Colorado Department of Public Health and Environment

OPERATING PERMIT

Public Service Company of Colorado - Roundup Compressor Station

First Issued: March 1, 1998
Renewed: September 1, 2012

AIR POLLUTION CONTROL DIVISION
COLORADO OPERATING PERMIT

FACILITY NAME:	Roundup Compressor Station	OPERATING PERMIT NUMBER
FACILITY ID:	0870030	**95OPMR081**
RENEWED:	September 1, 2012	
EXPIRATION DATE:	September 1, 2017	
MODIFICATIONS:	See Appendix F of Permit	

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et seq. and applicable rules and regulations.

ISSUED TO:	PLANT SITE LOCATION:
Public Service Company of Colorado 1800 Larimer Street, Suite 1300 Denver, CO 80202	3064 Road I Wiggins, CO 80654 Morgan County

INFORMATION RELIED UPON

Operating Permit Renewal Application Received:	October 26, 2007
And Additional Information Received:	June 24, July 14 and September 19, 2011 and February 24, 2012

Nature of Business:	Natural Gas Compression and Processing
Primary SIC:	4922

RESPONSIBLE OFFICIAL		FACILITY CONTACT PERSON	
Name:	Cheryl F. Campbell	Name:	Gary Magno
Title:	Vice President, Systems Design, Operation & Maintenance	Title:	Manager Environmental Services – Air Quality Compliance
Phone:	(303) 294-2071	Phone:	(303) 294-2177

RESPONSIBLE OFFICIAL'S AUTHORIZED REPRESENTATIVE

Name:	Victor Quinonez
Title:	Director, Gas Operations South
Phone:	(303) 571-3713

SUBMITTAL DEADLINES

Semi-Annual Monitoring Periods:	September 1 - February 28(29), March 1- August 31
Semi-Annual Monitoring Reports:	Due on April 1, 2013 & October 1, 2013 & subsequent years
Annual Compliance Period:	September 1 – August 31
Annual Compliance Certifications:	Due on October 1, 2013 and subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance Certifications must be received at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports/certifications.

TABLE OF CONTENTS:

SECTION I - General Activities and Summary 1
1. Permitted Activities 1
2. Alternative Operating Scenarios 1
3. Prevention of Significant Deterioration (PSD) 7
4. Accidental Release Prevention Program (112(r)) 8
5. Compliance Assurance Monitoring (CAM) 8
6. Summary of Emission Units 9

SECTION II - Specific Permit Terms 10
1. E001 - Ajax, Model DPC-280 Internal Combustion Engine 10
2. E002, E003 & E004 -Three (3) Waukesha, Model L5790GSI, Internal Combustion Engines 14
3. D001 & D002, Two (2) J. W. Williams Triethylene Glycol Dehydration Units 22
4. D003 - T. H. Russel, Model V-411, Ethylene Glycol Dehydration Unit 24
5. I001 - Elastec Inc., Smart Ash Energy Recovery Unit 26
6. Natural Gas Transmission and Storage MACT Requirements 29
7. E005 & E006 – Natural Gas-Fired Emergency Engines 30
8. M001 - Gasoline Storage Tank, 500 gallons aboveground 36

SECTION III - Permit Shield 38
1. Specific Non-Applicable Requirements 38
2. General Conditions 38
3. Streamlined Conditions 38

SECTION IV - General Permit Conditions 40
1. Administrative Changes 40
2. Certification Requirements 40
3. Common Provisions 40
4. Compliance Requirements 44
5. Emergency Provisions 45
6. Emission Controls for Asbestos 45
7. Emissions Trading, Marketable Permits, Economic Incentives 45
8. Fee Payment 45
9. Fugitive Particulate Emissions 46
10. Inspection and Entry 46
11. Minor Permit Modifications 46
12. New Source Review 46
13. No Property Rights Conveyed 46
14. Odor 46
15. Off-Permit Changes to the Source 47
16. Opacity 47
17. Open Burning 47
18. Ozone Depleting Compounds 47
19. Permit Expiration and Renewal 47
20. Portable Sources 47
21. Prompt Deviation Reporting 47
22. Record Keeping and Reporting Requirements 48
23. Reopenings for Cause 49
24. Section 502(b)(10) Changes 49

TABLE OF CONTENTS:

25. Severability Clause 50
26. Significant Permit Modifications 50
27. Special Provisions Concerning the Acid Rain Program 50
28. Transfer or Assignment of Ownership 50
29. Volatile Organic Compounds 50
30. Wood Stoves and Wood burning Appliances 51

APPENDIX A - Inspection Information 1
Directions to Plant: 1
Safety Equipment Required: 1
Facility Plot Plan: 1
List of Insignificant Activities: 1

APPENDIX B 1
Reporting Requirements and Definitions 1
Monitoring and Permit Deviation Report - Part I 5
Monitoring and Permit Deviation Report - Part II 7
Monitoring and Permit Deviation Report - Part III 9

APPENDIX C 1
Required Format for Annual Compliance Certification Reports 1

APPENDIX D 1
Notification Addresses 1

APPENDIX E 1
Permit Acronyms 1

APPENDIX F 1
Permit Modifications 1

APPENDIX G 1
Permanent Engine AOS Applicability Reports 1

SECTION I - General Activities and Summary

1. Permitted Activities

1.1 This facility consists of three natural gas-fired compressor engines for the storage, delivery, and transmission of natural gas. The natural gas processing plant uses a refrigerant compressor engine, two triethlyene glycol dehydrators and one liquified petroleum gas (LPG) glycol plant. There is also a smart ash incinerator to dispose of non-hazardous combustible waste. In addition, there are two (2) emergency generators and a gasoline storage tank that are considered significant activities and included in Section II of the permit.

The facility is located west of Wiggins, in Morgan County. The area in which the plant operates is designated as attainment for all criteria pollutants.

There are no affected states within 50 miles of the plant. There are no Federal Class I designated areas within 100 kilometers of the plant.

1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.

1.3 The Operating permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review requirements of Part B. Any revisions made using the provisions of Regulation No. 3, Part C shall become new applicable requirements for the purposes of this Operating Permit and shall survive reissuance. This permit incorporates the applicable requirements (except as noted in Section II) from the following construction permits: 92MR1345-1, 95MR1037-1, 95MR1037-2, 95MR1037-3 and 97PO0846.

1.4 All conditions in this permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. **State-only enforceable conditions are:** Permit Condition Number(s): Section II, Conditions 2.5 (engine control device requirement) 5.3.1 (particulate matter) and 5.7 (NSPS general provisions) and Section IV - Conditions 3.g (last paragraph), 14 and 18 (as noted).

1.5 All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section IV of this permit. Either electronic or hard copy records are acceptable.

2. Alternative Operating Scenarios

Temporary and Permanent Engine Replacement (10/1/11 version). The following Alternative Operating Scenario (AOS) for the temporary and permanent replacement of natural gas fired

reciprocating internal combustion engines has been reviewed in accordance with the requirements of Regulation No. 3., Part A, Section IV.A, Operational Flexibility-Alternative Operating Scenarios, Regulation No. 3, Part B, Construction Permits, and Regulation No. 3, Part D, Major Stationary Source New Source Review and Prevention of Significant Deterioration, and it has been found to meet all applicable substantive and procedural requirements. This permit incorporates and shall be considered a Construction Permit for any engine replacement performed in accordance with this AOS, and the permittee shall be allowed to perform such engine replacement without applying for a revision to this permit or obtaining a new Construction Permit.

2.1 Engine Replacement

The following AOS is incorporated into this permit in order to deal with a compressor engine breakdown or periodic routine maintenance and repair of an existing onsite engine that requires the use of either a temporary or permanent replacement engine. "Temporary" is defined as in the same service for 90 operating days or less in any 12 month period. "Permanent" is defined as in the same service for more than 90 operating days in any 12 month period. The 90 days is the total number of days that the engine is in operation. If the engine operates only part of a day, that day shall count as a single day towards the 90-day total. The compliance demonstrations and any periodic monitoring required by this AOS are in addition to any compliance demonstrations or periodic monitoring required by this permit.

All replacement engines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping), and shall be subject to any shield afforded by this permit.

The results of all tests and the associated calculations required by this AOS shall be submitted to the Division within 30 calendar days of the test or within 60 days of the test if such testing is required to demonstrate compliance with NSPS or MACT requirements. Results of all tests shall be kept on site for five (5) years and made available to the Division upon request.

The permittee shall maintain a log on-site and contemporaneously record the start and stop date of any engine replacement, the manufacturer, date of manufacture, model number, horsepower, and serial number of the engine(s) that are replaced during the term of this permit, and the manufacturer, model number, horsepower, and serial number of the replacement engine. In addition to the log, the permittee shall maintain a copy of all Applicability Reports required under Condition 2.1.2 and make them available to the Division upon request.

2.1.1 The permittee may **temporarily** replace an existing compressor engine that is subject to the emission limits set forth in this permit with an engine that is of the same manufacturer, model, and horsepower or a different manufacturer, model, or horsepower as the existing engine without modifying this permit, so long as the temporary replacement engine complies with all permit limitations and other requirements applicable to the existing engine. Measurement of emissions from the temporary replacement engine shall be made as set forth in Condition 2.2.

The permittee may temporarily replace a grandfathered or permit exempt engine or an engine that is not subject to emission limits without modifying this permit. In this circumstance, potential annual emissions of NO_X and CO from the temporary replacement engine must be less than or equal to the potential annual emissions of NO_X and CO from the original grandfathered or permit exempt engine or for the engine that is not subject to emission limits, as determined by applying appropriate emission factors (e.g. AP-42 or manufacturer's emission factors).

2.1.2 The permittee may **permanently** replace the existing compressor engine for the emission points specified in Table 1 with the manufacturer, model, and horsepower engines listed in Table 1 without modifying this permit so long as the permanent replacement engine complies with all permit limitations and other requirements applicable to the existing engine as well as any new applicable requirements for the replacement engine. Measurement of emissions from the permanent replacement engine and compliance with the applicable emission limitations shall be made as set forth in Condition 2.2.

An Air Pollutant Emissions Notice (APEN) that includes the specific manufacturer, model and serial number and horsepower of the permanent replacement engine shall be filed with the Division for the permanent replacement engine within 14 calendar days of commencing operation of the replacement engine. The APEN shall be accompanied by the appropriate APEN filing fee, a cover letter explaining that the permittee is exercising an alternative operating scenario and is installing a permanent replacement engine, and a copy of the relevant Applicability Reports for the replacement engine. Example Applicability Reports can be found in Appendix G. This submittal shall be accompanied by a certification from the Responsible Official indicating that "based on the information and belief formed after reasonable inquiry, the statements and information included in the submittal are true, accurate and complete".

This AOS cannot be used for permanent engine replacement of a grandfathered or permit exempt engine or an engine that is not subject to emission limits.

The permittee shall agree to pay fees based on the normal permit processing rate for review of information submitted to the Division in regard to any permanent engine replacement.

Table 1

Emission Point	Replacement Engine	Periodic Monitoring	Stack Test	MACT Status
E001	Exact replacement of engine	See Footnote 1	No	Facility is an area source for purposes of the RICE MACT
E002	Exact replacement of engine and associated control device	See Footnote 2	No	
E003	Exact replacement of engine and associated control device	See Footnote 2	No	
E004	Exact replacement of engine and associated control device	See Footnote 2	No	

[1] Monitoring is as specified in Section II.1 of this permit.

[2] Monitoring is as specified in Section II.2 or this permit

2.2 Portable Analyzer Testing

Note: In some cases there may be conflicting and/or duplicative testing requirements due to overlapping Applicable Requirements. In those instances, please contact the Division Field Services Unit to discuss streamlining the testing requirements.

Note that the testing required by this Condition may be used to satisfy the periodic testing requirements specified by the permit for the relevant time period (i.e. if the permit requires quarterly portable analyzer testing, this test conducted under the AOS will serve as the quarterly test and an additional portable analyzer test is not required for another three months).

The permittee may conduct a reference method test, in lieu of the portable analyzer test required by this Condition, if approved in advance by the Division.

The permittee shall measure nitrogen oxide (NO_X) and carbon monoxide (CO) emissions in the exhaust from the replacement engine using a portable flue gas analyzer *within seven (7) calendar days of commencing operation of the replacement engine*.

All portable analyzer testing required by this permit shall be conducted using the Division's Portable Analyzer Monitoring Protocol (ver March 2006 or newer).

Results of the portable analyzer tests shall be used to monitor the compliance status of this unit.

For comparison with an annual (tons/year) or short term (lbs/unit of time) emission limit, the results of the tests shall be converted to a lb/hr basis and multiplied by the allowable operating hours in the month or year (whichever applies) in order to monitor compliance. If a source is not limited in its hours of operation the test results will be multiplied by the maximum number of hours in the month or year (8760), whichever applies.

For comparison with a short-term limit that is either input based (lb/mmBtu), output based (g/hp-hr) or concentration based (ppmvd @ 15% O_2) that the existing unit is currently subject to or the replacement engine will be subject to, the results of the test shall be converted to the appropriate units as described in the above-mentioned Portable Analyzer Monitoring Protocol document.

If the portable analyzer results indicate compliance with both the NO_X and CO emission limitations, in the absence of credible evidence to the contrary, the source may certify that the engine is in compliance with both the NO_X and CO emission limitations for the relevant time period.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, if the portable analyzer results fail to demonstrate compliance with either the NO_X or CO emission limitations, the engine will be considered to be out of compliance from the date of the portable analyzer test until a portable analyzer test indicates compliance with both the NO_X and CO emission limitations or until the engine is taken offline.

2.3 Applicable Regulations for Permanent Engine Replacements

2.3.1 Reasonably Available Control Technology (RACT): Reg 3, Part B § II.D.2

All permanent replacement engines that are located in an area that is classified as attainment/maintenance or nonattainment must apply Reasonably Available Control Technology (RACT) for the pollutants for which the area is attainment/maintenance or nonattainment. Note that both VOC and NO_X are precursors for ozone. RACT shall be applied for any level of emissions of the pollutant for which the area is in attainment/maintenance or nonattainment, except as follows:

In the Denver Metropolitan PM_{10} attainment/maintenance area, RACT applies to PM_{10} at any level of emissions and to NO_X and SO_2, as precursors to PM_{10}, if the potential to emit of NO_X or SO_2 exceeds 40 tons/yr.

For purposes of this AOS, the following shall be considered RACT for natural-gas fired reciprocating internal combustion engines:

VOC:	The emission limitations in NSPS JJJJ
CO:	The emission limitations in NSPS JJJJ
NO_X:	The emission limitations in NSPS JJJJ
SO_2:	Use of natural gas as fuel
PM_{10}:	Use of natural gas as fuel

As defined in 40 CFR Part 60 Subparts GG (§ 60.331) and 40 CFR Part 72 (§ 72.2), natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet.

2.3.2 Control Requirements and Emission Standards: Regulation No. 7, Sections XVI. and XVII.E (State-Only conditions).

Control Requirements: Section XVI

Any permanent replacement engine located within the boundaries of an ozone nonattainment area is subject to the applicable control requirements specified in Regulation No. 7, section XVI, as specified below:

Rich burn engines with a manufacturer's design rate greater than 500 hp shall use a non-selective catalyst and air fuel controller to reduce emission.

Lean burn engines with a manufacturer's design rate greater than 500 hp shall use an oxidation catalyst to reduce emissions.

The above emission control equipment shall be appropriately sized for the engine and shall be operated and maintained according to manufacturer specifications.

The source shall submit copies of the relevant Applicability Reports required under Condition 2.1.2.

Emission Standards: Section XVII.E – State-only requirements

Any permanent engine that is either constructed or relocated to the state of Colorado from another state, after the date listed in the table below shall operate and maintain each engine according to the manufacturer's written instructions or procedures to the extent practicable and consistent with technological limitations and good engineering and maintenance practices over the entire life of the engine so that it achieves the emission standards required in the table below:

Max Engine HP	Construction or Relocation Date	Emission Standards in G/hp-hr		
		NO_X	CO	VOC
100<Hp<500	January 1, 2008	2.0	4.0	1.0
	January 1, 2011	1.0	2.0	0.7
500≤Hp	July 1, 2007	2.0	4.0	1.0
	July 1, 2010	1.0	2.0	0.7

The source shall submit copies of the relevant Applicability Reports required under Condition 2.1.2.

2.3.3 NSPS for spark ignition internal combustion engines: 40 CFR 60, Subpart JJJJ

A permanent replacement engine that is manufactured on or after 7/1/09 for emergency engines greater than 25 hp, 7/1/2008 for engines less than 500 hp, 7/1/2007 for engines greater than or equal to 500 hp except for lean burn engines greater than or equal to 500 hp and less than 1,350 hp, and 1/1/2008 for lean burn engines greater than or equal to 500 hp and less than 1,350 hp are subject to the requirements of 40 CFR Part 60, Subpart JJJJ. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement

shall be included in the Applicability Reports required under Condition 2.1.2. Any testing required by the NSPS is in addition to that required by this AOS. Note that the initial test required by NSPS Subpart JJJJ can serve as the testing required by this AOS under Condition 2.2, if approved in advance by the Division, provided that such test is conducted within the time frame specified in Condition 2.2.

Note that under the provisions of Regulation No. 6. Part B, section I.B. that Relocation of a source from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of Regulation No. 6 (i.e., the date that the source is first relocated to Colorado becomes equivalent to the manufacture date for purposes of determining the applicability of NSPS JJJJ requirements).

However, as of October 1, 2011 the Division has not yet adopted NSPS JJJJ. Until such time as it does, any engine subject to NSPS will be subject only under Federal law. Once the Division adopts NSPS JJJJ, there will be an additional step added to the determination of the NSPS. Under the provisions of Regulation No. 6, Part B, § I.B (which is referenced in Part A), any engine relocated from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of NSPS JJJJ.

2.3.4 Reciprocating internal combustion engine (RICE) MACT: 40 CFR Part 63, Subpart ZZZZ

A permanent replacement engine located at either an area or major source is subject to the requirements in 40 CFR Part 63, Subpart ZZZZ. An analysis of the applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in the Applicability Reports required under Condition 2.1.2. Any testing required by the MACT is in addition to that required by this AOS. Note that the initial test required by the MACT can serve as the testing required by this AOS under Condition 2.2, if approved in advance by the Division, provided that such test is conducted within the time frame specified in Condition 2.2.

2.4 Additional Sources

The replacement of an existing engine with a new engine is viewed by the Division as the installation of a new emissions unit, not “routine replacement” of an existing unit. The AOS is therefore essentially an advanced construction permit review. The AOS cannot be used for additional new emission points for any site; an engine that is being installed as an entirely new emission point and not as part of an AOS-approved replacement of an existing onsite engine has to go through the appropriate Construction/Operating permitting process prior to installation.

3. Prevention of Significant Deterioration (PSD)

3.1 Based on the information provided by the applicant, this source is not categorized as a PSD major stationary source as of the issue date of this permit. Any future modification at this

facility which is major by itself (i.e. Potential to Emit of ≥ 250 tons/year) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.

In addition, future modifications at this facility may result in the facility being classified as a major stationary source for PSD. Once that threshold is exceeded, future modifications at this facility resulting in a significant net emissions increase (see Regulation No. 3, Part D, Section II.A.26 and 42) for any pollutant as listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.

3.2 There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations.

4. Accidental Release Prevention Program (112(r))

4.1 Based on the information provided by the applicant, this facility is subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act). As of the original issue date of this permit (March 1, 1998), this facility is subject to these requirements as storage of flammable materials is in excess of threshold levels.

5. Compliance Assurance Monitoring (CAM)

5.1 The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV:

Although engines E002 through E004 are equipped with control devices to reduce NO_X, CO and VOC emissions, the control devices are not used to meet any emission limitation that is not exempt from the CAM requirements.

6. Summary of Emission Units

6.1 The emissions units regulated by this permit are the following:

Emission Unit No./ Facility ID	AIRS Point N0.	Description	Startup Date	Pollution Control Device
E001/ S001	001	Ajax, Model DPC-280, 2-Cycle Lean Burn Internal Combustion Engine (Refrigerant Compressor Engine), Rated at 225 HP (Site), Serial No. 77939. Natural Gas Fired.	1992	Uncontrolled
E002, E003 & E004	004	Three (3) Waukesha, Model, L5790GSI, 4-Cycle Rich Burn Internal Combustion Engines (Compressor Engines), Each Rated at 980 HP (Site), Serial Nos. 397617, 397616 and 397618. Natural Gas Fired.	1986	Non-Selective Catalytic Reduction Devices were Installed in December 2009
D001 & D002	006	Two (2) J. W. Williams, Triethylene Glycol Dehydrators, Model and Serial No. 801-1, Each Rated at 25 MMscf/day.	1980	Uncontrolled
D003	007	T. H. Russel, Model V-411, Ethylene Glycol Dehydrator, Serial No. Unavailable, Rated at 50 MMscf/day.	1992	Uncontrolled
I001	008	Elastec Inc., Smart Ash Energy Recovery Unit, Model No. 100, Serial No. AS110103221. Note this unit was previously permitted as a portable unit under AIRs ID No. 777-1171.	July 2011	Uncontrolled
E005 & E006	N/A	One (1) Caterpillar, Model No. G343, 4- Cycle Rich Burn Engine, Serial No. 97N336, Rated at 225 hp and 8,250 Btu/hp-hr, Natural Gas Fired Emergency Generator. One (1) Caterpillar, Model No. 3306 NG, 4- Cycle Rich Burn Engine, Serial No. 7Y01302, Rated at 195 hp and 7,877 Btu/hp-hr, Natural Gas Fired Emergency Generator.	Cat G343: Installed 1982, Manufactured 1982 Cat 3306: Installed 2003 Manufactured 1974	Uncontrolled
M001	N/A	Gasoline Storage Tank, 500 gallons, aboveground		Uncontrolled

SECTION II - Specific Permit Terms

1. E001 - Ajax, Model DPC-280 Internal Combustion Engine

Parameter	Permit Condition Number	Limitations Short Term	Limitations Long Term	Compliance Emission Factor (lbs/MMBtu)	Monitoring Method	Monitoring Interval
NO_X	1.1	N/A	26.4 tons/yr	3.17	Recordkeeping and Calculation	Monthly
CO		N/A	3.2 tons/yr	0.386		
Natural Gas Use	1.2	N/A	17.34 MMscf/yr	N/A	Fuel Meter and Calculation	Monthly
Opacity	1.3	Not to Exceed 20%		N/A	Fuel Restriction	Only Natural Gas is Used as Fuel
MACT Subpart ZZZZ	1.4	Change Oil and Filter Inspect Air Cleaner Inspect all Hoses and Belts		N/A	See Condition 1.4	
MACT General Provisions	1.5	N/A	N/A	N/A	See Condition 1.5	

1.1 Nitrogen Oxide (NO_X) and Carbon Monoxide (CO) shall not exceed the limitations stated above (Colorado Construction Permit 92MR1345-1, as modified under the provisions of Section I, Condition 1.3, based on the requested emissions indicated on the APEN submitted May 23, 2003). The emission factors listed above (from AP-42, Section 3.2, dated July 2000, Table 3.2-1, 2-stroke lean burn engines) have been approved by the Division and shall be used in the following equation to calculate emissions:

$$\text{tons/month} = \frac{[\text{EF (lbs/MMBtu) x natural gas usage (MMscf/month) x heat content of fuel (MMBtu/MMscf)}]}{\text{2000 lbs/ton}}$$

The heat content of the gas to be used in this equation is the average annual heat content (lower heating value) of gas in Public Service Company's Northern Zone of distribution. The heat content of the gas in this zone is determined using the appropriate ASTM Methods or equivalent, if approved in advance by the Division.

Emissions shall be calculated by the end of the subsequent month. A twelve-month rolling total shall be maintained to monitor compliance with annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.2 Natural gas consumption shall not exceed the limitations stated above (Construction Permit 92MR1345-1, as modified under the provisions of Section I, Condition 1.3, based on the requested fuel consumption rate indicated on the APEN submitted May 23, 2003). On the first working day of each month, natural gas use shall be recorded using the engine's fuel meter. Monthly natural gas use shall be used in a twelve month rolling total to monitor compliance with annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.3 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant which is in excess of 20% opacity (Construction Permit 92MR1345-1). In the absence of credible evidence to the contrary, compliance with the 20% opacity requirement will be presumed since only natural gas is permitted to be used as fuel for this engine.

1.4 This engine is subject to the requirements in 40 CFR Part 63 Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines", as follows:

The requirements below reflect the language in 40 CFR Part 63 Subpart ZZZZ as of the date of renewal permit issuance [September 1, 2012]. However, these engines are subject to the latest version of Subpart ZZZZ.

These requirements included in this Condition 1.4 are only federally enforceable. As of the date of renewal permit issuance [September 1, 2012], the requirements in 40 CFR Part 63 Subpart ZZZZ promulgated on August 20, 2010 have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements they will become state-enforceable.

Note that proposed revisions to the RICE MACT were published in the Federal Register on June 7, 2012. Although the requirements in the proposed rule that apply to this engine do not appear to be significantly affected these requirements may change in the future when the proposed rule is finalized.

When do I have to comply with this subpart (§ 60.6595)

1.4.1 If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013. ((§ 63.6595(a)(1))

What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions? (§ 63.6603)

1.4.2 If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you. (§ 63.6603(a)) The requirements in Table 2d that apply to this engine are as follows:

1.4.2.1 Change oil and filter every 4,320 hours of operation or annually, whichever comes first. (Subpart ZZZZ, Table 2d, item 6.a)

1.4.2.2 Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first. (Subpart ZZZZ, Table 2d, item 6.b)

1.4.2.3 Inspect all hoses and belts every 4,320 hours of operation or annually,

whichever comes first, and replace as necessary. (Subpart ZZZZ, Table 2d, item 6.c)

Notwithstanding the above requirements, the following applies:

1.4.2.4 Sources have the option to utilize an oil analysis program as described in Condition 1.4.7 in order to extend the specified oil change requirement in Table 2d of this subpart. (Subpart ZZZZ, Table 2d, footnote 1)

What are my general requirements for complying with this subpart? (§ 63.6605)

1.4.3 You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. (§ 63.6605(a))

1.4.4 At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (§ 63.6605(b))

What are my monitoring, installation, collection, operation, and maintenance requirements? (§ 63.6625)

1.4.5 If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (§ 63.6625(e)) As noted in § 63.6625(e)(5), an existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions is subject to the requirements in this paragraph.

1.4.6 If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. (§ 63.6625(h))

1.4.7 If you own or operate a stationary SI engine that is subject to the work, operation or management practices in Condition 1.4.2, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 1.4.2.1. The oil analysis must be performed at the same frequency specified for

changing the oil in Condition 1.4.2.1. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (§ 63.6625(j))

How do I demonstrate continuous compliance with the emission limitations and operating limitations? (§ 63.6640)

1.4.8 You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d [Condition 1.4.2] to this subpart that apply to you according to methods specified in Table 6 to this subpart. (§ 63.6640(a)) The methods specified in Table 6 of Subpart ZZZZ are as follows:

1.4.8.1 Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions (Subpart ZZZZ, Table 6, item 9.a.i); or

1.4.8.2 Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (Subpart ZZZZ, Table 6, item 9.a.ii)

What records must I keep? (§ 63.6655)

1.4.9 You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary RICE located at an area source of HAP emissions subject to management practices in Condition 1.4.2. (§ 63.6655(e) and (e)(3))

In what form and how long must I keep my records? (§ 63.6660)

1.4.10 Records shall be kept in the form and for the duration specified in § 63.6660.

What parts of the General Provisions apply to me? (§ 63.6665)

1.4.11 Table 8 of Subpart ZZZZ shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. (§ 63.6665) The general provisions that apply to this engine are included in Condition 1.5 of this permit.

1.5 This engine is subject to the requirements in 40 CFR part 63 Subpart A "General Provisions", as adopted by reference in Colorado Regulation No. 8, Part E, Section I as specified in 40 CFR Part 63 Subpart ZZZZ § 63.6665. These requirements include, but are not limited to the following:

1.5.1 Prohibited activities in § 63.4(a).

1.5.2 Circumvention in § 63.4(b)

2. E002, E003 & E004 -Three (3) Waukesha, Model L5790GSI, Internal Combustion Engines

Annual Emission and Natural Gas Limits Apply to All Three Engines Combined

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor (lbs/MMBtu)	Monitoring	
		Short Term	Long Term		Method	Interval
NO_X	2.1	N/A	137.2 tons/yr	2.27	Recordkeeping and Calculation	Monthly
CO		N/A	225 tons/yr	3.72		
Natural Gas Use	2.2	N/A	125.9 MMscf/yr	N/A	Fuel Meter and Calculation	Monthly
Opacity	2.3	Not to Exceed 20%		N/A	Fuel Restriction	Only Natural Gas is Used as Fuel
Colorado Regulation No. 7 Control Device Requirement – **State-only**	2.4	Install and Operate an Non-Selective Catalytic Reduction Device and Air-Fuel Controller		N/A	See Condition 2.4.	
MACT Subpart ZZZZ	2.5	Reduce Formaldehyde Emissions by 76% or More **OR** Limit Formaldehyde Emissions to 2.7 ppmvd at 15% O_2		N/A	See Condition 2.5	
MACT General Provisions	2.6	N/A	N/A	N/A	See Condition 2.6	

2.1 **Total** Nitrogen Oxide (NO_X), Carbon Monoxide (CO) and Volatile Organic Compound (VOC) emissions **from all three engines combined** shall not exceed the limitations stated above (Colorado Construction Permit 95MR1037-3, as modified under the provisions of Section I, Condition 1.3, based on the requested emissions indicated in the APEN submitted May 23, 2003). Monthly emissions of each pollutant shall be calculated using the listed emission factors (from AP-42, July 2000, Section 3.2, Table 3.2-3, 4-Cycle Rich Burn Engines) in the following equation:

$$\text{tons/month} = \frac{[\text{EF (lbs/MMBtu) x natural gas usage (MMscf/month) x heat content of fuel (MMBtu/MMscf)}]}{\text{2000 lbs/ton}}$$

The heat content of the gas to be used in this equation is the average annual heat content (lower heating value) of gas in Public Service Company's Northern Zone of distribution. The heat content of the gas in this zone is determined using the appropriate ASTM Methods or equivalent, if approved in advance by the Division.

Emissions shall be calculated by the end of the subsequent month. A twelve-month rolling total shall be maintained to monitor compliance with annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

2.2 **Total** natural gas consumption **from all three engines combined** shall not exceed the limitations stated above (Colorado Construction Permit 95MR1037-3, as modified under the provisions of Section I, Condition 1.3, based on the requested natural gas consumption rate indicated in the APEN submitted May 23, 2003). On the first working day of each month, natural gas use **for each engine** shall be recorded using the engine's fuel meter. Monthly fuel consumption **from each engine** shall be summed together to determine the total fuel consumption **from all engines combined**. Monthly natural gas use **from all engines combined** shall be used in a twelve month rolling total to monitor compliance with annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

2.3 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant which is in excess of 20% opacity (Colorado Construction Permit 95MR1037-3). This opacity standard applies to **each engine**. In the absence of credible evidence to the contrary, compliance with the 20% opacity requirement will be presumed since only natural gas is permitted to be used as fuel for these engines.

2.4 All rich burn reciprocating internal combustion engines with a manufacturer's name plate design rate greater than 500 horsepower, constructed or modified before February 1, 2009 shall install and operate both a non-selective catalytic reduction system and an air fuel controller by July 1, 2010. A rich burn reciprocating internal combustion engine is one with a normal exhaust oxygen concentration of less than 2% by volume. (Colorado Regulation No. 7, Section XVII.E.3.a.(i))

All control equipment required by this Condition 2.5. shall be operated and maintained pursuant to manufacturer specifications or equivalent to the extent practicable, and consistent with technological limitations and good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications or equivalent on file. (Colorado Regulation No. 7, Section XVII.E.3.a.(i)(a))

Note that until such time as the U.S. EPA approves this provision into the Colorado State Implementation Plan (SIP), it shall be **State-only** enforceable.

2.5 These engines are subject to the requirements in 40 CFR Part 63 Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines", as follows:

The requirements below reflect the language in 40 CFR Part 63 Subpart ZZZZ as of the date of renewal permit issuance [September 1, 2012]. However, these engines are subject to the latest version of Subpart ZZZZ.

These requirements included in this Condition 2.5 are only federally enforceable. As of the date of renewal permit issuance [September 1, 2012], the requirements in 40 CFR Part 63 Subpart ZZZZ promulgated on August 20, 2010 have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements they will become state-enforceable.

Note that proposed revisions to the RICE MACT were published in the Federal Register on June 7, 2012. Under the proposed revisions existing engines greater than 500 hp located at area sources that are remote stationary RICE are subject to work practice standards. The source has indicated that these engines are remote stationary RICE. Therefore, these requirements may change in the future when the proposed rule is finalized.

When do I have to comply with this subpart (§ 60.6595)

2.5.1 If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013. ((§ 63.6595(a)(1))

What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions? (§ 63.6603)

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

2.5.2 If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you. (§ 63.6603(a)) The requirements in Tables 2d and 1b of Subpart ZZZZ that apply to this engine are as follows:

Emission Limits

2.5.2.1 Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O_2 (Subpart ZZZZ, Table 2d, item 10b), **OR**

2.5.2.2 Reduce formaldehyde emissions by 76 percent or more. (Subpart ZZZZ, Table 2d, item 10b).

Operating Limits

2.5.2.3 Maintain your catalyst so that the pressure drop across the catalyst does

not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test (Subpart ZZZZ, Table 1b, item 1a); and

2.5.2.4 Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F. (Subpart ZZZZ, Table 1b, item 1b)

What are my general requirements for complying with this subpart? (§ 63.6605)

2.5.3 You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. (§ 63.6605(a))

2.5.4 At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (§ 63.6605(a))

Initial performance test and compliance demonstrations (§ 63.6612)

2.5.5 You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to Subpart ZZZZ that apply to you within 180 days after the compliance date that is specified for your stationary RICE in Condition 2.5.1 and according to the provisions in §63.7(a)(2). (§ 63.6612(a)) The relevant requirements from Tables 4 and 5 are included in Conditions 2.5.8 and 2.5.15.

2.5.6 An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in § 63.6612(b)(1). (§ 63.6612(a))

Subsequent performance tests (§ 63.6615)

2.5.7 If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of Subpart ZZZZ. (§ 63.6615) As specified in Table 3 of Subpart ZZZZ subsequent performance tests shall be conducted every 8760 hours or 3 years, whichever comes first. (Subpart ZZZZ, Table 3, item 4)

Performance test methods and procedures (§ 63.6620)

2.5.8 You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you. (§ 63.6620(a)) Frequency of performance testing (Table 3) is noted in Condition 2.5.7. As specified in Table 4 of Subpart ZZZZ, performance tests shall be conducted using the test methods specified in Table 4 of Subpart ZZZZ, as follows:

Reduce Formaldehyde Emissions (Condition 2.5.2.2)

2.5.8.1 Select the sampling port location and the number of traverse points. Sampling sites must be located at the inlet and outlet of the control device. (Subpart ZZZZ, Table 4, item 2.a.i) AND

2.5.8.2 Measure O_2 at the inlet and outlet of the control device. Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde concentration. (Subpart ZZZZ, Table 4, item 2.a.ii) AND

2.5.8.3 Measure moisture content at the inlet and outlet of the control device. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration. (Subpart ZZZZ, Table 4, item 2.a.iii) AND

2.5.8.4 Measure formaldehyde at the inlet and the outlet of the control device. Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. (Subpart ZZZZ, Table 4, item 2.a.iv)

Limit Formaldehyde Emissions (Condition 2.5.2.1)

2.5.8.5 Select the sampling port location and the number of traverse points. Sampling sites must be located at the outlet of the control device. (Subpart ZZZZ, Table 4, item 3.a.i) AND

2.5.8.6 Determine the O_2 concentration at the sampling port location. Measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde concentration. (Subpart ZZZZ, Table 4, item 3.a.ii) AND

2.5.8.7 Measure moisture content at the sampling port location. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration. (Subpart ZZZZ, Table 4, item e.a.iii) AND

2.5.8.8 Measure formaldehyde at the exhaust of the stationary RICE. Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs. (Subpart ZZZZ, Table 4, item 3.a.iv)

2.5.9 Each performance test must be conducted according to the requirements specified in Table 4 of Subpart ZZZZ [Condition 2.5.8]. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the

engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. ((§ 63.6620(b))

2.5.10 You must conduct three separate test runs for each performance test required in § 63.6620, as specified in §63.7(e)(3). Each test run must last at least 1 hour. (§ 63.6620(d))

2.5.11 Compliance with the formaldehyde percent reduction requirements shall be assessed using the procedures in § 63.6620(e).

2.5.12 Engine load during the performance test shall be determined as specified in § 63.6620(i).

Monitoring and operating and maintenance requirements (§ 63.6625)

2.5.13 The continuous parameter monitoring systems for catalyst inlet temperature shall meet the requirements in § 63.6625(b).

2.5.14 If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Conditions 2.5.2.1 or 2.5.2.2 apply. (§ 63.6625(h))

Initial Compliance Demonstration (§ 63.6630)

2.5.15 You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart. (§ 63.6630(a)) Table 5 specifies the following for this engine (Subpart ZZZZ, Table 5, items 7 and 10):

2.5.15.1 The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation, **OR**

2.5.15.2 The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and

2.5.15.3 You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and

2.5.15.4 You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

2.5.16 During the initial performance test, you must establish the operating limitation in Condition 2.5.2.3. (§ 63.6630(b))

2.5.17 You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. (§ 63.6630(c))

Monitoring and Collecting Data for Continuous Compliance (§ 63.6635)

2.5.18 Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (§ 63.6635(b))

2.5.19 You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods. (§ 63.6635(c))

Continuous Compliance Demonstration (§ 63.6640)

2.5.20 You must demonstrate continuous compliance with each emission limitation and operating limitation in Conditions 2.5.2.1 through 2.5.2.4 according to methods specified in Table 6 of Subpart ZZZZ. (§ 63.6640(a)) The methods specified in Table 6 for this engine are as follows (Subpart ZZZZ, Table 6, Item 10):

2.5.20.1 Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved **or** that your emissions remain below the formaldehyde concentration limit; and

2.5.20.2 Collecting the catalyst inlet temperature data according to §63.6625(b); and

2.5.20.3 Reducing these data to 4-hour rolling averages; and

2.5.20.4 Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and

2.5.20.5 Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

2.5.21 You must report each instance in which you did not meet each emission limitation or operating limitation in Conditions 2.5.2.1 through 2.5.2.4. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are

meeting the required emission limitation applicable to your stationary RICE. (§ 63.6640(b))

2.5.22 You must also report each instance in which you did not meet the requirements in Condition 2.5.26 that apply to you. (§ 63.6640(a))

Notifications, Reports and Records (§ 63.6645, § 63.6650, § 63.6655, and § 63.6660

2.5.23 Notifications shall be submitted as required by § 63.6645(a), (g) and (h).

2.5.24 Reports shall be submitted as required by § 63.6650(a), (b), (c), (e) and (f).

2.5.25 Records shall be kept as required by § 63.6655(a), (b) and (d). Records shall be kept in the forms and for the duration specified in § 63.6660.

General Provisions (§ 63.6665)

2.5.26 Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. (§ 63.6665) The general provisions that apply to this engine are included in Condition 2.6 of this permit.

2.6 This engine is subject to the requirements in 40 CFR part 63 Subpart A "General Provisions", as adopted by reference in Colorado Regulation No. 8, Part E, Section I as specified in 40 CFR Part 63 Subpart ZZZZ § 63.6665. These requirements include, but are not limited to the following:

2.6.1 Prohibited activities and circumvention in § 63.4.

2.6.2 Performance test requirements in § 63.7.

2.6.3 Monitoring requirements in § 63.8.

2.6.4 Notification requirements in § 63.9.

2.6.5 Recordkeeping requirements in § 63.10.

3. D001 & D002, Two (2) J. W. Williams Triethylene Glycol Dehydration Units

Annual Emission and Natural Gas Limits Apply to Both Dehydrators Combined

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
VOC	3.1	N/A	28 tons/yr	Based on input to GLYCalc Version 4.0 or Higher	Parametric	Monthly
Extended Gas Analysis	3.2	N/A	N/A	N/A	Laboratory Analysis	Semi-Annually
Operating Days	3.3	N/A	N/A	N/A	Recordkeeping	Monthly
Natural Gas Processed	3.4	N/A	18,250 MMscf/yr	N/A	Flow Meter and Calculation	Monthly
Operating Requirements	3.5	Operate in Accordance with Manufacturer's Recommendations and Good Engineering Practices		N/A	See Condition 3.5	

3.1 **Total** Volatile Organic Compound emissions **from both dehydrators combined** shall not exceed the limitations stated above (Colorado Construction permit 95MR1037-1, as modified under the provisions of Section I, Condition 1.3). Emissions of Volatile Organic Compounds and Hazardous Air Pollutants will be calculated monthly using the Gas Research Institute's GLYCalc (Version 4.0 or higher) Model. Parametric monitoring of the natural gas throughput, triethylene glycol recirculation rate, and inlet gas pressure and temperature and quantity/source of stripping gas used will be monitored to verify input to this model. Recording interval for these parameters will be on a monthly basis. Values shall be representative of how the units operated during the period. Monthly calculation of emissions using GLYCalc Version 4.0 or higher will be conducted by the end of the subsequent month utilizing the gas data from the last analysis conducted and representative parameters. Monthly emissions of VOCs will be used in a rolling twelve month total to monitor compliance with the annual limitation.

3.2 During the withdrawal cycle, samples of inlet gas shall be collected and analyzed (extended gas analysis) to determine C_1 to C_6, n-hexane, and benzene, toluene, ethyl benzene and total xylene (BTEX). An annual gas analysis is required within one month of withdrawing gas from storage. The latest gas analysis required by either this Condition or Condition 4.2 shall be used in the GLYCalc model run.

3.3 The number of Operating Days for each unit will be monitored monthly and recorded and maintained to be available to the Division upon request. The number of Operating Days will be used to determine an average daily natural gas processing rate to be used in the monthly GLYCalc run.

3.4 The **total** gas processed **by both dehydration units combined** shall not exceed the limitations listed above (Colorado Construction Permit 95MR1037-3, as modified under the provisions of Section I, Condition 1.3). The gas throughput to the dehydration units shall be determined and recorded monthly using the existing flow meter for the facility as well as other operational parameters and records. All records and data shall be made available to the Division upon request. Records should include information such as downtime for the units and gas either by-passed through the units or consumed by fuel-burning equipment. A twelve month rolling total will be maintained to monitor compliance with annual emission limitations.

3.5 These units shall be operated and maintained in accordance with manufacturer's recommendations and good engineering practices at all times, including periods of start-up, shutdown, and malfunction. A copy of the operating and maintenance procedures, schedules for maintenance and/or inspection activities and records related to the operation and maintenance of the dehydrators and good engineering practices, such as records of routine maintenance and/or inspections shall be maintained and made available to the Division upon request.

4. D003 - T. H. Russel, Model V-411, Ethylene Glycol Dehydration Unit

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
VOC	4.1	N/A	16 tons/yr	Based on input to GLYCalc Version 4.0 or Higher	Parametric	Monthly
Extended Gas Analysis	4.2	N/A	N/A	N/A	Laboratory Analysis	Semi-Annually
Ethylene Glycol Consumption	4.3	N/A	N/A	N/A	Recordkeeping	Annually
Operating Days	4.4	N/A	N/A	N/A	Recordkeeping	Monthly
Natural Gas Consumption	4.5	N/A	18,250 MMscf/yr	N/A	Flow Meter and Calculation	Monthly
Operating Requirements	4.6	Operate in Accordance with Manufacturer's Recommendations and Good Engineering Practices		N/A	See Condition 4.6	

4.1 Volatile Organic Compound emissions for this unit shall not exceed the limitations stated above (Colorado Construction Permit 95MR1037-2, as modified under the provisions of Section I, Condition 1.3). Emissions of Volatile Organic Compounds and Hazardous Air Pollutants will be calculated monthly using the Gas Research Institute's GLYCalc (Version 4.0 or higher) Model. Parametric monitoring of the natural gas throughput, ethylene glycol recirculation rate, inlet gas pressure and temperature, cold separator temperature and pressure and flash tank temperature and pressure will be monitored to verify input to this model. Recording interval for these parameters will be on a monthly basis. Values shall be representative of how the unit operated during the period. Monthly calculation of emissions using GLYCalc Version 4.0 or higher will be conducted by the end of the subsequent month utilizing the gas data from the last analysis conducted and representative parameters. Monthly emissions of VOCs will be used in a rolling twelve month total to monitor compliance with the annual limitation.

4.2 During the withdrawal cycle, samples of inlet gas shall be collected and analyzed (extended gas analysis) to determine C_1 to C_6, n-hexane, and benzene, toluene, ethyl benzene and total xylene (BTEX) composition. An annual gas analysis is required within one month of bringing the ethylene glycol dehydrator on line. The latest gas analysis will be used in the GLYCalc model run to determine monthly emissions.

4.3 Ethylene Glycol Consumption will be monitored and recorded annually. Ethlyene glycol emissions are subject to Recordkeeping and Reporting requirements listed under General Condition 22 and Fee Payment listed under General Condition 8.

4.4 The number of Operating Days for this unit will be monitored monthly and recorded and maintained to be available to the Division upon request. The number of Operating Days will be

used to determine an average daily natural gas processing rate to be used in the monthly GLYCalc run.

4.5 The gas processed by this ethylene glycol dehydration unit shall not exceed the limitations listed above (Colorado Construction Permit 95MR1037-3, as modified under the provisions of Section I, Condition 1.3). The gas throughput to the dehydration unit shall be determined and recorded monthly using the existing flow meter for the facility as well as other operational parameters and records. All records and data shall be made available to the Division upon request. Records should include information such as downtime for the unit and gas either by-passed through the unit or consumed by fuel-burning equipment. A twelve month rolling total will be maintained to monitor compliance with annual emission limitations.

4.6 This unit shall be operated and maintained in accordance with manufacturer's recommendations and good engineering practices at all times, including periods of start-up, shutdown, and malfunction. A copy of the operating and maintenance procedures, schedules for maintenance and/or inspection activities and records related to the operation and maintenance of the dehydrator and good engineering practices, such as records of routine maintenance and/or inspections shall be maintained and made available to the Division upon request.

5. I001 - Elastec Inc., Smart Ash Energy Recovery Unit

Parameter	Permit Condition Number	Limitations Short Term	Limitations Long Term	Compliance Emission Factor	Monitoring Method	Monitoring Interval
PM	5.1.	N/A	0.03 tons/yr	5.3 lbs/ton burned	Recordkeeping and Calculation	Monthly
PM_{10}			0.03 tons/yr	5.3 lbs/ton burned		
SO_2			0.01 tons/yr	2.5 lbs/ton burned		
NO_X			0.01 tons/yr	2.0 lbs/ton burned		
VOC			0.08 tons/yr	15 lbs/ton burned		
CO			0.10 tons/yr	20 lbs/ton burned		
Quantity of Waste Burned	5.2.	50 lbs/hr	10 tons/yr	N/A	Recordkeeping and Calculation	Per Charge, Daily
Particulate Matter	5.3.	0.10 gr/dSCF corrected to 12% CO_2 - **State Only**		N/A	Demonstrated Compliance with Conditions 5.2, 5.5 and 5.6.	
		0.15 gr/dSCF corrected to 12% CO_2				
Hours of Operation	5.4.	N/A	N/A	N/A	Recordkeeping	Daily
Waste Burning Requirements	5.5.	See Condition 5.5.		N/A	Recordkeeping	Per Charge
Incinerator Operating Requirements	5.6.	See Condition 5.6.		N/A	See Condition 5.6.	
State-Only - NSPS Subpart A General Provisions	5.7.	N/A	N/A	N/A	As Required by NSPS General Provisions	Subject to NSPS General Provisions
Opacity	5.8.	Not to Exceed 20%		N/A	See Condition 5.8	

5.1 Emissions of air pollutants shall not exceed the above limitations (Colorado Construction Permit 97PO0846, as modified under the provisions of Section I, Condition 1.3). Compliance with these limitations shall be monitored by calculating emissions monthly using the above emission factors (FIRE, Version 5.0, Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, EPA-454/R-95-012, dated August 1995, SCC 5-03-001-02) in the following equation:

$$\text{tons/month} = \frac{\text{EF (lbs/ton waste burned) x monthly quantity of waste burned (tons/month)}}{\text{2000 lbs/ton}}$$

Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual emission limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

5.2 The quantity of waste burned in the incinerator shall not exceed the above limitations (Colorado Construction Permit 97PO0846). Compliance with the above limitation shall be monitored by recording the weight of waste burned in each charge. A daily total of waste burned shall be calculated based on the records of material charged (Colorado Regulation No. 6, Part B, Section VII.D and Colorado Construction Permit No. 97PO0846). Daily totals shall be summed to obtain a monthly quantity of waste burned. The monthly total shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month rolling total shall be calculated using the previous twelve months data. Compliance with the hourly charge limit shall be monitored by dividing the daily quantity of material burned by the hours of operation, as required by Condition 5.4.

5.3 Particulate matter emissions from the incinerator are limited to the following:

5.3.1 **State-Only Requirement:** Particulate matter emissions shall not exceed 0.10 gr/dscf corrected to 12% CO_2 (Colorado Regulation No. 6, Part B, Section VII.C.2 and Colorado Construction Permit No. 97PO0846).

5.3.2 Particulate matter emissions shall not exceed 0.15 gr/dscf corrected to 12% CO_2 (Colorado Regulation No. 1, Section III.B.2.b).

In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits shall be presumed if the permittee meets the requirements in Conditions 5.2, 5.5 and 5.6.

5.4 Hours of Operation of the incinerator shall be recorded daily (Colorado Regulation No. 6, Part B, Section VII.D and Colorado Construction Permit No. 97PO0846). Hours of operation shall be used to calculate the hourly rate of waste burned in the incinerator as described in Condition 5.2.

5.5 The Waste Burned in this incinerator is subject to the following requirements:

5.5.1 Waste burned in this unit shall consist of dry waste consisting of materials such as paper, cardboard, oily absorbent materials and oil contaminated filters. No other type of waste shall be burned in this unit without prior approval from the Division (Colorado Construction Permit 97PO0846).

5.5.2 Absorbent materials that contain volatile liquids, such as gasoline or paint thinner shall not be burned in this unit. Waste material shall not contain or be contaminated with liquids with a flash point less than 100º F (Colorado Construction Permit 97PO0846, as modified under the provisions of Section I, Condition 1.3).

5.5.3 No radioactive or hazardous waste materials of any type shall be burned in this unit (Colorado Construction Permit 97PO0846).

Compliance with the above requirements shall be monitored by recording, for each charge, a description of the waste burned (i.e. paper, filters) and identifying any chemical contaminants (i.e. oil, grease) contained in or on the materials burned. In the absence of credible evidence to

the contrary, compliance with Condition 5.5.2 shall be presumed provided the liquid contaminants in or on the waste have a flash point higher than 100E F.

5.6 The Operation of this incinerator is subject to the following requirements:

5.6.1 The combustion chamber (55-gallon drum) shall not be overloaded with waste materials. Ample head room must be provided to encourage good start-up and efficient burning (Colorado Construction Permit 97PO0846). Compliance with this requirement shall be monitored by complying with the hourly waste burning limits in Condition 5.2.

5.6.2 Liquid fuel shall not be used as a start-up fuel. An ample layer of dry paper or cardboard material supplies a fast, easy initial fuel source for start-up (Colorado Construction Permit 97PO0846). Compliance with this requirement shall be monitored by complying with the requirements in Condition 5.5.2.

5.6.3 This unit shall be maintained and operated in accordance with manufacturer's operating instructions (Colorado Construction Permit 97PO0846). A copy of the manufacturer's operating and maintenance instructions shall be maintained on site and made available to the Division upon request.

5.6.4 This unit shall be operated by trained personnel who are competent and knowledgeable of the unit's operating instructions and maintenance procedures (Colorado Construction Permit 97PO0846). Compliance with this requirement shall be monitored by maintaining records of personnel trained to operate the incinerator. The name of the personnel operating the incinerator will be recorded for each charge of waste fed to the incinerator. These records shall be made available to the Division upon request.

5.7 **State-Only Requirement:** This incinerator is subject to 40 CFR Part 60, Subpart A - General Provisions, as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A. Specifically, this incinerator is subject to the following requirements:

5.7.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere (40 CFR Part 60 Subpart A § 60.12, as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A)

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

monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source (Colorado Construction Permit 97PO0846 and 40 CFR Subpart A § 60.11(d), as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A).

5.8 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1). Compliance with the Opacity requirement shall be monitored by conducting a visual observation of the incinerator during each use. If any visible emissions are observed, the source shall investigate the incinerator performance and make any adjustments necessary. A log of any adjustments shall be maintained and made available to the Division upon request. If, after the adjustment has been performed, visible emissions persist for longer than one hour, an EPA Reference Method 9 opacity observation shall be performed to determine compliance with the opacity standard. The EPA Reference Method 9 opacity observations shall be performed by an observer with current and valid Method 9 certification.

6. Natural Gas Transmission and Storage MACT Requirements

6.1 The owner of operator shall maintain records of the annual facility natural gas throughput each year and upon request, submit such records to the Division. If the facility annual natural gas throughput increases above the maximum natural gas throughput calculated in 40 CFR Part 63, Subpart HHH §§ 63.1270(a)(1) or (a)(2), the maximum natural gas throughput must be recalculated using the higher throughput multiplied by a factor of 1.2 (40 CFR Part 63 Subpart HHH § 63.1270(a)(3), as adopted by reference in Colorado Regulation No. 8, Part E, Section III).

Note that the maximum natural gas throughput rate calculated in accordance with the provisions in § 63.1270(a)(1) was determined to be 6,840 MMscf/yr (4,095 hrs/yr) of operation in a June 11, 2003 submittal.

6.2 A facility that is determined to be an area source, based on emissions estimated using the maximum natural gas throughput calculated as specified in 40 CFR Part 63 Subpart HHH §§ 63.1270(a)(1) or (a)(2), but subsequently increases emissions or potential to emit above the major source levels (without first obtaining and complying with other limitations to keep its potential to emit HAP below major source levels), and becomes a major source, must comply thereafter with all applicable provisions of 40 CFR Part 63 Subpart HHH on the applicable compliance dates specified in 40 CFR Part 63 Subpart HHH § 63.1270(d) (40 CFR Part 63 Subpart HHH § 63.1270(a), as adopted by reference in Colorado Regulation No. 8, Part E, Section III).

7. E005 & E006 – Natural Gas-Fired Emergency Engines

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
MACT ZZZZ Requirements	7.1.	Change Oil and Filter Inspect Air Cleaner Inspect all Hoses and Belts		N/A	See Condition 7.1.	
Opacity	7.2	Not to Exceed 20% Except as Provided for Below		N/A	Fuel Restriction	Only Natural Gas is Used as Fuel
MACT General Provisions	7.3.	N/A	N/A	N/A	See Condition 7.4	

Note that these emission units are exempt from the APEN reporting requirements in Regulation No. 3, Part A and the construction permit requirements in Regulation No. 3, Part B as long as actual emissions do not exceed the APEN de minimis level (equivalent to 397 hrs/yr of operation for E005 and 408 hrs/yr of operation for E006).

7.1 These engines are subject to the requirements in 40 CFR Part 63 Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines", as follows:

The requirements below reflect the language in 40 CFR Part 63 Subpart ZZZZ as of the date of renewal permit issuance [September 1, 2012]. However, these engines are subject to the latest version of Subpart ZZZZ.

These requirements included in this Condition 3.1 are only federally enforceable. As of the date of revised permit issuance [September 1, 2012], the requirements in 40 CFR Part 63 Subpart ZZZZ promulgated on August 20, 2010 have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements these engines will be subject to the APEN reporting and minor source permitting requirements and these requirements will be state-enforceable.

Proposed revisions to the 40 CFR Part 63 Subpart ZZZZ were published in the Federal Register on June 7, 2012. The proposed revisions include changes to periods under which emergency engines may be operated (Condition 7.1.10). Therefore, these requirements may change in the future when the proposed rule is finalized.

When do I have to comply with this subpart (§ 60.6595)

7.1.1 If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013. (§ 63.6595(a)(1))

What emission limitations and operating limitations must I meet if I own or operate an existing Stationary RICE located at an area source of HAP emissions (§ 63.6603)

7.1.2 If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you. (§ 63.6603(a)) The requirements in Table 2d that apply to these emergency engines are as follows:

7.1.2.1 Change oil and filter every 500 hours of operation or annually whichever comes first. (Table 2d, item 5.a)

7.1.2.2 Inspect air cleaner every 1,000 hours of operation or annually whichever comes first. (Table 2d, item 5.b)

7.1.2.3 Inspect all hoses and belts every 500 hours of operation or annually whichever comes first, and replace as necessary. (Table 2d, item 5.c)

Notwithstanding the above requirements, the following applies:

7.1.2.4 Sources have the option to utilize an oil analysis program as described in Condition 7.1.8 in order to extend the specified oil change requirement in Condition 7.1.2.1. (Table 2d, footnote 1)

7.1.2.5 If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Conditions 7.1.2.1 through 7.1.2.3, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. (Table 2d, footnote 2)

What are my general requirements for complying with this subpart? (§ 63.6605)

7.1.3 You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. (§ 63.6605(a))

7.1.4 At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved.

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (§ 63.6605(b))

What are my monitoring, installation, collection, operation, and maintenance requirements? (§ 63.6625)

7.1.5 If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (§ 63.6625(e)) As noted in § 63.6625(e)(3), an existing emergency or black start stationary RICE located at an area source of HAP emissions is subject to the requirements in this paragraph.

7.1.6 If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. (§ 63.6625(f))

7.1.7 If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. (§ 63.6625(h))

7.1.8 If you own or operate a stationary SI engine that is subject to the work, operation or management practices in Condition 7.1.2, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 7.1.2.1. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 7.1.2.1. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program,

the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (§ 63.6625(j))

How do I demonstrate continuous compliance with the emission limitations and operating limitations? (§ 63.6640)

7.1.9 You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d [Conditions 7.1.2.1 through 7.1.2.3] to this subpart that apply to you according to methods specified in Table 6 to this subpart. (§ 63.6640(a)) The methods specified in Table 6 of Subpart ZZZZ are as follows:

7.1.9.1 Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions (Subpart ZZZZ, Table 6, item 9.a.i); or

7.1.9.2 Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (Subpart ZZZZ, Table 6, item 9.a.ii)

7.1.10 If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in Conditions 7.1.10.1 through 7.1.10.3. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions 7.1.10.1 through 7.1.10.3, is prohibited. If you do not operate the engine according to the requirements in Conditions 7.1.10.1 through 7.1.10.3, the engine will not be considered an emergency engine under 40 CFR Part 63 Subpart ZZZZ and will need to meet all requirements for non-emergency engines. (§ 63.6640(f))

7.1.10.1 There is no time limit on the use of emergency stationary RICE in emergency situations. (§ 63.6640(f)(1))

7.1.10.2 You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. (§ 63.6640(f)(2))

7.1.10.3 You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the

100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this Condition 7.1.10.3, as long as the power provided by the financial arrangement is limited to emergency power. (§ 63.6640(f)(3))

What records must I keep? (§ 63.6655)

7.1.11 You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Conditions 7.1.2.1 through 7.1.2.3. (§ 63.6655(e) and (e)(3))

7.1.12 If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. (§ 63.6655(f) and § 63.6655(f)(2))

In what form and how long must I keep my records? (§ 63.6660)

7.1.13 Records shall be kept in the form and for the duration specified in § 63.6660.

What parts of the General Provisions apply to me? (§ 63.6665)

7.1.14 Table 8 of Subpart ZZZZ shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. (§ 63.6665) The general provisions that apply to this engine are included in Condition 7.3 of this permit:

7.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1). This opacity standard applies to **each engine**. In the absence of credible evidence to the contrary, compliance with the 20% opacity requirement will be presumed since only natural gas is permitted to be used as fuel for these engines. The permittee shall maintain records that verify that only natural gas is used as fuel.

7.3 These engines are subject to the requirements in 40 CFR part 63 Subpart A "General Provisions", as adopted by reference in Colorado Regulation No. 8, Part E, Section I as specified in 40 CFR Part 63 Subpart ZZZZ § 63.6665. These requirements include, but are not limited to the following:

7.3.1 Prohibited activities in § 63.4(a).

7.3.2 Circumvention in § 63.4(b)

8. M001 - Gasoline Storage Tank, 500 gallons aboveground

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
Gasoline Throughput	8.1	N/A	N/A	N/A	Recordkeeping	Monthly
40 CFR Pat 63 Subpart CCCCCC Requirements	8.2.	Work Practice Standards		N/A	See Condition 8.2	

Note that this emission unit is exempt from the APEN reporting requirements in Regulation No. 3, Part A and the construction permit requirements in Regulation No. 3, Part B.

These requirements included in this Section II.8 are only federally enforceable. As of the date of revised permit issuance **[DATE]**, the requirements in 40 CFR Part 63 Subpart CCCCCC have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements this tank will be subject to the APEN reporting and minor source permitting requirements and these requirements will be state-enforceable.

8.1 The quantity of gasoline processed through this tank shall be monitored and recorded monthly. Monthly records of gasoline processed shall be retained as required by Condition 8.2.1.

8.2 This tank is subject to the requirements in 40 CFR Part 63 Subpart CCCCCC, "National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities", as follows:

8.2.1 An affected source shall, upon request by the division, demonstrate that their average monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable (40 CFR Part 63 Subpart CCCCCC § 63.11111(e)).

8.2.2 You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following (40 CFR Part 63 Subpart CCCCCC § 63.11116(a)):

8.2.2.1 Minimize gasoline spills;

8.2.2.2 Clean up spills as expeditiously as practicable;

8.2.2.3 Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

8.2.2.4 Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators;

8.2.3 You are not required to submit notifications or reports, but you must have records available within 24 hours of a request by the Division to document your gasoline throughput (40 CFR Part 63 Subpart CCCCCC § 63.11116(b)).

SECTION III - Permit Shield

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D. & XIII.B and § 25-7-114.4(3)(a), C.R.S.

1. Specific Non-Applicable Requirements

Based on the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modification or reconstruction on which construction commenced prior to permit issuance.

Emission Unit Description & Number	Applicable Requirement	Justification
Units E001 through E004	Colorado Regulation 6, Part B, Section II	This regulation does not apply because internal combustion engines are not considered fuel-burning equipment.

2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;

2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;

2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;

2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.

2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

3. Streamlined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the

listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

Permit Condition(s)	Streamlined (Subsumed) Requirements
Section II, Condition 5.8	**State-Only Requirement:** Colorado Regulation No. 6, Part B, Section VII.C.2 - Only the 20% opacity requirement.
Section IV, Condition 21.b and c	Colorado Construction Permit 97PO0846, Condition 1.c - Only the requirement to retain records for two years.

SECTION IV - General Permit Conditions

5/22/12 version

1. Administrative Changes

Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

2. Certification Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.

c. Compliance certifications shall contain:

(i) the identification of each permit term and condition that is the basis of the certification;

(ii) the compliance status of the source;

(iii) whether compliance was continuous or intermittent;

(iv) method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.

d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

3. Common Provisions

Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II,.E., II.F., II.I, and II.J

a. To Control Emissions Leaving Colorado

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

b. Emission Monitoring Requirements

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

(i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;

(ii) approves the use of an equivalent method;

(iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or

(iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for test methods applicable to such facility;

(ii) Safe sampling platform(s);

(iii) Safe access to sampling platform(s); and

(iv) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Affirmative Defense Provision for Excess Emissions during Malfunctions

An affirmative defense to a claim of violation under these regulations is provided to owners and operators for civil penalty actions for excess emissions during periods of malfunction. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of evidence that:

(i) The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;

(ii) The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;

(iii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded;

(iv) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;

(v) All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality;

(vi) All emissions monitoring systems were kept in operation (if at all possible);

(vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;

(viii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

(ix) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This section is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement; and

(x) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source.

The owner or operator of the facility experiencing excess emissions during a malfunction shall notify the division verbally as soon as possible, but no later than noon of the Division's next working day, and shall submit written notification following the initial occurrence of the excess emissions by the end of the source's next reporting period. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to failures to meet federally promulgated performance standards or emission limits, including, but not limited to, new source performance standards and national emission standards for hazardous air pollutants. The affirmative defense provision does not apply to state implementation plan (sip) limits or permit limits that have been set taking into account potential emissions during malfunctions, including, but not necessarily limited to, certain limits with 30-day or longer averaging times, limits that indicate they apply during malfunctions, and limits that indicate they apply at all times or without exception.

e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan 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 or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

(i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;

(ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;

(iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;

(v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;

(vi) All emissions monitoring systems were kept in operation (if at all possible);

(vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,

(viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

4. Compliance Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d. and § 25-7-122.1(2), C.R.S.

a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.

b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.

d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.

e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.

f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:

(i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and

(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

5. Emergency Provisions

Regulation No. 3, 5 CCR 1001-5, Part C, § VII.

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, 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. the permitted 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 the permit; and

d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

6. Emission Controls for Asbestos

Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, "asbestos control."

7. Emissions Trading, Marketable Permits, Economic Incentives

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

8. Fee Payment

C.R.S. §§ 25-7-114.1(6) and 25-7-114.7

a. The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.

b. The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. 25-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.

c. The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. 25-7-114.1(6) for each APEN or revised APEN filed.

9. Fugitive Particulate Emissions

Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

10. Inspection and Entry

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;

b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;

c. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Operating Permit;

d. sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or applicable requirements, any substances or parameters.

11. Minor Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

12. New Source Review

Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

13. No Property Rights Conveyed

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

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

14. Odor

Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

15. Off-Permit Changes to the Source

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit . The permit shield shall not apply to any off-permit change.

16. Opacity

Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.-II.

17. Open Burning

Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

18. Ozone Depleting Compounds

Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

19. Permit Expiration and Renewal

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.

b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

20. Portable Sources

Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

21. Prompt Deviation Reporting

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to malfunction conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

"Prompt" is defined as follows:

a. Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or

b. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:

(i) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence;

(ii) For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report shall be made within 48 hours; and

(iii) For all other deviations from permit requirements, the report shall be submitted every six (6) months, except as otherwise specified by the Division in the permit in accordance with paragraph 22.d. below.

c. If any of the conditions in paragraphs b.i or b.ii above are met, the source shall notify the Division by telephone (303-692-3155) or facsimile (303-782-0278) based on the timetables listed above. *[Explanatory note: Notification by telephone or facsimile must specify that this notification is a deviation report for an Operating Permit.]* A written notice, certified consistent with General Condition 2.a. above (Certification Requirements), shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required above.

"Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

22. Record Keeping and Reporting Requirements

Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:

(i) date, place as defined in the Operating Permit, and time of sampling or measurements;

(ii) date(s) on which analyses were performed;

(iii) the company or entity that performed the analysis;

(iv) the analytical techniques or methods used;

(v) the results of such analysis; and

(vi) the operating conditions at the time of sampling or measurement.

b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.

c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee

shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.

d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the compliance assurance monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.

e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

23. Reopenings for Cause

Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.

b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.

c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.

d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

24. Section 502(b)(10) Changes

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

25. Severability Clause

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

26. Significant Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, § III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

27. Special Provisions Concerning the Acid Rain Program

Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.

b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

28. Transfer or Assignment of Ownership

Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

29. Volatile Organic Compounds

Regulation No. 7, 5 CCR 1001-9, §§ III & V.

The requirements in paragraphs a, b and e apply to sources located in an ozone non-attainment area or the Denver 1-hour ozone attainment/maintenance area. The requirements in paragraphs c and d apply statewide.

a. All storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

   Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.

b. Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be

transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.

c. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.

d. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.

e. Beer production and associated beer container storage and transfer operations involving volatile organic compounds with a true vapor pressure of less than 1.5 PSIA actual conditions are exempt from the provisions of paragraph b, above.

30. Wood Stoves and Wood burning Appliances

Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

END OF PERMIT REQUIREMENTS

OPERATING PERMIT APPENDICES

A - INSPECTION INFORMATION
B - COMPLIANCE MONITORING REPORT FORMAT
C - COMPLIANCE CERTIFICATION REPORT FORMAT
D - NOTIFICATION ADDRESSES
E - PERMIT ACRONYMS
F - PERMIT MODIFICATIONS
G - PERMANENT ENGINE AOS APPLICABILITY REPORTS

*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, except as otherwise provided in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

APPENDIX A - Inspection Information

Directions to Plant:

From I-76 eastbound, take exit # 64 (first Wiggins exit). Go south on Road 3 approximately 8.5 miles to the intersection of Road 3 and Road I. Roundup station is located on the southeast corner of this intersection.

Safety Equipment Required:

Eye Protection
Hard Hat
Safety Shoes
Hearing Protection

Facility Plot Plan:

Figure 1 (following page) shows the plot plan as submitted on December 14, 1995 with additional technical information provided to support the source's Title V Operating Permit Application.

List of Insignificant Activities:

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

<u>Units with emissions less than the APEN de minimis - criteria (Reg 3 Part C.II.E.3.a)</u>

Kleentex Model 1045 Degreaser Unit
Natural gas venting during system blowdowns
Storage pond for liquids from separators and scrubber streams (to be replaced with produced water tanks in the future)
Two (2) produced water storage tanks – planned for future installation (400 bbls, each)
Fugitive particulate emissions from vehicle traffic
Condensate tank – north, 5,000 gal aboveground
Condensate truck loading
Fugitive VOCs from Equipment Leaks (formerly addressed in construction permit 92MR1345-2)

<u>Units with emissions less than the APEN de minimis - non-criteria (Reg 3 Part C.II.E.3.b)</u>

Methanol tank #1 (2,000 gal aboveground)
Methanol tank #2 (300 gal aboveground)
Engine coolant tank # 1, 55% ethylene glycol (300 gal aboveground)
Engine coolant tank # 2, 55% ethylene glycol (500 gal aboveground)

Fuel Burning Equipment less than 5 MMBtu/hr (Reg 3 Part C.II.E.3.k)

Gas heater #1, Par-Mac Custom (2.75 MMBtu/hr)
Gas heater #2, Par-Mac Custom (2.75 MMBtu/hr)
NGL Plant - hot oil boiler, T. H. Russel Co. V-411 (0.40 MMBtu/hr)
TEG Reboiler #1, J. W. Williams 801-1 (0.40 MMBtu/hr)
TEG Reboiler #2, J. W. Williams 801-1 (0.40 MMBtu/hr)
Gas heater for the three-phase separator (0.75 MMBtu/hr)
Two (2) gas heaters for produced water tanks (each 0.5 MMBtu/hr)
Nineteen (19) heaters for the gathering system two-phase separators at the storage reservoir well heads (each at 0.75 MMBtu/hr)

Chemical Storage Areas - capacity not exceeding 5,000 gal (Reg 3 Part C.II.E.3.mm)

NGL Plant - Used ethylene glycol tank (300 gal aboveground)
NGL Plant Ethylene glycol tank (1,000 gal aboveground)
NGL Plant - Ethylene glycol tank 3(00 gal aboveground)
Triethylene glycol tank #1 (295 gal aboveground)
Triethylene glycol tank #2 (295 gal aboveground)
Triethylene glycol tank #3 (295 gal aboveground)

Storage of butane, propane, or liquified petroleum gas in tank less than 60,000 gal (Reg 3 Part C.II.E.3.zz)

LPG tank (12,000 gal aboveground)
NGL/propane tank (1,000 gal aboveground)

Storage tanks less than 40,000 gal capacity - lubricating oil (Reg 3 Part C.II.E.3.aaa)

Engine oil tank (500 gal aboveground)
Engine oil tank (500 gal aboveground)
Used oil tank (1,500 gal vaulted aboveground)

Fuel burning equipment less than 10 MMBtu/hr - for heating (Reg 3 Part C.II.E.3.ggg)

Space heating boiler

Not Sources of Emissions

Mercaptan odorant tank (800 gal, pressurized, aboveground)

APPENDIX B

Reporting Requirements and Definitions

with codes ver 2/20/07

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

(A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);

(B) fails to notify or report as required under the Act; or

(C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits.
All required reports must be certified by a responsible official.

Report #1: Monitoring Deviation Report (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

Report #2: Permit Deviation Report (must be reported "promptly")

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit requirements, including those attributable to malfunctions as defined in this Appendix, the probable cause of

such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "malfunction" shall refer to both emergency conditions and malfunctions. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due as set forth in General Condition 21. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

(1) A situation where emissions exceed an emission limitation or standard contained in the permit;

(2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;

(3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,

(4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report. All deviations shall be reported using the following codes:

1 = Standard:	When the requirement is an emission limit or standard
2 = Process:	When the requirement is a production/process limit
3 = Monitor:	When the requirement is monitoring
4 = Test:	When the requirement is testing
5 = Maintenance:	When required maintenance is not performed
6 = Record:	When the requirement is recordkeeping
7 = Report:	When the requirement is reporting
8 = CAM:	A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.
9 = Other:	When the deviation is not covered by any of the above categories

Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the

permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- Whether or not the method(s) used by the owner or operator for determining the compliance status with each permit term and condition during the certification period was the method(s) specified in the permit. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.[1]
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

Startup, Shutdown, Malfunctions and Emergencies

Understanding the application of Startup, Shutdown, Malfunctions and Emergency Provisions, is very important in both the deviation reports and the annual compliance certifications.

Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be

[1] For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event.

confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

Emergency Provisions

Under the Emergency provisions of Part 70 certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

DEFINITIONS

Malfunction (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Malfunction (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, 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 preventative maintenance, careless or improper operation, or operator error.

Monitoring and Permit Deviation Report - Part I

1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division as set forth in General Condition 21. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or malfunction or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or malfunctions) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: Public Service Company of Colorado – Roundup Compressor Station
OPERATING PERMIT NO: 95OPMR081
REPORTING PERIOD:_____ (see first page of the permit for specific reporting period and dates)

Operating Permit Unit ID	Unit Description	Deviations Noted During Period?[1]		Deviation Code[2]	Malfunction/ Emergency Condition Reported During Period?	
		YES	NO		YES	NO
E001	Ajax, Model DPC-280, 2-Cycle Lean Burn Internal Combustion Engine (Refrigerant Compressor Engine), Rated at 225 hp (site), Serial No. 77939. Natural Gas Fired.					
E002, E003 & E004	Three (3) Waukesha, Model L5790GSI, 4-Cycle Rich Burn Internal Combustion Engines (Compressor Engines), Each Rated at 980 hp (site), Serial Nos. 397617, 397616 and 397618. Natural Gas Fired.					
D001 & D002	Two (2) J.W. Williams, Triethylene Glycol Dehydrators, Model and Serial Nos. 801-1 and 801-2, Each Rated at 25 MMscf/day.					
D001	T.H. Russel, Model V-411, Ethylene Glycol Dehydrator, Serial No. Unavailable, Rated at 50 MMscf/day.					
I001	Elastec Inc., Smart Ash Energy Recovery Unit, Model No. 100, Serial No. AS110103221. Note this unit was previously permitted as a portable unit under AIRs ID No. 777-1171.					
E005 & E006	One (1) Caterpillar, Model No. G343, 4- Cycle Rich Burn Engine, Serial No. 97N336, Rated at 225 hp and 8,250 Btu/hp-hr, Natural Gas Fired Emergency Generator. One (1) Caterpillar, Model No. 3306 NG, 4- Cycle Rich Burn Engine, Serial No. 7Y01302, Rated at 195 hp and 7,877 Btu/hp-hr, Natural Gas Fired Emergency Generator.					

Operating Permit Unit ID	Unit Description	Deviations Noted During Period?[1]		Deviation Code[2]	Malfunction/ Emergency Condition Reported During Period?	
		YES	NO		YES	NO
M001	Gasoline Storage Tank, 500 gal, above ground					
	General Conditions					
	Insignificant Activities					

[1] See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

[2]Use the following entries as appropriate:

1 = Standard: When the requirement is an emission limit or standard
2 = Process: When the requirement is a production/process limit
3 = Monitor: When the requirement is monitoring
4 = Test: When the requirement is testing
5 = Maintenance: When required maintenance is not performed
6 = Record: When the requirement is recordkeeping
7 = Report: When the requirement is reporting
8 = CAM: A situation in which an excursion or exceedance as defined in 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.
9 = Other: When the deviation is not covered by any of the above categories

Monitoring and Permit Deviation Report - Part II

FACILITY NAME: Public Service Company of Colorado – Roundup Compressor Station
OPERATING PERMIT NO: 95OPMR081
REPORTING PERIOD:

Is the deviation being claimed as an: Emergency _____ Malfunction_____ N/A

(For NSPS/MACT) Did the deviation occur during: Startup _____ Shutdown _____ Malfunction _____
Normal Operation _____

OPERATING PERMIT UNIT IDENTIFICATION:

Operating Permit Condition Number Citation

Explanation of Period of Deviation

Duration (start/stop date & time)

Action Taken to Correct the Problem

Measures Taken to Prevent a Reoccurrence of the Problem

Dates of Malfunctions/Emergencies Reported (if applicable)

Deviation Code _____ Division Code QA: _____

SEE EXAMPLE ON THE NEXT PAGE

EXAMPLE

FACILITY NAME: Acme Corp.
OPERATING PERMIT NO: 96OPZZXXX
REPORTING PERIOD: 1/1/04 - 6/30/06

Is the deviation being claimed as an: Emergency _____ Malfunction __XX____ N/A

(For NSPS/MACT) Did the deviation occur during: Startup _____ Shutdown _____ Malfunction
Normal Operation _____

OPERATING PERMIT UNIT IDENTIFICATION:

Asphalt Plant with a Scrubber for Particulate Control - Unit XXX

Operating Permit Condition Number Citation

Section II, Condition 3.1 - Opacity Limitation

Explanation of Period of Deviation

Slurry Line Feed Plugged

Duration

START- 1730 4/10/06
END- 1800 4/10/06

Action Taken to Correct the Problem

Line Blown Out

Measures Taken to Prevent Reoccurrence of the Problem

Replaced Line Filter

Dates of Malfunction/Emergencies Reported (if applicable)

5/30/06 to A. Einstein, APCD

Deviation Code _____ Division Code QA: _____

Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME: Public Service Company of Colorado – Roundup Compressor Station

FACILITY IDENTIFICATION NUMBER: 0870030

PERMIT NUMBER: 95OPMR081

REPORTING PERIOD:_____ (see first page of the permit for specific reporting period and dates)

All information for the Title V Semi-Annual Deviation Reports must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. This signed certification document must be packaged with the documents being submitted.

STATEMENT OF COMPLETENESS

I have reviewed the information being submitted in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this submittal are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in Sub-Section 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of Sub-Section 25-7 122.1, C.R.S.

Printed or Typed Name | Title

Signature of Responsible Official | Date Signed

Note: Deviation reports shall be submitted to the Division at the address given in Appendix D of this permit. No copies need be sent to the U.S. EPA.

APPENDIX C

Required Format for Annual Compliance Certification Reports

with codes ver 2/20/07

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: Public Service Company of Colorado – Roundup Compressor Station

OPERATING PERMIT NO: 95OPMR081
REPORTING PERIOD:

I. Facility Status

___ During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the Permit.

___ With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Deviations Reported [1]		Monitoring Method per Permit?[2]		Was compliance continuous or intermittent?[3]	
		Previous	Current	YES	NO	Continuous	Intermittent
E001	Ajax, Model DPC-280, 2-Cycle Lean Burn Internal Combustion Engine (Refrigerant Compressor Engine), Rated at 225 hp (site), Serial No. 77939. Natural Gas Fired.						
E002, E003 & E004	Three (3) Waukesha, Model L5790GSI, 4-Cycle Rich Burn Internal Combustion Engines (Compressor Engines), Each Rated at 980 hp (site), Serial Nos. 397617, 397616 and 397618. Natural Gas Fired.						
D001 & D002	Two (2) J.W. Williams, Triethylene Glycol Dehydrators, Model and Serial Nos. 801-1 and 801-2, Each Rated at 25 MMscf/day.						
D001	T.H. Russel, Model V-411, Ethylene Glycol Dehydrator, Serial No. Unavailable, Rated at 50 MMscf/day.						

Operating Permit Unit ID	Unit Description	Deviations Reported [1]		Monitoring Method per Permit?[2]		Was compliance continuous or intermittent?[3]	
		Previous	Current	YES	NO	Continuous	Intermittent
I001	Elastec Inc., Smart Ash Energy Recovery Unit, Model No. 100, Serial No. AS110103221. Note this unit was previously permitted as a portable unit under AIRs ID No. 777-1171.						
E005 & E006	One (1) Caterpillar, Model No. G343, 4- Cycle Rich Burn Engine, Serial No. 97N336, Rated at 225 hp and 8,250 Btu/hp-hr, Natural Gas Fired Emergency Generator. One (1) Caterpillar, Model No. 3306 NG, 4-Cycle Rich Burn Engine, Serial No. 7Y01302, Rated at 195 hp and 7,877 Btu/hp-hr, Natural Gas Fired Emergency Generator.						
M001	Gasoline Storage Tank, 500 gal, above ground						
	General Conditions						
	Insignificant Activities [4]						

[1] If deviations were noted in a previous deviation report , put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

[2] Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

[3] Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

[4] Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

II. Status for Accidental Release Prevention Program:

A. This facility _____ is subject _____ is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act)

B. If subject: The facility _____ is _____ is not in compliance with all the requirements of section 112(r).

1. A Risk Management Plan _____ will be _____ has been submitted to the appropriate authority and/or the designated central location by the required date.

III. Certification

All information for the Annual Compliance Certification must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. This signed certification document must be packaged with the documents being submitted.

I have reviewed this certification in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this certification are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in § 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of § 25-7 122.1, C.R.S.

_____

Printed or Typed Name Title

_____

Signature Date Signed

NOTE: All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

APPENDIX D

Notification Addresses

1. **Air Pollution Control Division**

Colorado Department of Public Health and Environment
Air Pollution Control Division
Operating Permits Unit
APCD-SS-B1
4300 Cherry Creek Drive S.
Denver, CO 80246-1530

ATTN: Matt Burgett

2. **United States Environmental Protection Agency**

Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice
Mail Code 8ENF-T
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance
Air and Radiation Programs, 8P-AR
U.S. Environmental Protection Agency, Region VIII
1595 Wynkooop Street
Denver, CO 80202-1129

APPENDIX E

Permit Acronyms

Listed Alphabetically:

AIRS -	Aerometric Information Retrieval System
AP-42 -	EPA Document Compiling Air Pollutant Emission Factors
APEN -	Air Pollution Emission Notice (State of Colorado)
APCD -	Air Pollution Control Division (State of Colorado)
ASTM -	American Society for Testing and Materials
BACT -	Best Available Control Technology
BTU -	British Thermal Unit
CAA -	Clean Air Act (CAAA = Clean Air Act Amendments)
CCR -	Colorado Code of Regulations
CEM -	Continuous Emissions Monitor
CF -	Cubic Feet (SCF = Standard Cubic Feet)
CFR -	Code of Federal Regulations
CO -	Carbon Monoxide
COM -	Continuous Opacity Monitor
CRS -	Colorado Revised Statute
DSCF -	Dry Standard Cubic Feet
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate in Lbs/MMBtu
FR -	Federal Register
G -	Grams
Gr-	Grains
Gal -	Gallon
GPM -	Gallons per Minute
HAPs -	Hazardous Air Pollutants
HP -	Horsepower
HP-HR -	Horsepower Hour (G/HP-HR = Grams per Horsepower Hour)
LAER -	Lowest Achievable Emission Rate
LBS -	Pounds
M -	Thousand
MM -	Million
MMscf -	Million Standard Cubic Feet
MMscfd -	Million Standard Cubic Feet per Day
N/A or NA -	Not Applicable
NOx -	Nitrogen Oxides
NESHAP -	National Emission Standards for Hazardous Air Pollutants
NSPS -	New Source Performance Standards
P -	Process Weight Rate in Tons/Hr
PE -	Particulate Emissions

PM -	Particulate Matter
PM_{10} -	Particulate Matter Under 10 Microns
PSD -	Prevention of Significant Deterioration
PTE -	Potential To Emit
RACT -	Reasonably Available Control Technology
SCC -	Source Classification Code
SCF -	Standard Cubic Feet
SIC -	Standard Industrial Classification
SO_2 -	Sulfur Dioxide
TPY -	Tons Per Year
TSP -	Total Suspended Particulate
VOC -	Volatile Organic Compounds

APPENDIX F

Permit Modifications

DATE OF REVISION	MODIFICATION TYPE	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION

APPENDIX G

Permanent Engine AOS Applicability Reports

ver 10/1/11

Note: A MS Word version of this Appendix can be found at:

http://www.cdphe.state.co.us/ap/oilgaspermitting.html

DISCLAIMER:

These are only example reports and do not cover all possible requirements.

Engine AOS Applicability Report Certification Language

All information for the Applicability Reports must be certified by either 1) for Operating Permits, a Responsible Official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. or 2) for Construction and General Permits, the person legally authorized to act on behalf of the source. This signed certification document must be packaged with the documents being submitted.

I have reviewed this certification in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this certification are true, accurate and complete. Further, I agree that by signing and submitting these documents I agree that any new requirements identified in the Applicability Report(s) shall be considered to be Applicable Requirements as defined in Colorado Regulation No. 3, section I.B.9., and that such requirements shall be enforceable by the Division and its agents and shall be considered to be revisions to the underlying permit(s) referenced in the Report(s) until such time as the Permit is revised to reflect the new requirements.

Please note that the Colorado Statutes state that any person who knowingly, as defined in § 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of § 25-7 122.1, C.R.S.

Printed or Typed Name

Title

Signature Date Signed

Colorado Regulation No. 7
Sections XVI and XVII.E

DISCLAIMER: This is only an example report and does not cover all possible Reg 7 requirements.

Company: Acme Gas Processing
Source ID: 999/1234/001
Permit #: 93OPXX999
Date: October 1, 2008

Determination of compliance and reporting requirements for a

Manufacturer: BestEngineCompany
Model: 777 LowNox
Nameplate HP: 1340
Construction date: July 1, 2007

Note: If the engine is exempt from a requirement due to construction date or was relocated from within Colorado, supporting documentation must be provided.

Determination of Regulation No. 7 requirements:

Regulation No. 7, § XVI

☐ Does not apply to this engine. Engine is not located in the ozone nonattainment area or does not have a manufacturer's design rate greater than 500 horsepower or did not commence operation on or after June 1, 2004.

☐ Does apply to this engine and applicable emissions controls have been installed.

Regulation No. 7, § XVII.E

☐ Does not apply to this engine. Engine does not have a maximum horsepower greater than 100 or the construction or relocation date precedes the applicability dates.

☐ Does apply to this engine. The following emission limits apply to the engine:

NO_X (g/hp-hr): 2.0
CO (g/hp-hr): 4.0
VOC (g/hp-hr): 1.0

Max Engine HP	Construction or Relocation Date	Emission Standards in g/hp-hr		
		NO_X	CO	VOC
100<Hp<500	January 1, 2008	2.0	4.0	1.0
	January 1, 2011	1.0	2.0	0.7
500≤Hp	July 1, 2007	2.0	4.0	1.0
	July 1, 2010	1.0	2.0	0.7

NSPS JJJJ Example Report Format

DISCLAIMER: This is only an example report and does not cover all possible JJJJ requirements.

Note that as of October 1, 2011 that the Division has not yet adopted NSPS JJJJ. Until such time as it does, any engine subject to NSPS will be subject only under Federal law. Once the Division adopts NSPS JJJJ, there will be an additional step added to the determination of the NSPS. Under the provisions of Regulation No. 6, Part B, § I.B (which is referenced in Part A), any engine relocated from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of NSPS JJJJ.

NSPS Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Company: Acme Gas Processing
Source ID: 999/1234/001
Permit #: 93OPXX999
Date: October 1, 2008

Manufacturer: BestEngineCompany
Model: 777 LowNox
Nameplate HP: 1340
Engine Type: 2 Stroke Rich Burn
Manufacture Date: July 1, 2007
Date Engine Ordered: April 1, 2007

Note: If the engine is exempt from a requirement due to construction/manufacture date, supporting documentation must be provided.

Upon adoption of NSPS Subpart JJJJ into Colorado Regulation No. 6, Part A, if the engine is exempt because the engine was relocated within the state of Colorado, supporting documentation must be provided.

☐ NSPS JJJJ **does not apply** to this engine.

☐ NSPS JJJJ **does apply** to this engine.

Note: Using the format below, the source must submit to the Division an analysis of all of the NSPS JJJJ applicable requirements that apply to this specific engine. **The analysis below is an example only**, based on a hypothetical engine that is a rich burn engine, greater than 500 HP, with a manufacture date after July 1, 2007.

Determination of NSPS JJJJ requirements:

60.4230 Applicability

(a)(4)(i) Applies to this engine since it is a rich burn engine, greater than 500 HP, with a manufacture date after July 1, 2007.

60.4233 Emission Standards for Owners and Operators

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than 100 HP must comply with the standards in Table 1.

Non-Emergency SI, Natural Gas, HP≥500, Manufactured after 7/1/2007

NO_x	2.0 g/HP-hr or 160 ppmvd@15% O_2
CO	4.0 g/HP-hr or 540 ppmvd@15% O_2
VOC	1.0 g/HP-hr or 86 ppmvd@15% O_2

Other Requirements for Owners and Operators

60.4234 Emission standards must be met for the lifetime of the engine.
60.4235 N/A - Sulfur content of gasoline.
60.4236 N/A (for now) - After July 1, 2009 owners and operators may not install engines with a power rating ≥ 500HP that do not meet the emissions standards in 60.4230.
60.4237 N/A - Emergency Engines.

60.4238 - 60.4242 Compliance Requirements for Manufacturers – (Not Applicable)

60.4243 Compliance Requirements for Owners and Operators

(b)(2)(ii) To maintain compliance with the emission limits in 60.4233, owners of SI ICE ≥ 500HP must:

- Keep a maintenance plan;
- Keep records of conducted maintenance;
- Maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions;
- Conduct an initial performance test; and
- Conduct subsequent performance tests every 8,760 hours or every three years, which ever comes first, in order to demonstrate compliance with the emission limits.

(g) Air to fuel ratio controllers (AFRCs) must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

60.4244 Testing Requirements for Owners and Operators

(a) Each performance test must be conducted within 10% of the highest achievable load and must comply with the testing requirements listed in 60.8 and Table 2 of NSPS JJJJ.

(b) Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 60.8(c). If the engine is non-operational when a performance test is due, the engine does not need to be started up just to test it, but will need to be tested immediately upon startup.

(c) Three separate test runs must be conducted for each performance test as specified by 60.8(f). Each run must be within 10% of max load and be at least 1 hour in duration.

(d) To determine compliance with the NO_x, CO, and VOC mass per unit output emission limitations, the measured concentration must be converted using the equations outlined in this section of NSPS JJJJ.

60.4245 Notification, Reports, and Records for Owners and Operators

(a) Owners of all stationary SI ICE must keep records of the following:
(1) All notifications submitted to comply with this subpart;
(2) Maintenance conducted on the engine;
(3) N/A - Manufacturer information for certified engines, and
(4) Documentation that shows non-certified engines are in compliance with the emission standards.

(b) N/A – For emergency engines only.

(c) Owners of non-certified engines ≥ 500HP must submit an initial notification as required in 60.7(a)(1) which includes the following information:
(1) Name and address of the owner or operator;
(2) The address of the affected source;
(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
(4) Emission control equipment; and
(5) Fuel used.

CONCLUSION OF FINDINGS (EXAMPLE ONLY)

In general, Acme's 1,235HP, Waukesha 7042 GSI engine is subject to the emissions limitations summarized in Table 1 of NSPS JJJJ. ACME will meet these emission limitations using an AFRC and a non-selective catalytic converter (NSCR). These emission rates will be met throughout the life of the engine. A maintenance plan will be kept and all maintenance activities will be recorded. Compliance with the emission limits will be confirmed by the initial performance tests, which shall be conducted following the procedures outlined in 60.4244. Copies of performance test results will be submitted within 60 days of the completion of each test. Since this is an uncertified engine, an initial notification will be submitted including all of the requested information in 40.4245 within 30 days of startup. ACME will keep records of all compliance related materials.

MACT ZZZZ Example Report Format

DISCLAIMER: This is only an example report and does not cover all possible ZZZZ requirements.

MACT Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Company: Acme Gas Processing
Source ID: 999/1234/001
Permit #: 93OPXX999
Date: October 1, 2008

Manufacturer: BestEngineCompany
Model: 777 LowNox
Nameplate HP: 1340
Engine Type: 2 Stroke Rich Burn
Manufacture Date: July 1, 2007
Date Engine Ordered: April 1, 2007

Note: If the engine is exempt from a requirement due to construction/reconstruction date, supporting documentation must be provided.

☐ MACT ZZZZ **does not apply** to this engine.

☐ MACT ZZZZ **does apply** to this engine.

Note: Using the format below, the source must submit to the Division an analysis of all of the major source MACT ZZZZ applicable requirements that apply to this specific engine. **The analysis below is an example only**, based on a hypothetical new engine located at a major source of HAP emissions.

Determination of MACT ZZZZ requirements:

63.6585 Applicability

This subpart is applicable to Acme's engine since they are going to be operating a new stationary reciprocating internal combustion engine (RICE) at a major source of HAP emissions.

63.6590 What Parts of My Plant Does This Subpart Cover?

This subpart covers Acme's new stationary reciprocating internal combustion engine.

63.6595 When do I have to comply with this Subpart?

(a)(5) The engine must comply with the applicable emission limitations and operating limitations upon startup.

63.6600 Emission and operating limitations for RICE site rated at more than 500 hp

(a) The engine is subject to the emission limits in table 1a and the operating limits in table 1b. ACME will meet the emission limitations by reducing formaldehyde emissions by 76 percent and will maintain the catalyst such that the pressure drop does not change by more than 2 inches of H_2O at 100 % load plus or minus 10 percent from the pressure drop measured during the initial performance test and will maintain the temperature of the engine exhaust so that the catalyst inlet temperature is greater than or equal to 750 º F and less than or equal to 1250 º F.

The engine will be equipped with non-selective catalytic reduction and an air fuel controller to meet the emission limitations.

63.6601 & 63.6611 Requirements for 4SLB engines between 250 and 200 hp

These requirements do not apply.

63.6605 General Requirements

(a) The engine will comply with the emission and operating limitations at all times, except during periods of startup, shutdown and malfunction (SSM)

(b) The engine, including air pollution control and monitoring equipment shall be operating in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during SSM.

63.6610 Initial performance test

(a) the performance tests specified in Table 4 (select sampling port and measure O_2, moisture and formaldehyde at inlet and outlet of the control device) shall be conducted within 180 days of startup.

(b) & (c) not applicable construction did not commence between 12/19/02 and 6/15/04.

(d) previous performance tests have not been conducted on this unit within two years, therefore, this provision does not apply.

63.6615 Subsequent performance tests

Subsequent tests will be conducted as specified in Table 3. No additional testing is required for 4SRB engines meeting the formaldehyde percent reduction requirements.

63.6620 Performance test procedures

(b) tests must be conducted at 100 % load plus or minus 10%

(c) tests may not be conducted during periods of SSM.

(d) must conduct three 1-hr test runs

(e) equation (e)(1) shall be used to determine compliance with the percent reduction requirement.

(f), (g) & (h) Not applicable

(i) engine load during test shall be determined as specified in this paragraph.

63.6625 Monitoring, installation, operation and maintenance requirements

(a), (c) & (d) Not applicable

(b) a continuous parameter monitoring system (CPMS) shall be installed to measure the catalyst inlet temperature. The CPMS will meet the requirements in § 63.8

63.6630 Demonstrating initial compliance

(a) initial compliance shall be determined in accordance with table 5 (initial performance test must indicate formaldehyde reduction of 76 percent or more, a CPMS must be installed to measure inlet temperature of the catalyst and the pressure drop and catalyst inlet temperature must be recorded during the initial performance test).

(b) pressure differential will be established during the initial performance test.

(c) Notification of compliance status will be submitted and will contain the results of the initial compliance demonstration.

63.6635 Monitoring to demonstrate continuous compliance

(b) except for monitor malfunctions, associated repairs, and required QA/QC activities monitoring must be continuous at all time the engine is operating.

(c) data recorded during monitoring malfunctions, associated repairs and required QA/QC activities must not be used in data averages and calculations to report operating levels, however, all the valid data collected during other periods shall be used.

63.6640 Demonstrating continuous compliance

(a) continuous compliance will be demonstrated as specified in table 6 (collect catalyst inlet temperature data, reduce that data to 4-hr rolling average and maintain the 4-hr rolling averages to within the operating limitation and measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop meets the operating limitation.

(b) deviations from the emission and operating limitations must be reported per § 63.6550.
If catalyst is changed the operating parameters established during the initial performance test must be re-established.
When operating parameters re-established a performance test must also be conducted.

63.6645 Notifications

(a) Submit notifications in §§ 63.7(b) & (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) thru (e) & (g) & (h) that apply by dates specified.

(b) Not applicable. Acme unit started after effective dated for Subpart ZZZZ.

(c) Submit initial notification within 120 days after becoming subject to Subpart ZZZZ.

(d) thru (f) Not applicable. Acme engine greater than 500 hp and subject to requirements in Subpart ZZZZ.

(g) & (h) Submit notification of intent to conduct performance test and notification of compliance status.

63.6650 Reports

(a) Submit reports required by table 7 (compliance report and SSM reports (if actions inconsistent with SSM plan)

(b) Not applicable, an alternate schedule for report submittal has been approved. Reports will be submitted with title v reports

(c) Compliance reports to contain the following information: company name and address, statement by responsible official certifying accuracy, date of report and beginning and end of reporting period, if SSM the information in 63.10(d)(5)(i), if no deviations a statement saying that, if no periods when CPMS out of control a statement saying that.

(d) Not applicable, using CPMS

(e) For each deviation the information in (e)(1) thru (e)(12) shall be provided.

(f) Applicable. Compliance reports are submitted with title v reports. Compliance reports under Subpart ZZZZ include all necessary info for title v deviation report with respect to Subpart ZZZZ requirements.

(g) Not applicable. Acme engine not firing landfill or digester gas.

63.6655 Recordkeeping

(a) Retain records as follows: copy of each notification and report (including all documentation supporting any initial notification or notification of compliance status), records in 63.6(e)(iii) thru (v) related to SSM, and records of performance tests and evaluations.

(b) CPMS records including records in 63.10(b)(2)(vi) thru (xi), previous versions of the performance evaluation plan required by 63.8(d)(3) and requests for alternatives to the relative accuracy test for CPMS as required by 63.8(f)(6)(i).

(c) Not applicable. Acme engine not firing landfill or digester gas.

(d) Will keep records required in Table 6 (monthly pressure drop readings, 4-hr averages of catalyst inlet temperature) to show continuous compliance with emission and operating limits.

63.6660 Form and length of records

(a) records must be in a form suitable and readily available for expeditions review

(b) records must be retained for five years

(c) records must be retained on-site for first 2 years, may be retained off-site for the remaining 3 years

63.6665 General Provisions

This engine must comply with the general provisions as indicated in Table 8.

CONCLUSION OF FINDINGS (EXAMPLE ONLY)

Since this engine is subject to the requirements of MACT Subpart ZZZZ. The engine will be installed with a non-selective catalyst to meet the formaldehyde reduction requirement of 76% or more. An initial performance test will be conducted within 180 days of startup to demonstrate compliance with the formaldehyde percent reduction requirement. During the initial performance test, the pressure drop across the catalyst will be measured. A CPMS will be installed to measure the catalyst inlet temperature. Continuous compliance will be demonstrated by keeping the 4-hr rolling averages of catalyst inlet temperature within the operating limitations and recording the pressure drop across the catalyst monthly and demonstrating that the pressure drop is within the operating limitation.

Records, notifications and reports will be submitted as required. To that end required reports and notifications include initial notification, notice of intent to conduct performance test, notification of compliance status, SSM reports (if required) and semi-annual compliance reports.