Colorado Department of Public Health and Environment

OPERATING PERMIT

Spindle Hill Energy, LLC
Spindle Hill Energy Center

Issued: February 1, 2014

AIR POLLUTION CONTROL DIVISION
COLORADO OPERATING PERMIT

FACILITY NAME:	Spindle Hill Energy Center	OPERATING PERMIT NUMBER
FACILITY ID:	123/5468	**08OPWE311**
ISSUED:	February 1, 2014	
EXPIRATION DATE:	February 1, 2019	
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:
Spindle Hill Energy, LLC	Spindle Hill Energy, LLC
6335 County Road 19	6335 County Road 19
Fort Lupton, CO 80621	Fort Lupton, CO 80621

INFORMATION RELIED UPON

Operating Permit Application Received:	April 8, 2008
And Additional Information Received:	Various dates; see Technical Review Document

Nature of Business:	Electric Power Generation
Primary SIC:	4911

RESPONSIBLE OFFICIAL		FACILITY CONTACT PERSON	
Name:	Robert Rooney	Name:	Robert Rooney
Title:	O&M Manager	Title:	O&M Manager
Phone:	303-833-5135	Phone:	303-833-5135

SUBMITTAL DEADLINES –

First Semi-Annual Monitoring Period:	February 1, 2014 – June 30, 2014
Subsequent Semi-Annual Monitoring Periods:	January 1 – June 30, July 1 – December 31
Semi-Annual Monitoring Reports:	Due February 1, 2014 & August 1, 2014 & subsequent years
First Annual Compliance Period:	February 1, 2014 – December 31, 2014
Subsequent Annual Compliance Periods:	January 1 – December 31
Annual Compliance Certification:	Due February 1, 2014 & subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance report 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.

FOR ACID RAIN SUBMITTAL DEADLINES SEE SECTION III.4 OF THIS PERMIT

TABLE OF CONTENTS:

TABLE OF CONTENTS:

SECTION I - General Activities and Summary

1. Permitted Activities

1.1 The Spindle Hill Energy Center is a peaking utility electric power generation facility classified under Standard Industrial Classification code 4911. The significant emissions units at the facility include two (2) GE 7FA 145 MW simple-cycle combustion turbines capable of running on either natural gas or fuel oil, a natural gas fired water bath gas heater used to heat natural gas before firing, a fuel oil storage tank, and an emergency fire pump engine.

This facility is located approximately 4 miles west of Ft Lupton, Colorado at 6335 County Road 19 (West of Co Rd 19 and North of Co Rd 14), in Weld County. This area is classified as non-attainment for ozone and is located in the 8-hr Ozone Control Area as defined in Colorado Regulation No.7, Section II.A.1.

There are no affected states within 50 miles of the facility. Rocky Mountain National Park and the Rawah Wilderness Area are Federal Class I designated areas within 100 kilometers of the facility.

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 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: **05WE0274**

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 – Condition 1.11.3; Section IV - Conditions 3.g (last paragraph), 14 & 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 V of this permit. Either electronic or hard copy records are acceptable.

2. Alternative Operating Scenarios

2.1 The permittee shall be allowed to make the following changes to its method of operation without applying for a revision of this permit (Regulation 3, Part A, Section IV.A).

2.1.1 No separate operating scenarios have been specified.

3. Nonattainment Area New Source Review (NANSR) and Prevention of Significant Deterioration (PSD)

3.1 This facility is categorized as a NANSR major stationary source (Potential to Emit of NOx > 100 Tons/Year). Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) for VOC or NOx or a modification which is major by itself (Potential to Emit of $\geq$ 100 TPY of either VOC or NOx) may result in the application of the NANSR review requirements.

3.2 Based on the information provided by the applicant, this source is categorized as a minor stationary source for PSD as of the issuance date of this permit. Any future modification which is major by itself (Potential to Emit of $\geq$ 250 TPY) 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.

3.3 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 not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act).

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:

> The turbines are not subject to CAM since this Title V operating permit establishes a continuous compliance determination method. (40 CFR Part 64 § 64.2(b)(1)(vi), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV)

6. Summary of Emission Units

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

Facility ID	AIRS ID	Description	Pollution Control
CT-01	001	General Electric simple-cycle combustion turbine, Model GE 7FA, Serial No. 297986, heat input rated at 1353.6 MMBtu/hr for natural gas and 1527 MMBtu/hr for fuel oil (for ambient temperature of 50ºF). This unit runs an electric power generator and has a site-rated gross power output of 145 megawatts.	Dry Low NO_X (DLN) Combustion System and Water Injection during fuel oil firing for NO_X control
CT-02	002	General Electric simple-cycle combustion turbine, Model GE 7FA, Serial No. 297987, heat input rated at 1353.6 MMBtu/hr for natural gas and 1527 MMBtu/hr for fuel oil (for ambient temperature of 50ºF). This unit runs an electric power generator and has a site-rated gross power output of 145 megawatts.	Dry Low NO_X (DLN) Combustion System and Water Injection during fuel oil firing for NO_X control
EU 003	003	One (1) GTS Energy natural gas fired Water Bath Gas Heater, Model ISNG-HWB8.3s5x, Serial No. PC06035, heat input rated at 11.1 MMBtu/hr.	NA
Fire Pump Engine	005	One (1) Clarke, Model VFMP-T6HT, Serial No. 91B02978, distillate fuel oil fired internal combustion engine, site-rated at 145 HP and 1.96 MMBtu/hr	NA

SECTION II - Specific Permit Terms

1. CT-01 & CT-02: Two (2) GE 7FA Simple Cycle Combustion Turbines

Unless otherwise specified, limits are for both turbines.

Parameter	Permit Condition Number	Limitations	Compliance Emission Factor (lb/MMBtu)		Monitoring	
			CT-01	CT-02	Method	Interval
PM	1.1	**For each turbine:** 0.1 lb/MMBtu	NA		Fuel Restriction	See Condition 1.1.1
		70.0 tons/yr	Natural gas: 0.002, Fuel Oil: 0.007	Natural gas: 0.004, Fuel Oil: 0.008	Record Keeping and Calculation	Monthly
PM_{10}		70.0 tons/yr			Record Keeping and Calculation	Monthly
VOC	1.2	17.7 tons/yr	Natural gas: 0.0007, fuel oil 0.0004	Natural gas: 0.0004, fuel oil 0.0004	Record Keeping and Calculation	Monthly
SO_2	1.3	37.50 tons/yr	See Condition 1.3		40 CFR Part 75, Appendix D	As specified in 40 CFR Part 75, Appendix D
		For each turbine: Use of fuel with ≤ 0.060 lb/MMBtu potential sulfur emissions	NA		Fuel Restriction	See Condition 1.3
H_2SO_4	1.4	5.0 tons/yr	Fuel oil: 0.0006 lb/MMBtu	Fuel oil: 0.0009 lb/MMBtu	Record Keeping and Calculation	Monthly
NO_X	1.5	223.3 tons/yr	NA		Continuous Emission Monitoring System	Continuously
		For each turbine, when firing natural gas: 15 ppmvd at 15% O_2, on a 4-hour rolling average Note: doesn't apply during Startup/Shutdown/ Malfunction **For each turbine when firing fuel oil:** 42 ppmvd at 15% O_2, on a 4-hour rolling average Note: doesn't apply during Startup/Shutdown/ Malfunction	NA			

Parameter	Permit Condition Number	Limitations	Compliance Emission Factor (lb/MMBtu)		Monitoring	
			CT-01	CT-02	Method	Interval
CO	1.6	223.4 tons/yr	NA		Continuous Emission Monitoring System	Continuously
Fuel Consumption	1.7	**For both turbines combined:** Natural gas – 11,328 MMscf/yr Distillate fuel oil – 11,110,743 gal/yr (natural gas consumption limits shall be reduced with fuel oil use according to Condition 1.7)	NA		Recordkeeping and Calculation	Monthly
Continuous Emission Monitoring System Requirements	1.8	NA	NA		NA	See Condition 1.8
Sulfur Content of Fuel	1.9	**For Natural Gas**: total sulfur content not to exceed 20 grains/100scf **For Fuel Oil**: total sulfur content not to exceed 0.05 % by weight	NA		See Condition 1.9	
NSPS General Provisions	1.10	NA	NA		As Required by NSPS General Provisions	Subject to NSPS General Provisions
Opacity	1.11	Not to Exceed 20% Except as Provided for Below	NA		See Condition 1.11	
		For Certain Operational Activities - Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes				
		State Only Requirement: Not to Exceed 20%				
NSPS Subpart KKKK	1.12	See Condition 1.12				
Acid Rain Program Requirements	1.13	See Section III of this Permit			Certification	Annually

1.1 PM and PM10 emissions are subject to the following requirements.

1.1.1 Particulate Matter (PM) emissions **from each turbine** shall not exceed 0.1 lbs/mmBtu (Colorado Regulation No. 1, Section III.A.1.c). In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits is presumed whenever natural gas or distillate fuel oil that meets the requirements in Condition 1.9 is used as fuel in the turbines.

1.1.2 Total annual emissions of PM and PM_{10} **from both turbines together** shall not exceed the limitations in the summary table above (Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3 to set emission limits for individual equipment instead of a facility wide total). Monthly emissions **from each turbine** shall be calculated by the end of the subsequent month using the above emission factors (from performance tests conducted in April and May 2007) and the heat input for the month as recorded on the data acquisition and handling system (DAHS) for the continuous emission monitoring system (required by Condition 1.8) in the following equation:

$$\text{tons/mo} = \frac{\text{(EF, lbs/mmBtu) x heat input (mmBtu/mo)}}{\text{2000 lbs/ton}}$$

Monthly emissions from **each turbine** shall be summed together and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.1.3 **When burning distillate fuel oil:** A performance test shall be conducted on each turbine to monitor compliance with the PM/PM_{10} annual emissions whenever the hours of operation on distillate fuel oil **for both turbines combined** reaches 1,000 hours in any two consecutive calendar years. These performance tests shall be conducted within 60 days, or within 100 distillate fuel oil-fired operating hours, whichever occurs later, of reaching 1,000 hours and shall be conducted in accordance with the requirements of 40 CFR Part 60 Subpart A § 60.8 using EPA Test Methods 5 and 202.

A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to performance of the tests required under this condition. No stack test required herein shall be performed without prior written approval of the protocol by the Division. The Division reserves the right to witness the tests. In order to facilitate the Division's ability to make plans to witness the tests, notice of the date (s) for the stack tests shall be submitted to the Division at least thirty (30) calendar days prior to the tests. The Division may for good cause shown, waive this thirty (30) day notice requirement. In instances when a scheduling conflict is presented, the Division shall immediately contact the permittee in order to explore the possibility of making modifications to the stack test schedule. The required number of copies of the compliance test results shall be submitted to the Division within forty-five (45) calendar days of the completion of the test unless a longer period is approved by the Division.

1.2 Total Annual emissions of VOC **from both turbines together** shall not exceed the limitations in the summary table above (Colorado Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3 to set emission limits for individual equipment instead of a facility wide total). Monthly emissions from each turbine shall be calculated by the end of the subsequent month using the above emission factors (from performance tests conducted in April and May 2007) and the heat input for the month as recorded on the data acquisition and handling system (DAHS) for the continuous emission monitoring system (required by Condition 1.8) in the following equation:

$$\text{tons/mo} = \frac{\text{(EF, lbs/mmBtu) x heat input (mmBtu/mo)}}{\text{2000 lbs/ton}}$$

Monthly emissions from **each turbine** shall be summed together and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.3 Sulfur Dioxide (SO2) emissions shall not exceed the following limitations:

1.3.1 Total Annual Sulfur Dioxide (SO_2) emissions **from both turbines together** shall not exceed the limitations in the summary table above (Colorado Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3 to set emission limits for individual equipment instead of a facility wide total). Compliance with the annual SO_2 emission limitations shall be monitored using the protocol specified in 40 CFR Part 75 Appendix D.

Monthly emissions from **each turbine** shall be summed together and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.3.2 **Each turbine** shall meet the following fuel use requirement:

1.3.2.1 You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement (40 CFR 60 Subpart KKKK, (§60.4330(a)(2), as adopted by reference in Colorado Regulation No. 6, Part A)

Compliance with the above fuel sulfur content limitation shall be determined according to the requirements of Conditions 1.12.9, 1.12.10, and 1.12.11.

1.4 Total annual emissions of sulfuric acid (H_2SO_4) **from both turbines together** shall not exceed the limitations in the summary table above (Colorado Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3 to set emission limits for individual equipment instead of a facility wide total). Monthly emissions from each turbine shall be calculated by the end of the subsequent month using the above emission factors (from

performance tests conducted in April and May 2007) and the heat input for the month as recorded on the data acquisition and handling system (DAHS) for the continuous emission monitoring system (required by Condition 1.8) in the following equation:

$$\text{tons/mo} = \frac{\text{(EF, lbs/mmBtu) x heat input (mmBtu/mo)}}{\text{2000 lbs/ton}}$$

Monthly emissions from **each turbine** shall be summed together and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.5 Emissions of Nitrogen Oxides (NO_X) shall not exceed the following limitations:

1.5.1 Total annual emissions of NO_X **from both turbines together** shall not exceed the limitation in the summary table above (Colorado Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3 to set emission limits for individual equipment instead of a facility wide total). Monthly emissions from each turbine shall be determined using the continuous emission monitoring system required by Condition 1.8. For any hour in which fuel is combusted in the turbines, the permittee shall program the DAHs to calculate lb/hr NO_X emissions in accordance with the requirements in 40 CFR Part 75, including any replaced data and bias-adjusted data, as warranted.

Specifically hourly mass NO_X emissions (in lb/hr) shall be calculated by multiplying the hourly NO_X lb/MMBtu value (which includes replaced or bias-adjusted data, as applicable) by the hourly heat input value (MMBtu/hr) (which includes replaced data from the fuel flow measurement, as applicable). The hourly NO_X lb/MMBtu and heat input values shall be determined using equation F-5 and equation F-19 (fuel oil) or F-20 (natural gas) in Appendix F of 40 CFR Part 75. The resulting NO_X lb/hr value is then multiplied by the unit operating time for that hour to produce a NO_X lbs value. Hourly NO_X mass emissions (lbs) shall be summed and divided by 2000 lb/ton to determine monthly NO_X emissions (in tons).

Monthly emissions from each turbine shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

1.5.2 Nitrogen Oxide (NO_X) emissions from each turbine shall not exceed the following limitations (40 CFR 60 Subpart KKKK, §60.4320(a) and Table 1 to Subpart KKKK, as adopted by reference in Colorado Regulation No. 6, Part A):

1.5.2.1 When firing natural gas, NOx emissions shall not exceed 15 ppmvd at 15% O_2, on a 4-hour rolling average;

1.5.2.2 When firing fuels other than natural gas, NOx emissions shall not exceed 42 ppmvd at 15% O_2, on a 4-hour rolling average.

1.5.2.3 The emission limitation above does not apply during periods of startup, shutdown, or malfunction; however, emissions during startup, shutdown, and malfunction shall be included in determining compliance with the annual limitation in Condition 1.5.1.

Compliance with the above limitations shall be monitored using the continuous emission monitoring system required by Condition 1.8. As specified in Condition 1.12.8.3, the missing data substitution methodology specified in 40 CFR Part 75 Subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required by Condition 2.5.

1.6 Total annual emissions of CO **from both turbines together** shall not exceed the limitations in the summary table above (Colorado Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3 to set emission limits for individual equipment instead of a facility wide total). Monthly emissions from each turbine shall be determined using the continuous emission monitoring system required by Condition 1.8. When quality assured data is not available for CO, the missing data substitution procedures of 40 CFR Part 75 Subpart D, as specified for NOx, shall be applied to CO. For any hour in which fuel is combusted in the turbines, the permittee shall program the DAHS to calculate lb/hr CO emissions in accordance with the requirements in 40 CFR Part 75, including any replaced data, if warranted.

Specifically, hourly mass CO emissions (in lb/hr) shall be calculated by multiplying the hourly CO lb/MMBtu value (which includes replaced data in accordance with the provisions in Part 75 for NOx replacement, as applicable) by the hourly heat input value (MMBtu/hr) (which includes replaced data from the fuel flow measurement, as applicable). The hourly CO lb/MMBtu and heat input values shall be determined using equations F-5 (except that the value of K is 7.25 x 10^{-8} for carbon monoxide) and F-19 (for fuel oil) or F-20 (for natural gas) in Appendix F of 40 CFR Part 75. The resulting CO lb/hr value is then multiplied by the unit operating time for that hour to produce a CO lbs value. Hourly CO mass emissions (lbs) shall be summed and divided by 2000 lb/ton to determine monthly CO emissions (in tons).

Monthly emissions from each turbine shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

1.7 Total fuel consumption **for both turbines together** shall not exceed the above limitations (Colorado Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3). The fuel consumption for each turbine shall be monitored and recorded monthly using the fuel flow meter required by Condition 1.8. Monthly **natural gas** fuel consumption for each turbine shall be summed together and used in a rolling twelve month total to monitor compliance with the annual limitation. Monthly **distillate fuel oil** consumption for each turbine shall be summed together and used in a rolling twelve month total to monitor compliance with the annual limitation. Each month new twelve month rolling totals **for each fuel** shall be calculated using the previous twelve months data for that fuel.

1.7.1 For a combination of natural gas and fuel oil, for each gallon of fuel oil burned in the turbines, the consumption limit of natural gas shall be reduced by 1,040.614 standard cubic feet. (Colorado Construction Permit 05WE0274)

1.8 **Each** of the turbine exhaust stacks shall be equipped with a continuous emission monitoring system to measure and record the following (Colorado Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3):

1.8.1 Combustion fuel flow rate for natural gas and distillate fuel oil;

1.8.2 Concentration of NOx, ppmvd hourly average, in the exhaust, corrected to 15% O_2;

1.8.3 Emissions of NOx, pounds per hour, tons per month, and tons per rolling 12 months;

1.8.4 Concentration of Carbon Monoxide, ppmvd hourly average, in the exhaust, corrected to 15% O2;

1.8.5 Emissions of Carbon Monoxide, pounds per hour, tons per month and tons per rolling 12 months;

1.8.6 Concentration of Oxygen, percent hourly average, in the exhaust;

1.8.7 Commencement and end of startup events;

1.8.8 Rate of water injection during distillate fuel oil firing, and water-to-fuel oil ratio.

The continuous emission monitoring systems shall meet the requirements in Condition 2 of this permit. Data from the continuous emission monitoring system shall be used to determine compliance with the NOx emission limitations as specified by Conditions 1.5 and Condition 1.12, and to determine compliance with the CO emission limitation as specified by Condition 1.6.

1.9 The sulfur content of the fuels burned in the turbines shall meet the following requirements:

1.9.1 The permittee shall maintain records demonstrating that the natural gas burned meets the definition of natural gas as defined in 40 CFR Part 72. Specifically, the permittee shall demonstrate that the natural gas burned has a total sulfur content of 20 grains/100 SCF or less.

1.9.2 The annual average sulfur content of the distillate fuel oil burned shall not exceed 0.05 % by weight (Colorado Construction Permit 05WE0274). If fuel sampling is used to demonstrate compliance with this requirement all sampling data for the annual period shall be used to calculate the annual average sulfur content of the distillate fuel.

Compliance with the fuel sulfur content limits above shall be monitored using the methods identified in Conditions 1.12.9, 1.12.10, and 1.12.11.

1.10 Regulation No. 6, Part A, Subpart A, General Provisions apply as follows:

1.10.1 At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not 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 05WE0274 and 40 CFR 60 Subpart A §60.11(d), as adopted by reference in Colorado Regulation No. 6, Part A)

1.10.2 No article, machine, equipment or process shall be used to conceal an emission that 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 that is based on the concentration of a pollutant in the gases discharged to the atmosphere. (Colorado Construction Permit 05WE0274 and 40 CFR 60 Subpart A §60.12, as adopted by reference in Colorado Regulation No. 6, Part A)

1.10.3 Records of startups, shutdowns, and malfunctions shall be maintained, as required under §60.7.

1.10.4 Written notification of continuous monitoring system demonstrations shall be submitted to the Division as required under §60.7.

1.10.5 Excess Emission and Monitoring System Performance Reports shall be submitted as required under §60.7.

1.10.6 Performance tests shall be conducted as required under §60.8.

1.10.7 Continuous monitoring systems shall be maintained and operated as required under §60.13.

1.11 The turbines at this facility are subject to the following opacity requirements:

1.11.1 Except as provided for in Condition 1.11.2 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1). This opacity standard applies to each turbine.

1.11.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods

aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to each turbine.

1.11.3 **State-Only Requirement:** No owner or operator may discharge, or cause the discharge into the atmosphere of any particulate matter which is greater than 20% opacity (Colorado Regulation No. 6, Part B, Section II.C.3). This opacity standard applies to each turbine**.**

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A).

Note that this opacity requirement is more stringent than the opacity requirement in Condition 1.11.2 during periods of building of a new fire, cleaning of fire boxes, soot blowing, process modifications and adjustment or occasional cleaning of control equipment.

Compliance with the opacity requirements shall be monitored as follows:

1.11.4 **When Burning Natural Gas as Fuel:** In the absence of credible evidence to the contrary, each turbine shall be presumed to be in compliance with the above opacity requirements whenever natural gas is used as fuel.

1.11.5 **When Burning Distillate Fuel Oil** compliance with the opacity requirements shall be monitored as follows:

1.11.5.1 Compliance with the opacity standard in Condition 1.11.1 shall be monitored by conducting annual visible emission observations in accordance with EPA Method 9.

A visible emissions observation is not required for any annual period where no distillate fuel oil is burned, or where no events of distillate fuel oil runs lasting at least one hour occur.

1.11.5.2 Compliance with the opacity standard in Condition 1.11.2 shall be monitored by conducting visible emission observations in accordance with EPA Method 9, semi-annually. This opacity observation shall be taken within one (1) hour of the commencement of any of the specific activities identified in Condition 1.11.2 and every 24 hours thereafter until that activity is completed.

A visible emissions observation is not required for any semi-annual period where no distillate fuel oil is burned. In addition, a visible emission observation is not required for any semi-annual period where no specific activities identified in Condition 1.11.2 have occurred when distillate fuel oil is burned.

1.11.5.3 Compliance with the opacity standard in Condition 1.11.3 is presumed, in the absence of credible evidence to the contrary, provided the visible emission observations conducted under the provisions of Condition 1.11.5.1 and 1.11.5.2 indicate compliance.

1.11.5.4 Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the opacity limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

1.11.5.5 Results of Method 9 readings and a copy of the certified Method 9 reader's certification shall be made available to the Division upon request.

1.12 These turbines are subject to the requirements in 40 CFR Part 60 Subpart KKKK, "Standards of Performance for Stationary Combustion Turbines" (as adopted by Colorado Regulation No. 6, Part A, Subpart KKKK), including, but not limited to, the following:

[The requirements below reflect the current rule language as of the revisions to 40 CFR Part 60 Subpart KKKK published in the Federal Register on March 20, 2009 (74 FR 11861). However, if revisions to this Subpart are published at a later date, the owner or operator is subject to the requirements contained in the revised version of 40 CFR Part 60 Subpart KKKK.]

[Please note that proposed revisions to 40 CFR Part 60 Subpart KKKK were published in the Federal Register on August 29, 2012 (77 FR 52553). Therefore, the requirements below may change in the future.]

Emission Limits

1.12.1 The pollutants regulated by this subpart are nitrogen oxide (NO_X) and sulfur dioxide (SO_2). (§60.4315)

1.12.2 You must meet the emission limits for NO_X specified in Table 1 to Subpart KKKK. (§60.4320(a))

1.12.2.1 Reference Condition 1.5.2 for NOx emission limits from Table 1 to Subpart KKKK.

1.12.3 You must meet the emission limits specified in Table 1 to Subpart KKKK. If your total heat input is greater than or equal to 50 percent natural gas, you must meet the corresponding limit for a natural gas-fired turbine when you are burning that fuel. Similarly, when your total heat input is greater than 50 percent distillate oil and fuels other than natural gas, you must meet the corresponding limit for distillate oil and fuels other than natural gas for the duration of the time that you burn that particular fuel. (§60.4325)

1.12.4 For turbines located in a continental area, you must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of

0.060 lb SO_2/MMBtu heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. (§60.4330(a)(2))

General Compliance Requirements

1.12.5 You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. (§60.4333(a))

Monitoring

1.12.6 If you are using water or steam injection to control NO_X emissions:

1.12.6.1 You must install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine when burning a fuel that requires water or steam injection for compliance (§60.4335(a)); **or**

1.12.6.2 You may install, certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NO_X monitor and a diluent gas (oxygen (O_2)) monitor, to determine the hourly NO_X emission rate in parts per million (ppm) or pounds per million British thermal units (lb/MMBtu) (§60.4335(b)(1))

1.12.7 If the option to use a NOx CEMS is chosen:

1.12.7.1 Each NO_X/diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B to this part, except the 7-day calibration drift is based on unit operating days, not calendar days. Alternatively, a NO_X/diluent CEMS that is installed and certified according to appendix A of part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis. (§60.4345(a))

1.12.7.2 As specified in §60.13(e)(2), during each full unit operating hour, both the NO_X monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO_X emission rate for the hour. (§60.4345(b))

1.12.7.3 Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, fuel flowmeters

that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart. (§60.4345(c))

1.12.7.4 Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions. (§60.4345(d))

1.12.7.5 The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in Conditions 1.12.7.1, 1.12.7.3, and 1.12.7.4. For the CEMS and fuel flow meters, the owner or operator may satisfy the requirements of this paragraph by implementing the QA program and plan described in section 1 of appendix B to part 75 of this chapter. (§60.4345(e))

1.12.8 For purposes of identifying excess emissions:

1.12.8.1 All CEMS data must be reduced to hourly averages as specified in §60.13(h). (§60.4350(a))

1.12.8.2 For each unit operating hour in which a valid hourly average, as described in Condition 1.12.7.2, is obtained for both NO_X and diluent monitors, the data acquisition and handling system must calculate and record the hourly NO_X emission rate in units of ppm or lb/MMBtu, using the appropriate equation from method 19 in appendix A of this part. For any hour in which the hourly average O_2 concentration exceeds 19.0 percent O_2, a diluent cap value of 19.0 percent O_2 may be used in the emission calculations. (§60.4350(b))

1.12.8.3 If you have installed and certified a NO_X diluent CEMS to meet the requirements of part 75 of this chapter, only quality assured data from the CEMS shall be used to identify excess emissions under this subpart. Periods where the missing data substitution procedures in subpart D of part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under Condition 2.5. (§60.4350(d))

1.12.8.4 All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages. (§60.4350(e))

1.12.8.5 Calculate the hourly average NO_X emission rates, in units of the emission standards under §60.4320, using ppm for units complying with the concentration limit. (§60.4350(f))

1.12.8.6 For simple cycle units without heat recovery, use the calculated hourly average emission rates from paragraph (f) (Condition 1.12.8.5) of this section to assess excess emissions on a 4-hour rolling average basis, as described in §60.4380(b)(1) (Condition 1.12.13.1). (§60.4350(g))

1.12.9 You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Condition 1.12.10. The sulfur content of the fuel must be determined

using total sulfur methods described in Condition 1.12.16. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used. (§60.4360)

1.12.10 You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for units located in continental areas. You must use one of the following sources of information to make the required demonstration:

1.12.10.1 The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet, has potential sulfur emissions of less than less than 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas (§60.4365(a)); **or**

1.12.10.2 Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required. (§60.4365(b))

1.12.11 The frequency of determining the sulfur content of the fuel must be as follows:

1.12.11.1 *Fuel Oil:* For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (*i.e.* , flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). (§60.4370(a))

1.12.11.2 *Gaseous Fuel:* If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day. (§60.4370(b))

1.12.11.3 *Custom Schedules:* Notwithstanding the requirements of Condition 1.12.11.2, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (c)(1) and (c)(2) of §60.4370 of Subpart KKKK, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Condition 1.12.4. The two custom sulfur monitoring

schedules set forth in paragraphs (c)(1)(i) through (iv) and in paragraph (c)(2) of §60.4370 of Subpart KKKK are acceptable, without prior Administrator approval. (§60.4370(c) and §60.4370(c)(1))

Reporting

1.12.12 For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. (§60.4375(a))

1.12.13 For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows for turbines using continuous emission monitoring, as described in §§60.4335(b) and 60.4345 (§60.4380(b)):

1.12.13.1 An excess emissions is any unit operating period in which the 4-hour rolling average NO_X emission rate exceeds the applicable emission limit in §60.4320. For the purposes of this subpart, a "4-hour rolling average NO_X emission rate" is the arithmetic average of the average NO_X emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NO_X emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NO_X emission rate is obtained for at least 3 of the 4 hours. (§60.4380(b)(1))

1.12.13.2 A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO_X concentration, CO2 or O_2concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if you will use this information for compliance purposes. (§60.4380(b)(2))

1.12.14 If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

1.12.14.1 For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. (§60.4385(a))

1.12.14.2 If the option to sample each delivery of fuel oil has been selected, you must immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage

tank) if the sulfur content of a delivery exceeds 0.05 weight percent. You must continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and you must evaluate excess emissions according to Condition 1.12.14.1. When all of the fuel from the delivery has been burned, you may resume using the as-delivered sampling option. (§60.4385(b))

1.12.14.3 A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample. (§60.4385(c))

1.12.15 All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period. (§60.4395)

Performance Tests

1.12.16 You must conduct initial and subsequent performance tests for sulfur according to §60.4415 of Subpart KKKK. (§60.4415)

1.13 These units are subject to the Title IV Acid Rain Requirements. As specified in 40 CFR Part 72.72(b)(1)(viii), the acid rain permit requirements shall be complete and segregable portion of the Operating Permit. As such the requirements are found in Section III of this permit.

2. Continuous Emission Monitoring Requirements

Note that the continuous emission monitoring requirements identified in this Condition are in addition to the continuous emission monitoring requirements required by the Acid Rain Program, which are identified in Section III of this permit.

2.1 Equipment and QA/QC Requirements

2.1.1 The Continuous Emission Monitoring Systems (CEMS) are subject to the following requirements:

2.1.1.1 Except as provided for in Conditions 2.1.1.1(a), (c), and Condition 2.1.2.1, the **CO monitors** are subject to the applicable requirements of 40 CFR Part 60 (Colorado Construction Permit 05WE0274). The monitoring systems shall meet the equipment, installation and performance specifications of 40 CFR Part 60 Appendix B, Performance Specification 4/4A. These CEMS are subject to the quality assurance/quality control requirements in 40 CFR Part 60 Appendix F and Subpart A § 60.13.

a. The CO CEMS data shall meet the applicable “primary equipment hourly operating requirements” for hourly average calculation methodology specified in 40 CFR Part 75 Subpart B § 75.10(d).

b. CO monitor relative accuracy (RA) testing will be performed in ppm @ 15 % O_2 measurement units, and will be performed according to 40 CFR Part 60, Appendix B, Performance Specification 4/4A.

c. Relative accuracy test audit (RATA) frequency will be determined according to the frequency applicable to NOx in 40 CFR Part 75, Appendix B.

2.1.1.2 The **NO_X (and diluent) monitors** are subject to the applicable requirements of 40 CFR Part 75. The monitoring systems shall meet the equipment, installation and performance specification requirements in 40 CFR Part 75, Appendix A. These CEMS shall meet the quality assurance/quality control requirements in 40 CFR Part 75, Appendix B and the conversion procedures of Appendix F.

2.1.1.3 The **NO_X and CO CEMS for the turbines** are subject to the following requirements:

a. Relative Accuracy Test Audits (RATAs): RATAs shall be conducted in the units (e.g., lb/MMBtu, ppm) of the emission limitation for all of the emission limitations that are applicable to the emissions unit. The RATAs for emissions units that have annual emission limitations (tons/yr) will be conducted in terms of pounds per hour (lb/hr).

b. The DAHS for the CEMS shall be able to record and manipulate the data in the units (e.g., lb/MMBtu) of the emission limitation and meet the reporting requirements for all the emissions limitations that are applicable to the emissions unit.

2.1.2 Quality assurance/quality control plans shall be prepared for the continuous emission monitoring systems as follows:

2.1.2.1 The quality assurance/quality control plan for the **CO monitors** shall be prepared in accordance with the applicable requirements in 40 CFR Part 60, Appendix F, except that cylinder gas audit (CGA) testing is not required during quarters with less than 168 hours of operating time.

2.1.2.2 The quality assurance /quality control plan for the **NO_X (and diluent) monitors** shall be prepared in accordance with the applicable requirements in 40 CFR Part 75, Appendix B.

The quality assurance/quality control plans shall be made available to the Division upon request. Revisions shall be made to the plans at the request of the Division.

2.2 General Provisions

2.2.1 **CO monitors:** The permittee shall ensure that all continuous emission monitoring systems required are in operation and monitoring unit emissions at all times except for monitoring system breakdowns, repairs, calibration checks and zero and span

adjustments required under 40 CFR Part 60 Subpart A § 60.13(d) (40 CFR Part 60 Subpart A § 60.13(e)).

2.2.2 **NO_X (and diluent) monitors:** The permittee shall ensure that all continuous emission monitoring systems required are in operation and monitoring unit emissions at all times that the affected unit combusts any fuel except as provided in 40 CFR § 75.11(e) and during periods of calibration, quality assurance, or preventative maintenance performed pursuant to 40 CFR Part 75, § 75.21 and Appendix B, periods of repair, periods of backups of data from the data acquisition and handling system or recertification performed pursuant to 40 CFR § 75.20 (40 CFR Part 75 § 75.10(d)).

2.2.3 Alternative monitoring systems, alternative reference methods, or any other alternatives for the required continuous emission monitoring systems shall not be used without having obtained prior written approval from the appropriate agency, either the Division or the U.S. EPA, depending on which agency is authorized to approve such alternative under applicable law. Any alternative continuous emission monitoring systems or continuous opacity monitoring systems must be certified in accordance with the applicable requirements of 40 CFR Part 60 or 40 CFR Part 75 prior to use.

2.2.4 All test and monitoring equipment, methods, procedures and reporting shall be subject to the review and approval by the appropriate agency, either the Division or the U. S. EPA, depending on which agency is authorized to approve such item under applicable law, prior to any official use. The Division shall have the right to inspect such equipment, methods and procedures and data obtained at any time. The Division may provide a witness(s) for any and all tests as Division resources permit.

2.2.5 A file suitable for inspection shall be maintained of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by applicable portions of 40 CFR Part 60 Subpart A and Appendices B and F and 40 CFR Part 75.

2.2.6 Records shall be maintained of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative (40 CFR Part 60 Subpart A § 60.7(b) and Colorado Construction Permit 05WE0274).

2.3 Data Replacement Requirements

For periods when quality assured data is not available from the continuous emission monitoring systems the data replacement procedures in 40 CFR Part 75 Subpart D shall be used for determining the total (annual) emissions. Although CO emissions are not specifically referenced in the Subpart D procedures, the CEMS data acquisition system shall be programmed to

substitute CO emissions using the same procedures specified for NO_X. For purposes of monitoring compliance with the annual emission limitations (tons/yr), replaced and bias-adjusted data shall be included when assessing compliance with the annual limitations. Note that since CO emissions are not subject to requirements in 40 CFR Part 75, the CO emission data is not required to be bias-adjusted.

2.4 Reference Condition 1.12.7 for NSPS Subpart KKKK NO_X CEMS provisions.

2.5 Recordkeeping and Reporting Requirements

2.5.1 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the calendar month following the end of each semi-annual period, a report of excess emissions for all pollutants monitored for that quarter (40 CFR Part 60 Subpart A § 60.7(c)). This report shall consist of the following information and/or reporting requirements as specified by the Division:

2.5.1.1 The magnitude of excess emissions computed in accordance with 40 CFR Part 60 Subpart A § 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions and the process operating time during the reporting period (40 CFR Part 60 Subpart A § 60.7(c)(1)).

2.5.1.2 Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted (40 CFR Part 60 Subpart A § 60.7(c)(2)).

2.5.1.3 The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments (40 CFR Part 60 Subpart A § 60.7(c)(3)).

2.5.1.4 When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR Part 60 Subpart A § 60.7(c)(4)).

2.5.2 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the month following the end of each semi-annual period, a summary report for that semi-annual period (40 CFR Part 60 Subpart A § 60.7(c)). One summary report form shall be submitted for each pollutant monitored. This report shall contain the information and be presented in a format approved by the Division.

If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and continuous monitoring system (CMS) downtime is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission

report described in Condition 2.5.1 need not be submitted unless required by the Division (40 CFR Part 60 Subpart A § 60.7(d)(1)).

If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Condition 2.5.1 shall both be submitted (40 CFR Part 60 Subpart A § 60.7(d)(1)).

3. EU 003: One (1) GTS Energy Natural Gas Fired Water Bath Gas Heater

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor (lb/MMscf)	Monitoring	
				Method	Interval
PM	3.1	0.267 lb/MMBtu	NA	See Condition 3.1	
SO_2	3.2	2 tons/day	NA	See Condition 3.2	
NO_X	3.3	7.5 tons/yr	156.06	Recordkeeping and Calculation	Monthly
CO		4.6 tons/yr	95.88	Recordkeeping and Calculation	Monthly
Natural Gas Consumption	3.4	95.33 MMscf/yr	NA	Recordkeeping and Calculation	Monthly
NSPS Subpart Dc	3.5	NA	NA	See Condition 3.5	
Opacity	3.6	Not to Exceed 20%, Except as Provided for in 3.6.2	NA	Fuel Restriction	Only Natural Gas is to be used as fuel
		For Startup - Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes	NA		

3.1 PM emissions shall not exceed 0.267 lb/MMBtu (Colorado Regulation No. 1, Section III.A.1.b). In the absence of credible evidence to the contrary, compliance with the particulate matter emission limit is presumed since natural gas is the only fuel permitted for use in the water bath gas heater.

Note that the numeric PM standard was determined using the design heat input for the water bath gas heater (11.1 MMBtu/hr) in the following equation:

$PE = 0.5 \times (FI)^{-0.26,}$ where: PE = particulate standard in lbs/MMBtu
FI = fuel input in MMBtu/hr

3.2 Sulfur Dioxide (SO_2) emissions shall not exceed two (2) tons per day (Colorado Regulation No. 1, Section VI.B.5.a). In the absence of credible evidence to the contrary, compliance with the sulfur dioxide emission limit is presumed since natural gas is the only fuel permitted for use in the water bath gas heater.

3.3 Annual emissions of NOx and CO from the water bath gas heater shall not exceed the limitations in the summary table above (Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3 to set emission limits for individual equipment instead of a facility wide total). Monthly emissions shall be calculated by the end of the subsequent month using the

emission factors above (from the vendor) and the monthly natural gas consumption (required by Condition 3.4) in the following equation:

$$\text{ton/mo} = \frac{[\text{EF (lb/MMscf) x monthly natural gas consumption (MMscf/mo)}]}{2000 \text{ lb/ton}}$$

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

3.4 Natural gas consumption shall not exceed the limitation in the summary table above (Construction Permit 05WE0274, as modified under the provisions of Section I, Condition 1.3). The fuel consumption for the water bath gas heater shall be monitored and recorded monthly using a fuel meter, and used in a rolling twelve month total to monitor compliance with the annual limitation. Each month new twelve month rolling total shall be calculated using the previous twelve months data.

3.5 The water bath gas heater is subject to the requirements in 40 CFR 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" (as adopted by reference in Colorado Regulation No. 6, Part A), including, but not limited to the following requirements:

3.5.1 The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of 40 CFR Part 60. This notification shall include:

3.5.1.1 The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility. (§60.48c(a)(1))

3.5.1.2 The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired. (§60.48c(a)(2))

3.5.2 The owner or operator of an affected facility that combusts only natural gas shall record and maintain records of the amount of fuel combusted during each calendar month. (§60.48c(g))

3.5.3 Records of fuel combusted that are required under Condition 3.5.2 shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. (§60.48c(i))

3.6 Opacity of emissions from the Water Bath Gas Heater shall not exceed the following:

3.6.1 Except as provided for in Condition 3.6.2 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Regulation No.1, Section II.A.1).

3.6.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from start-up which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

In the absence of credible evidence to the contrary, compliance with the above opacity standards shall be presumed since only natural gas is permitted to be used as fuel for this heater.

4. Fire Pump Engine: One (1) Clarke VMFP-T6HT Fire Pump Engine, Rated at 145 HP

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
				Method	Interval
Opacity	4.1	Not to exceed 20%, except as provided for below For startup, not to exceed 30% for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes.	NA	Method 9	See Condition 4.1
NESHAP Subpart ZZZZ	4.2	NA	NA	See Condition 4.2	
NSPS Subpart IIII	4.3	NO_X + NMHC: 7.8 g/hp-hr CO: 3.7 g/hp-hr PM: 0.60 g/hp-hr	NA	See Condition 4.3	
Hours of Operation	4.4	500 hours/yr	NA	Recordkeeping	Monthly
RACT – VOC emissions	4.5	Compliance with the NSPS Subpart IIII Requirements is Determined to be RACT	NA	Certification	Annually

4.1 Opacity of emissions from the engine shall not exceed the following:

4.1.1 Except as provided for in Condition 4.1.2 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1).

4.1.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from startup which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

Compliance with these limitations shall be monitored by conducting opacity observations in accordance with EPA Reference Method 9 as follows:

4.1.3 Engine startup shall not exceed 30 minutes. An engine startup period of less than 30 minutes shall not require an opacity observation to monitor compliance with the opacity limit in Condition 4.1.2. A record shall be kept of the date and time the engine started and when it was shutdown.

4.1.4 An opacity observation shall be conducted annually (calendar year period) to monitor compliance with the opacity limit in Condition 4.1.1. If the engine is operated more than 250 hours in any calendar year period, a second opacity observation shall be conducted. If two opacity readings are conducted in the annual (calendar year) period, such readings shall be conducted at least thirty days apart.

4.1.5 If the engine is not operated during the annual (calendar year) period, then no opacity observations are required.

4.1.6 Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the opacity limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

4.1.7 All Method 9 opacity observations shall be performed by an observer with current and valid Method 9 certification. Results of Method 9 readings and a copy of the certified Method 9 reader's certificate shall be kept on site and made available to the Division upon request.

4.2 **[Federal-Only]** 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", including, but not limited to, the following:

[The requirements below reflect the current rule language as of the revisions to 40 CFR Part 63 Subpart ZZZZ published in the Federal Register on 1/30/2013. However, if revisions to this Subpart are published at a later date, the owner or operator is subject to the requirements contained in the revised version of 40 CFR Part 63 Subpart ZZZZ.]

[Note that as of the date of permit issuance [February 1, 2014], the requirements in 40 CFR Part 63 Subpart ZZZZ promulgated on January 18, 2008 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 both state and federally enforceable.]

Stationary RICE subject to Regulations under 40 CFR Part 60

4.2.1 If you own or operate a new or reconstructed stationary RICE located at an area source of HAP emissions, you must meet the requirements of this part by meeting the requirements of 40 CFR part 60 Subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part. (§63.6590(c)(1))

4.3 This engine is subject to the requirements in 40 CFR Part 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines", as adopted by reference in Colorado Regulation No. 6, Part A, including, but not limited to, the following requirements:

[The requirements below reflect the current rule language as of the revisions to 40 CFR Part 60 Subpart IIII published in the Federal Register on 1/30/2013. However, if revisions to this Subpart are published at a later date, the owner or operator is subject to the requirements contained in the revised version of 40 CFR Part 60 Subpart IIII.]

Emission Standards for Owners and Operators

4.3.1 Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to Subpart IIII, for all pollutants. (§60.4205(c))

The specific emission limitations in table 4 that apply to this engine are as follows:

Maximum Engine Power 100 ≤ hp < 175		
Model Year 2009 and earlier		
Emission Standards (g/hp-hr)		
NMHC + NO_X	CO	PM
7.8	3.7	0.60

Compliance with the above emission limitations shall be demonstrated according to Condition 4.3.5.

4.3.2 Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in Condition 4.3.1 over the entire life of the engine. (§60.4206)

Fuel Requirements for Owners and Operators

4.3.3 Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. (§60.4207(b))

The fuel requirements for nonroad diesel fuel listed in 40 CFR 80.510(b) are as follows:

4.3.3.1 Sulfur content of 15 ppm maximum (§80.510(b)(1)(i))

4.3.3.2 A minimum cetane index of 40 or maximum aromatic content of 35 volume percent ((§80.510(b)(2)(i), (ii))

Compliance with the above fuel use limitations shall be demonstrated by maintaining records from the vendor indicating the diesel fuel purchased for use in the engine has been tested according to the appropriate ASTM methods, and meets the sulfur content and cetane index/aromatic content as described.

Compliance Requirements

4.3.4 If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under Condition 4.3.7:

4.3.4.1 Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions (§60.4211(a)(1));

4.3.4.2 Change only those emission-related settings that are permitted by the manufacturer (§60.4211(a)(2); and

4.3.4.3 Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you (§60.4211(a)(3)).

4.3.5 If you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to Subpart IIII and must comply with the emission standards specified in Condition 4.3.1, you must demonstrate compliance according to one of the methods specified in Conditions 4.3.5.1 through 4.3.5.5. (§60.4211(b))

4.3.5.1 Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. (§60.4211(b)(1))

4.3.5.2 Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly. (§60.4211(b)(2))

4.3.5.3 Keeping records of engine manufacturer data indicating compliance with the standards. (§60.4211(b)(3))

4.3.5.4 Keeping records of control device vendor data indicating compliance with the standards. (§60.4211(b)(4))

4.3.5.5 Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable. (§60.4211(b)(5))

4.3.6 If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in Conditions 4.3.6.1 through 4.3.6.3. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in Conditions 4.3.6.1 through 4.3.6.3, is prohibited. If you do not operate the engine according to the requirements in Conditions 4.3.6.1 through 4.3.6.3, the engine will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines. (§60.4211(f))

4.3.6.1 There is no time limit on the use of emergency stationary ICE in emergency situations. (§60.4211(f)(1))

4.3.6.2 You may operate your emergency stationary ICE for any combination of the purposes specified in Conditions 4.3.6.2(a) through 4.3.6.2(c) for a

maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 4.3.6.3 counts as part of the 100 hours per calendar year allowed by this Condition 4.3.6.2. (§60.4211(f)(2))

a. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 ICE beyond 100 hours per calendar year. (§60.4211(f)(2)(i))

b. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. (§60.4211(f)(2)(ii))

c. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. (§60.4211(f)(2)(iii))

4.3.6.3 Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition 4.3.6.2. Except as provided in Condition 4.3.6.3(a), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (§60.4211(f)(3))

a. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: (§60.4211(f)(3)(i))

(i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; (§60.4211(f)(3)(i)(A))

(ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. (§60.4211(f)(3)(i)(B))

(iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. (§60.4211(f)(3)(i)(C))

(iv) The power is provided only to the facility itself or to support the local transmission and distribution system. (§60.4211(f)(3)(i)(D))

(v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. (§60.4211(f)(3)(i)(E))

4.3.7 If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows (§60.4211(g)):

4.3.7.1 If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. (§60.4211(g)(2))

Testing Requirements for Owners and Operators

4.3.8 Reference **§**60.4212 for testing requirements for owners and operators who conduct performance tests pursuant to Subpart IIII.

Notification, Reports, and Records for Owners and Operators

4.3.9 If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. (§60.4214(b))

4.3.10 If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Conditions 4.3.6.2(b) and 4.3.6.2(c) or that operates for the purposes specified in Condition 4.3.6.3(a), you must submit an annual report according to the requirements in §60.4214(d)(1) through (3) of Subpart IIII.

General Provisions

4.3.11 Table 8 to Subpart IIII shows which parts of the General Provisions in §§60.1 through 60.19 apply to you. (§60.4218)

4.4 Hours of operation shall not exceed 500 hours per year (as provided for under the provisions in Section I, Condition 1.3, and in accordance with the emission limits requested on the APEN received on December 19, 2012). Compliance with the annual limitation shall be monitored by recording the hours of operation monthly. Monthly hours of operation shall be used in a rolling twelve month total to monitor compliance with the annual limitation. Each month a new twelve month rolling total shall be calculated using the permit twelve month's data.

4.5 This engine is subject to RACT requirements for VOC emissions (Colorado Regulation No. 3, Part B, Section III.D.2.a and Colorado Regulation No. 7, Section II.C.2). RACT for VOC shall be met by complying with the requirements in 40 CFR Part 60 Subpart IIII (Condition 4.3 of this permit).

5. Facility Wide Requirements

Parameter	Permit Condition Number	Limitation	Compliance Emission Factor	Monitoring	
				Method	Interval
HAP Emissions	5.1	8.0 tons/yr single 15.0 tons/yr total	See Condition 5.1	Recordkeeping and Calculation	Monthly
Insignificant Activities	5.2	NO_X: < 18.7 tons/yr CO: < 21.9 tons/yr	See Condition 5.2	Recordkeeping and Calculation	One-time

5.1 Facility-wide HAP emissions shall not exceed the limits in the summary table above (Colorado Construction permit 05WE0274). HAP emissions for the turbines shall be calculated by the end of the subsequent month using actual throughputs and the following compliance emission factors.

Emission Unit	Pollutant	Emission Factor		Emission Factor Source
		CT-01	CT-02	
Turbines	Formaldehyde	Natural Gas: 0.0001 lb/MMBtu, Fuel Oil: 0.0003 lb/MMBtu	Natural Gas: 0.0005 lb/MMBtu, Fuel Oil: 0.0003 lb/MMBtu	Natural gas emission factors from performance tests conducted on November 5, 2009 (CT-01) and in April/May 2007 (CT-02); Fuel oil emission factors from AP-42, Table 3.1-4.
	Manganese	Fuel Oil: 0.0008	Fuel Oil: 0.0008	AP-42, Table 3.1-5
	Total other HAPs	Emission Factor ratios: During Natural Gas firing, 0.4469; During Fuel Oil Firing, 0.7783.		Developed from AP-42, Chapter 3.1

5.1.1 Total HAP emissions, for each turbine, shall be calculated by using the emission factor ratio above (according to the type of fuel fired) and the calculated emissions for formaldehyde and manganese, according to the following:

During natural gas firing:

Total HAP = [EF ratio x calculated formaldehyde emissions] +
calculated formaldehyde emissions

During fuel oil firing:

Total HAP = [EF ratio x calculated formaldehyde emissions] +
calculated formaldehyde emissions +
calculated manganese emissions

HAP emissions from other significant emissions units at this facility that are determined to be above the de minimis levels, according to the method in Colorado Regulation No. 3, Appendix A, shall be included with the facility wide HAP emissions calculated to demonstrate compliance with the facility wide limits in this condition.

A twelve-month rolling total shall be maintained for demonstration of compliance with annual HAP limitations. Each month, a new twelve month total shall be calculated using the previous twelve months data. Records of calculations shall be maintained for Division inspection upon request.

5.2 NO_X and CO emissions from insignificant activities at the facility shall not exceed the limitations in the summary table above. Compliance with the limitation shall be monitored by conducting a potential to emit (PTE) of NO_X and CO from insignificant activities that demonstrates that the emissions are below the levels listed above. The analysis, as well as the calculations and any supporting documentation, shall be retained on site and made available to the Division upon request.

The above analysis shall be updated if any new insignificant activities that can potentially emit NO_X and/or CO emissions are added to the facility.

SECTION III - Acid Rain Requirements

1. Designated Representative and Alternative Designated Representative

DESIGNATED REPRESENTATIVE		ALTERNATE DESIGNATED REPRESENTATIVE	
Name:	Ralph E. Randall	Name:	Robert Rooney
Title:	Invenergy Services, LLC Regional Plant Director	Title:	Invenergy Services LLC O & M Manager
Phone:	(863) 375-3266 x 225	Phone:	(303) 833-5135

2. Sulfur Dioxide Emission Allowances and Nitrogen Oxide Emission Limitations

Combustion Turbine 1	2007	2008	2009	2010	2011	2012
SO_2 Allowances, per 40 CFR Part 73.10(b), Table 2	0*	0*	0*	0*	0*	0*
NO_X Limits	This Unit Has No Acid Rain Program NO_X Limits (See Section 5)					

* Under the provisions of § 72.84(a) any allowance allocations to, transfers to and deductions from an affected unit's Allowance Tracking System account is considered an automatic permit amendment and as such no revision to the permit is necessary. Numerical allowances shown in this table are from the 1996 edition of the CFR.

Combustion Turbine 2	2007	2008	2009	2010	2011	2012
SO_2 Allowances, per 40 CFR Part 73.10(b), Table 2	0*	0*	0*	0*	0*	0*
NO_X Limits	This Unit Has No Acid Rain Program NO_X Limits (See Section 5)					

* Under the provisions of § 72.84(a) any allowance allocations to, transfers to and deductions from an affected unit's Allowance Tracking System account is considered an automatic permit amendment and as such no revision to the permit is necessary. Numerical allowances shown in this table are from the 1996 edition of the CFR.

3. Standard Requirements

Combustion Turbines CT-01 and CT-02 of this facility are subject to and the source has certified that they will comply with the following standard conditions.

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the Division determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the Division; and
(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Federal Clean Air Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Federal Clean Air Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan to the Administrator of the U. S. EPA, as required under 40 CFR part 77.

(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:

(i) Pay without demand, to the Administrator of the U. S. EPA, the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or the Division:

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Federal Clean Air Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Federal Clean Air Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Federal Clean Air Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7, 72.8 or 72.14 shall be construed as:

(1) Except as expressly provided in title IV of the Federal Clean Air Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Federal Clean Air Act, including the provisions of title I of the Federal Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Federal Clean Air Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

4. Reporting Requirements

Pursuant to 40 CFR Part 75.64 quarterly reports and compliance certification requirements shall be submitted to the Administrator within 30 days after the end of the calendar quarter. The contents of these reports shall meet the requirements of 40 CFR 75.64.

Revisions to this permit shall be made in accordance with 40 CFR Part 72, Subpart H, §§ 72.80 through 72.85 (as adopted by reference in Colorado Regulation 18). Permit modification requests shall be submitted to the Division at the address identified in Appendix D.

Changes to the Designated Representative or Alternate Designated Representative shall be made in accordance with 40 CFR 72.23.

5. Comments, Notes and Justifications

Combustion Turbines CT-01 and CT-02 burn natural gas as the primary fuel, with distillate oil used as back-up. The NO_X limitations in 40 CFR Part 76 are only applicable to coal-fired utility units and thus do not apply to CT-01 and CT-02.

SECTION IV - Permit Shield

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D. & XIII.B; § 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 modifications or reconstruction on which construction commenced prior to permit issuance.

No requirements have been specifically identified as non-applicable to this facility.

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. Stream-lined 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	Streamlined (Subsumed) Requirements
Turbines	
Section II, Condition 1.3.2	Regulation No. 1, Section VI.B.4.c.(ii) [SO2 emissions not to exceed 0.35 lb/MMBtu]
Section II, Condition 1.3.2	Regulation No. 6, Part B, Section II.D.3.b [SO2 emissions not to exceed 0.35 lb/MMBtu], **State-only Requirement**
Water Bath Gas Heater (WBGH)	
Section II, Condition 3.1	Colorado Regulation No. 6, Part B, Section II.C.2 [Particulate matter emissions not to exceed $0.5(FI)^{-0.26}$ where FI = fuel input in MMBtu/hr], **State-only Requirement**
Section II, Condition 3.6	Colorado Regulation No. 6, Part B, Section II.C.3 [Emissions of particulate matter shall not exceed 20% opacity], **State-only Requirement**
Emergency Fire Pump Engine	
Section II, Condition 4.3.3	Colorado Regulation No.1, Section VI.B.4.b.(i) [SO_2 emissions shall not exceed 0.8 lb/MMBtu of heat input.

SECTION V - General Permit Conditions (ver 5/22/2012)

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.E

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.

OPERATING PERMIT APPENDICES

*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

1. **Directions to Plant:**

   Take I-25 north to exit 235 (Ft Lupton/Hwy 52).
   Exit highway and go east on Hwy 52 for 5.2 miles.
   Turn north (left) on County Road 19.
   Drive north ¾ mile. Spindle Hill is on the left.

2. **Safety Equipment Required:**

   Eye Protection; Hard Hat; Safety Shoes; Hearing Protection

3. **Facility Plot Plan:**

   Figure 1 and 2 on the following pages show the plot plan and facility layout as submitted in the April 9, 2008 Title V Operating Permit Application.

4. **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.

Small amounts of chemical storage in chemical lockers in O&M Building Warehouse.
Storage Tanks:

Description	Size (gallons)
Fuel Oil Storage Tank	750,000
Raw Water Tank	310,000
Demineralized Water Tank	750,000
Diesel Fire Pump Fuel Tank	240
Equipment Fuel Tank	240
Fuel Gas Drains Tank	300
Coalescing Filter Drains Tank A	150
Coalescing Filter Drains Tank B	150
Turbine Lube Oil Reservoir A	6,200
Turbine Lube Oil Reservoir B	6,200
Water Wash Drains Tank A	2,500
Water Wash Drains Tank B	2,500
False Start Drains Tank A	715
False Start Drains Tank B	715
Turbine Lube Oil Drums	6-55

Firewater Pump Engine (no longer insignificant activity).
Equipment Leaks.
Fuel Oil Loading.
Landscaping and Housekeeping Equipment.

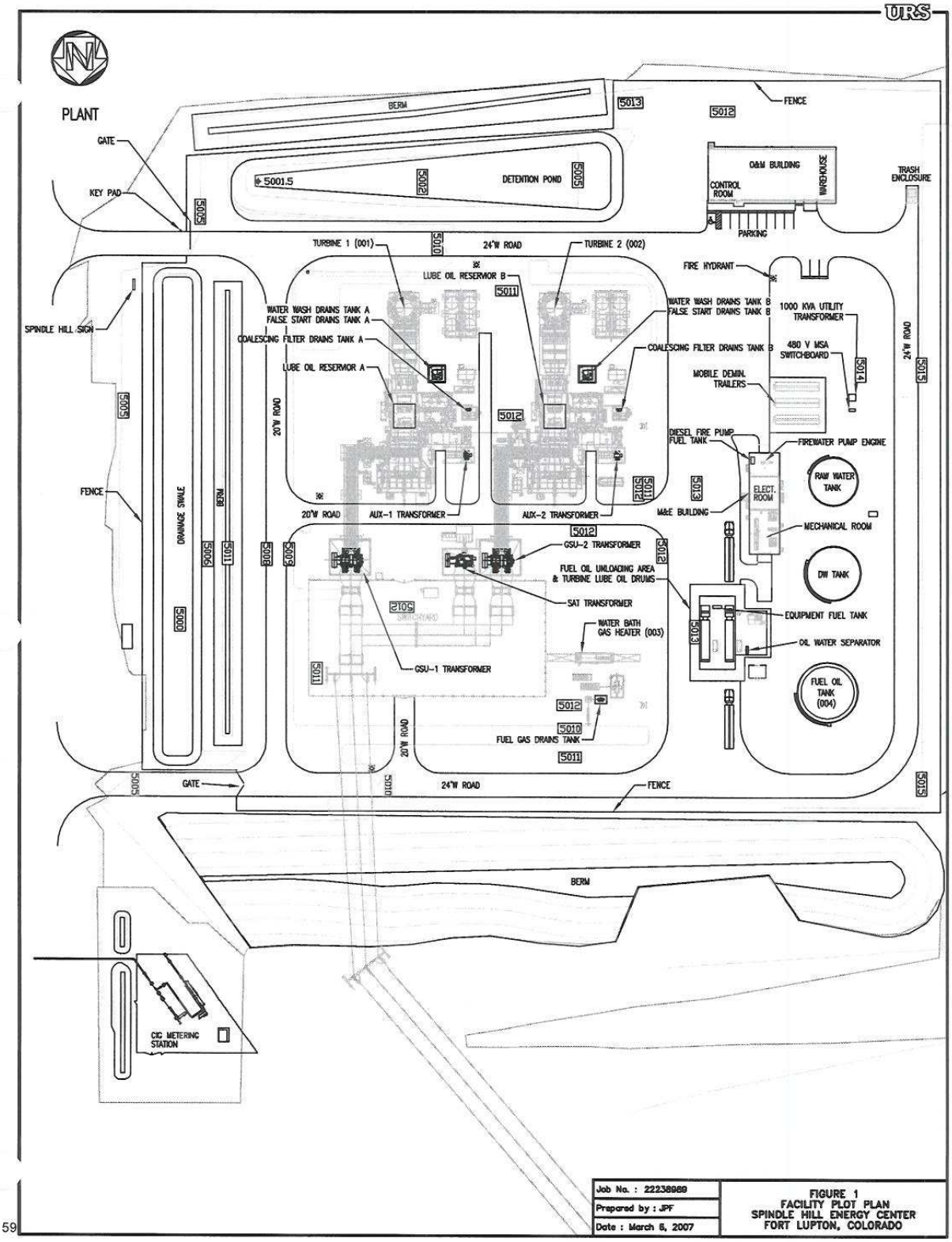
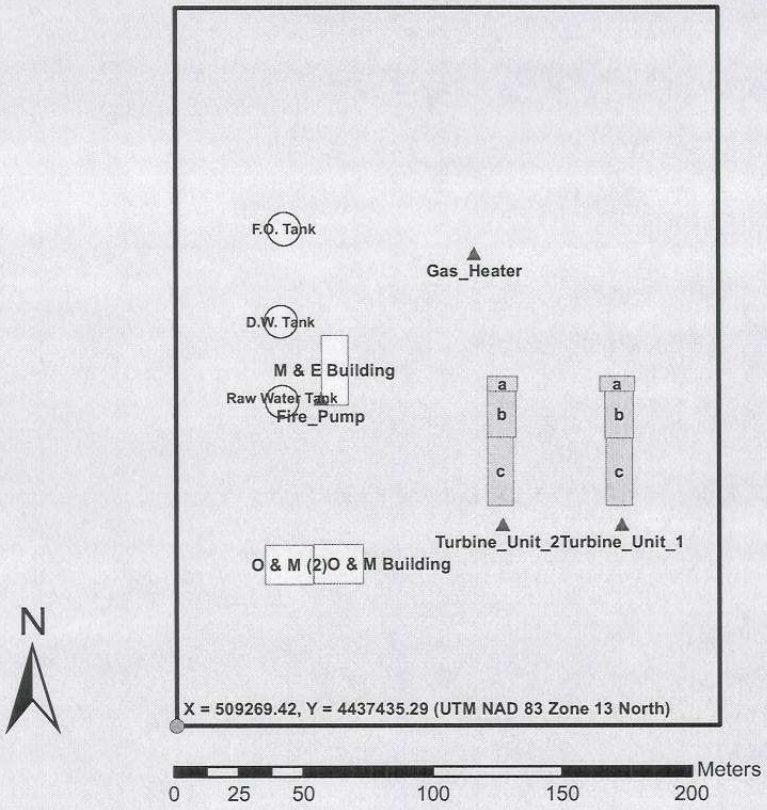

URS
PLANT
GATE
KEY PAD
BERM
5013
5012
FENCE
5001.5
5002
DETENTION POND
5005
O&M BUILDING
WAREHOUSE
CONTROL ROOM
TRASH ENCLOSURE
PARKING
TURBINE 1 (001)
5010
24'W ROAD
TURBINE 2 (002)
FIRE HYDRANT
LUBE OIL RESERVOIR B
5011
WATER WASH DRAINS TANK A
FALSE START DRAINS TANK A
WATER WASH DRAINS TANK B
FALSE START DRAINS TANK B
1000 KVA UTILITY TRANSFORMER
SPINDLE HILL SIGN
COALESCING FILTER DRAINS TANK A
COALESCING FILTER DRAINS TANK B
480 V MSA SWITCHBOARD
5014
LUBE OIL RESERVOIR A
MOBILE DEMIN. TRAILERS
20'W ROAD
DIESEL FIRE PUMP FUEL TANK
FIREWATER PUMP ENGINE
ELECT. ROOM
RAW WATER TANK
5013
M&E BUILDING
MECHANICAL ROOM
AUX-1 TRANSFORMER
AUX-2 TRANSFORMER
GSU-2 TRANSFORMER
FUEL OIL UNLOADING AREA & TURBINE LUBE OIL DRUMS
DW TANK
SAT TRANSFORMER
EQUIPMENT FUEL TANK
WATER BATH GAS HEATER (003)
OIL WATER SEPARATOR
GSU-1 TRANSFORMER
FUEL OIL TANK (004)
FUEL GAS DRAINS TANK
DRAINAGE SWALE
BERM
GATE
CIC METERING STATION
Job No. : 22238989
Prepared by : JPF
Date : March 6, 2007
FIGURE 1
FACILITY PLOT PLAN
SPINDLE HILL ENERGY CENTER
FORT LUPTON, COLORADO

FIGURE 2
FACILITY LAYOUT AND HEIGHTS



Description	Label In Drawing	Height (agl - meters)
Turbine Inlet	a	20.73
Turbine Inlet Building	b	14.02
Turbine Stack Building	c	10.06
O & M Building	O & M Building	6.096
O & M (2)	O & M (2)	10.668
M & E Building	M & E Building	5.486
F.O. Tank	F.O. Tank	14.3
D.W. Tank	D.W. Tank	9.144
Raw Water Tank	Raw Water Tank	9.144
Turbine (Unit 1)	Turbine_Unit_1	22.86
Turbine (Unit 2)	Turbine_Unit_2	22.86
Gas Heater	Gas_Heater	4.57
Fire Pump	Fire_Pump	4.57

60

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.

[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.

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 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: Spindle Hill Energy, LLC - Spindle Hill Energy Center
OPERATING PERMIT NO: 08OPWE311
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
CT-01	General Electric simple-cycle combustion turbine, Model GE 7FA, Serial No. 297986, driving a 145 MW electric power generator.					
CT-02	General Electric simple-cycle combustion turbine, Model GE 7FA, Serial No. 297987, driving a 145 MW electric power generator.					
EU 003	One (1) GTS Energy natural gas fired Water Bath Gas Heater, Model ISNG-HWB8.3s5x, Serial No. PC06035, heat input rated at 11.1 MMBtu/hr.					
Fire Pump Engine	One (1) Clarke, Model VFMP-T6HT, Serial No. 91B02978, distillate fuel oil fired internal combustion engine, site-rated at 145 HP and 1.96 MMBtu/hr					
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 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

Monitoring and Permit Deviation Report - Part II

FACILITY NAME: Spindle Hill Energy, LLC - Spindle Hill Energy Center
OPERATING PERMIT NO: 08OPWE311
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 J. Garcia, APCD

Deviation Code _____ Division Code QA: _____

Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME: Spindle Hill Energy, LLC - Spindle Hill Energy Center

FACILITY IDENTIFICATION NUMBER: 123/5468

PERMIT NUMBER: 08OPWE311

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

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: Spindle Hill Energy, LLC - Spindle Hill Energy Center
OPERATING PERMIT NO: 08OPWE311
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
CT-01	General Electric simple-cycle combustion turbine, Model GE 7FA, Serial No. 297986, driving a 145 MW electric power generator.						
CT-02	General Electric simple-cycle combustion turbine, Model GE 7FA, Serial No. 297987, driving a 145 MW electric power generator.						
EU 003	One (1) GTS Energy natural gas fired Water Bath Gas Heater, Model ISNG-HWB8.3s5x, Serial No. PC06035, heat input rated at 11.1 MMBtu/hr.						
Fire Pump Engine	One (1) Clarke, Model VFMP-T6HT, Serial No. 91B02978, distillate fuel oil fired internal combustion						

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
	engine, site-rated at 145 HP and 1.96 MMBtu/hr						
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 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, Colorado 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 Wynkoop Street
Denver, Colorado 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
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate in Lbs/mmBtu
FR -	Federal Register
G -	Grams
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	TYPE OF REVISION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION