulated by 40CFR60, Subpart K, Ka, and Kb): The permittee shall keep records of the visual inspection of the tanks.

4.2.10 Flare Recordkeeping (Unit FL-1): All actions taken to bring the flare into normal operating conditions, and maintenance activities shall be recorded, including the dates and causes of alarm activation. The permittee shall also comply with recordkeeping requirements of 40CFR63, Subpart A, Section 10, and 40CFR60 Subpart A.

The results of annual Reference Method 22 tests conducted on the elevated flare (Unit FL-1) shall be made and maintained on-site for a minimum of two (2) years from the time of recording and shall be made available to Department personnel upon request. Reference – NSR permit number 633-M5-R1, condition 4.i.

4.2.11 MACT Recordkeeping of Truck Loading: The Permittee shall comply with the recordkeeping requirements of 40CFR63, Section 428 of Subpart R, and Section 654 of Subpart CC.

4.2.12 NSPS Recordkeeping for Leak Monitoring (For Heaters, Units specified in section 3.4.2.12): The Permittee shall comply with the recordkeeping requirements of 40CFR60, Section 60.592, Subpart GGG

4.2.13 NESHAP Recordkeeping of Leak Monitoring (Process Units and Emission Points): The Permittee shall comply with the recordkeeping requirements of 40CFR63, Subpart CC, Sections 653 and 654.

4.2.14 NESHAP Recordkeeping of Benzene Containing Waste Streams: The Permittee shall comply with the recordkeeping requirements of 40CFR61, Subpart FF.

4.2.15 NSPS Recordkeeping of Oil-Water Separator, and Refinery Waste Water System (For Units specified in section 3.4.2.15) : The Permittee shall comply with the recordkeeping requirements of 40CFR60, Subpart QQQ, Section 697.

a. The permittee shall comply with all applicable recordkeeping requirements of 40 CFR60 Subpart QQQ, including Section 697(f). Reference - NSR permit 0633-M6, condition 4.a.

b. The permittee shall maintain records of all data and calculations for a period of five years from the date of generation. Reference - NSR permit 0633-M6, condition 4.b.

c. Once per calendar month the permittee shall record the number of barrels of crude oil delivered to the facility during the preceding calendar month. Reference - NSR permit 0633-M6, condition 4.c.

4.2.16 NESHAP Recordkeeping Monitoring (For Units FCCU and REF): The permittee shall comply with the recordkeeping requirements of 40CFR63, Subpart UUU.

5.0 REPORTING

Conditions of 5.0 are pursuant to 20.2.70.302.E NMAC.

5.1 General Reporting Requirements:

5.1.1 Reports shall clearly identify the subject equipment showing the emission unit ID number according to the operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the required reports. Reports of all required monitoring activities for this facility shall be submitted to the Department on the following schedule. This condition is pursuant to 20.2.70.302.E.1 NMAC.

Table 5.1.1: Schedule of Monitoring Activity Report Submittal:

Report for Emissions Unit Nos.	Submittal Date
All the process equipment specified in Table 3.4.2.	Within 45 days following the end of every 6-month period following the issuance date of permit P021 (December 10).

5.1.2 The permittee shall submit reports of all deviations (including emergencies) from permit requirements to the Department when they occur. The permittee shall communicate initial notice of the deviation to the Department within twenty-four (24) hours of the start of the first business day following the discovery of the occurrence via telephone or facsimile. Within ten (10) calendar days of the start of the first business day following the discovery of the occurrence, written notice shall be submitted to the Department using the Department's Excess Emissions Form currently in use at time of discovery. This condition is pursuant to 20.2.70.302.E.2 NMAC.

5.1.3 At such time as new units are installed as authorized by NSR permit 0633-M6-R1, the permittee shall fulfill the notification requirements of condition 5 (Reporting) in the NSR permit.

5.2 Unit Specific Monitoring Reports Requirements:
Conditions of 5.2 are pursuant to 20.2.70.302.E NMAC.

5.2.1 Particulate Matter Reporting (For all combustion equipment): The permittee shall report dates and duration of use of any fuel other than pipeline quality natural gas and the corresponding opacity measurements.

5.2.2 Maintenance and Repair Reporting (For Engines, Unit specified in section 3.4.2.2): These reports shall include a summary of the activities in section 4.2.2 above, including a copy of the manufacturer's or permittee's recommended maintenance schedule.

5.2.3 Operational Inspections, and Excess Air Check (For Boiler/Furnace, Units specified in section 3.4.2.3): Reports of operational inspections for the boilers, and excess air measurements shall briefly summarize in chronological order the result of all equipment inspections noting any adjustments needed to bring the equipment into compliance with permit conditions.

5.2.4 NSPS Reporting (For Unit specified in section 3.4.2.4): The permittee shall comply with the reporting requirements of 40CFR60, Subpart Dc, Section 48c.

5.2.5 NSPS Reporting of Cogen.Turbines - Fuel Usage and Analysis (Units specified in section 3.4.2.5): The permittee shall comply with the reporting requirements of 40CFR60, Subpart GG, Section 334(c).

5.2.6 Periodic Emission Tests Reporting (For Boiler, Unit F-B1): Periodic Emission Test results of the unit F-B1 shall be reported in accordance with the Department's Standard Operating Procedure for Content of Stack Test Reports.

5.2.7 NSPS Reporting of Tanks: The Permittee shall comply with the reporting requirements of 40CFR60, Subpart Kb, Sections 115.b, and 116.b for the units T-102, T108, T-562, T-563, and T-581.

5.2.8 MACT Reporting of Tanks – Leak Reporting (For Units specified in section 3.4.2.8): The Permittee shall comply with the reporting requirements of 40CFR63, Subpart CC, Section 654.

5.2.9 Non NSPS Tanks Reporting -Visual Inspection Reports (Floating Roof Tanks that are not regulated by 40CFR60, Subpart K, Ka, and Kb)
The permittee shall report to the Department all the activities listed in section 3.4.2.9. In addition, the permittee shall report any malfunction, leakage, or any other abnormal situation to the Department within two weeks of their occurrence.

5.2.10 Flare Reporting (For Unit FL-1): Records of the activities listed in section 4.2.10 above shall be included in the reports.

Permittee shall report an excess emissions and monitoring systems performance report and/or a summary report form per the frequency set forth in NSPS, 40 CFR60, Section 7, unless more frequent reporting is required by the applicable Subpart. Reference – NSR permit 0633-M5-R1, condition 5.m.

5.2.11 MACT Reporting of Truck Loading: The Permittee shall comply with the reporting requirements of 40CFR63, Section 428 of Subpart R, and Section 654 of Subpart CC

5.2.12 NSPS Reporting of Leak Monitoring (For Units specified in section 3.4.2.12): The Permittee shall comply with the reporting requirements of 40CFR60, Section 487 as referenced in 40CFR60, Subpart GGG, Section 592(e).

5.2.13 NESHAP Recordkeeping of Leak Monitoring (For Units specified in section 3.4.2.13): The Permittee shall comply with the reporting requirements of 40CFR63, Subpart CC, Section 654.

5.2.14 NESHAP Reporting of Benzene Containing Waste Streams: The Permittee shall comply with the reporting requirements of 40CFR61, Subpart FF.

5.2.15 NSPS Reporting of Oil-Water Separator, and Refinery Wastewater System (For Units specified in section 3.2.4.15): The Permittee shall comply with the reporting requirements of 40CFR60, Subpart QQQ, Section 698:

a. The permittee shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ, including 40CFR60.698. Reference - NSR permit 0633-M6, condition 5.a.

b. At least once per calendar year the permittee shall report to the Department the results of the emissions calculation required by Condition 7 below. Reference - NSR permit 0633-M6, condition 5.b.

5.2.16 NESHAP Reporting of Units FCCU and Reformer: The permittee shall comply with the recordkeeping requirements of 40CFR63, Subpart UUU.

6.0 COMPLIANCE

6.1 The conditions of Section 6.1 are pursuant to 20.2.70.302.E.3 NMAC. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall

be made on the current version of the Department's Compliance Certification Report Form (example attached to this permit) and submitted to the Department and to EPA at least every 12 months. This report is due no later than 30 days after each anniversary date of the first issued operating permit P021 (December 10).

6.1.1 For sources that have submitted air dispersion modeling that demonstrates compliance with state and federal ambient air quality standards, in accordance with 20.2.70.300.D.10 NMAC or 20.2.72.203.A.4 NMAC, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed to be compliance with state and federal ambient air quality standards (20.2.3NMAC NMAAQS and 40CFR50 NAAQS).

6.2 Conditions of 6.2 are pursuant to 20.2.70.302.G.1 NMAC. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following:

6.2.1 enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept,

6.2.2 have access to and copy, at reasonable times, any records that are required by this permit to be maintained,

6.2.3 inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operation regulated or required under the permit,

6.2.4 sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the federal Act.

6.3 A copy of this permit shall be kept at the permitted facility and shall be made available to Department personnel for inspection upon request. This condition is pursuant to 20.2.70.302.G.3 NMAC.

7.0 EMERGENCIES

Conditions of 7.0 are pursuant to 20.2.70.304 NMAC.

7.1 An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

7.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has

demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) An emergency occurred and that the permittee can identify the cause(s) of the emergency;

(b) This facility was at the time being properly operated;

(c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(d) The permittee fulfilled notification requirements under Condition 5.1.2 of this permit. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

7.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

7.4 This provision is in addition to any emergency or upset provision contained in any applicable requirement, except that this facility shall not be subject to the provisions of 20.2.7 NMAC (Excess Emissions during Malfunction, Startup, Shutdown, or Scheduled Maintenance) for terms and conditions issued under 20.2.70 NMAC.

8.0 PERMIT REOPENING AND REVOCATION

8.1 This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when 8.1.3 or 8.1.4 occurs. Conditions of 8.1 are pursuant to 20.2.70.405.A.1 NMAC.

8.1.1 Additional requirements under the federal Act become applicable to this source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.

8.1.2 Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.

8.1.3 The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.

8.1.4 The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.

8.2 Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. This condition is pursuant to 20.2.70.405.A.2 NMAC.

APPEAL PROCEDURES

Any person who participated in this permitting action before the Department and who is adversely affected by the action taken by the Department concerning this permit, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition must be made in writing to the board within thirty (30) days from the date notice is given of the Department's action. This petition must specify the portions of the permitting action to which the petitioner objects and certify that a copy of the petition has been mailed or hand-delivered as required by 20.2.70.403.A.2 NMAC; a copy of the permitting action for which review is sought must be attached to the petition. Upon receipt of the appeal notice, the petitioner must mail or deliver a copy of the petition to the Department, and to the applicant or permittee if the petitioner is not the applicant/permittee. Requests for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg.
P.O. Box 26110
Santa Fe, New Mexico 87502

Unless a timely request for a hearing is made, the decision of the Department will be final. If a timely request for hearing is made, the board will hold a hearing within sixty (60) days of receipt of the petition in accordance with the New Mexico Air Quality Control Act NMSA 1978 § 74-2-7 and 20.2.70.403.A.3 NMAC.

Any person who is adversely affected by an administrative action taken by the board pursuant to 20.2.70.403.A NMAC may appeal to the Court of Appeals in accordance with New Mexico Air Quality Control Act NMSA 1978 § 74-2-9. Petitions for judicial review must be filed no later than thirty (30) days after the administrative action. This condition is pursuant to 20.2.70.403.B NMAC and New Mexico Air Quality Control Act NMSA 1978 § 74-2-9.

SUBMITTAL OF REPORTS AND CERTIFICATIONS

Test protocols, excess emission forms, test reports, compliance certification reports, monitoring results and reports, emissions sampling and measurement data, monitoring activity reports, compliance schedule progress reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Program Manager, **Compliance & Enforcement Section**
New Mexico Environment Department
Air Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502-0110

In accordance with 20.2.70.302.E.3 NMAC, Compliance Certifications Reports shall be submitted to the Administrator at the address below:

Chief, Air Permits
US EPA Region-6, 6PD-R
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Questions about this permit should be referred to Imam Imanuddin of the Operating Permit Unit of the Air Quality Bureau in Santa Fe at (505) 955-8003.

Additional copies of the attachments can be downloaded from the NMED web site at URL **http://www.nmenv.state.nm.us/aqb/permit/app_form.html** for your convenience.

Attachments:
1) Excess Emission Form (for reporting deviations and emergencies)
2) Compliance Certification Report Form
3) Acronyms

APPENDIX A

Table A.1: APPLICABLE REQUIREMENTS FOR THIS FACILITY[1]

The permittee shall comply with all applicable sections of the requirements listed in Table A.1

Applicable Requirements	Federally Enforceable	Entire Facility	Unit Nos.
20.2.7 NMAC - Excess Emissions during Malfunction Startup, Shutdown and Maintenance	X	(2)	
20.2.36 - NMAC - Petroleum Refinery - Sulfur	X	X	
20.2.37 - NMAC, Sections 201, 202, 203, 204, 200.A, 200.B, 200C, 203, and 204 - Existing Catalyst Cracking Regeneration Unit	X	X	
20.2.38 – NMAC – Hydrocarbon Storage Facilities	X	X	
20.2.70 NMAC - Operating Permits	X	X	
20.2.71 NMAC - Operating Permit Emission Fees	X	X	
Air Quality Bureau Permit Nos: 633-M4, 633-M4-R1, and 633-M4-R2, 633-M5-R1, 633-M6, and 633-M6-R1	X	X	
20.2.73 NMAC - Notice of Intent and Emissions Inventory Requirements	X	X	
20.2.77 NMAC - New Source Performance Standards	X	X	
20.2.78 NMAC – HAPS Emissions	X	X	
40 CFR 63, Subpart R – National Emission Standards for Gasoline Distribution Facilities	X		Truck Rack
40CFR63, Subpart CC, Section 646 - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (Refinery MACT), and 20NMAC2.82, Group Storage Vessels	X		T-2, T-3, T-4, T-6, T-101, T-102, T-108, T-567, T-568, T-569, T-570, T-571, T-572, T-574, T-576, and T-582

Table A.1: APPLICABLE REQUIREMENTS FOR THIS FACILITY (continued)

Applicable Requirements	Federally Enforceable	Entire Facility	Unit Nos.
40CFR63, Subpart CC, Section 648 - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (Refinery MACT), Equipment Leak Standards	X		Fugitive HAPS Emissions Units
40CFR63, Subpart CC, Section 650 - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (Refinery MACT), Gasoline Loading Rack Provisions	X		Truck Rack
40CFR61, Subpart FF - National Emission Standard from Benzene Waste Operations	X	X	
40 CFR 60, Subpart A	X		FL-1
40CFR60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	X		B – 106
40CFR60, Subpart GG - Standards of Performance for Stationary Gas Turbines	X		Z-81-B104/G104, and Z-81-B105/G105
40CFR60, Subpart Ka - Standards of Performance for Volatile Organic Liquid Storage Vessels	X		T-337, T-344, and T-345
40CFR60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels	X		T-102, T-108, T-562, T-563, T-581 and T-583
40CFR60, Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries	X		I-H1, I-H3, D-H1, D-H2, D-H3, P-H2, ISOM, and SATS
40CFR60, Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems	X		DHT, and Z84-T5

Table A.1: APPLICABLE REQUIREMENTS FOR THIS FACILITY (continued)

Applicable Requirements	Federally Enforceable	Entire Facility	Unit Nos.
40CFR63, Subpart A, Section 63.11 – Control Device Requirements, Flare	X		FL-1
40 CFR 63 Subpart UUU – National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units	X		FCCU, Reformer

(1) NMED will petition the EIB to amend the definition of "applicable requirement" in 20.2.70.7.E NMAC to state that the New Mexico Ambient Air Quality Standards (NMAAQS), 20.2.3 NMAC are not included. If the EIB denies the petition, NMED will reopen this permit to add the NMAAQS to this table, and the permittee may challenge a determination that the NMAAQS are "applicable requirements."

(2) Regulation 20.2.7 NMAC applies to permit terms and conditions except as provided in Table A.2.

APPENDIX A

Table A.2: The Department has determined that the following requirements identified in the permit application are not applicable requirements for this facility, or the requirement does not impose any conditions in this permit.

Requirements as identified in the Permit Application	Not Applicable For This Facility (1))	No Requirements (2)
20.2.7 NMAC - Excess Emissions during Malfunction Startup, Shutdown and Maintenance	(3)	
20.2.33 NMAC - Gas Burning Equipment-Nitrogen Dioxide	X	
20.2.39 NMAC - Sulfur Recovery Plant	X	
20.2.61 NMAC - Control of Smoke and Visible Emissions	X	
20.2.72 – Permits		X
20.2.74 NMAC - Permits, Prevention and Significant Deterioration (PSD)		X
20.2.79 NMAC - Non-attainment Areas		X
20.2.80 NMAC - Stack Heights		X
40CFR63, Subpart GGGGG – National Emission Standards for Hazardous Air Pollutants: Site Remediation		X

(1) No existing or planned operation/activity at this facility triggers the applicability of these requirements.

(2) Although these regulations may provide guidance, they do not impose any specific requirements on the operation of the facility as described in this permit.

(3) Regulation 20.2.7 NMAC does not apply to permit terms or conditions arising under 20.2.77 NMAC, 20.2.78 NMAC, or 20.2.82 NMAC, or created solely under the authority of regulation 20.2.70 NMAC.