Colorado Department of Public Health and Environment

OPERATING PERMIT

Suez Denver Metro, LLC – Metro Wastewater Cogeneration Facility

First Issued: September 1, 2002
Renewed: January 1, 2008
Last Revised: March 25, 2009

AIR POLLUTION CONTROL DIVISION
COLORADO OPERATING PERMIT

FACILITY NAME:	Suez Denver Metro, LLC – Metro Wastewater Cogeneration Facility	OPERATING PERMIT NUMBER
FACILITY ID:	0010097	**01OPAD212**
RENEWED:	January 1, 2008	
EXPIRATION DATE:	January 1, 2013	
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:

Suez Denver Metro, LLC
P. O. Box 4088
Golden, CO 80401-0088

PLANT SITE LOCATION:

6450 York Street
Denver, CO 80229-7499
Adams County

INFORMATION RELIED UPON

Operating Permit Renewal Application Received: July 31, 2006
And Additional Information Received: September 26, 2006 and June 1, 2007

Nature of Business: Cogeneration of Electricity and Hot Water
Primary SIC: 4939

RESPONSIBLE OFFICIAL

Name: Mr. Jeffrey K. Richie
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FACILITY CONTACT PERSON

Name: Ms. Suzanne C. Stevens
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Phone: (303) 277-6940

SUBMITTAL DEADLINES

Semi-Annual Monitoring Periods: January 1 – June 30, July 1 – December 31
Semi-Annual Monitoring Reports: Due on August 1, 2008 & February 1, 2009 & subsequent years
Annual Compliance Periods: January 1 – December 31
Annual Compliance Certification: Due on February 1, 2009 & subsequent years

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

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SECTION I - General Activities and Summary

1. Permitted Activities

1.1 This permit covers the cogeneration and combustion sources located at the Metro Wastewater Treatment Facility. Note that this is one of two operating permits issued for this particular facility. An operating permit (95OPAD072) has been issued to the Metro Wastewater Reclamation District (MWRD) for the wastewater treatment processes. The sources addressed in this permit are classified as a cogeneration facility which falls into the Standard Industrial Classification of 4939. Suez Denver Metro, LLC owns and operates two combustion turbine generator units and is responsible for operating four internal combustion engines that are owned by MWRD. Suez Denver Metro, LLC is also responsible for the permitting and compliance of three boilers and four flares that are owned and operated by MWRD. Suez Denver Metro, LLC is also responsible for reporting fugitive emissions occurring from digester gas piping downstream of each major header isolation valve off the digester tanks. However, fugitive emissions from these leaks are below APEN reporting levels.

The turbines and engines provide power for the facility and heat to the digester tanks. The turbines burn either natural gas or digester gas as fuel and the engines burn only digester gas as fuel. Digester gas is generated by MWRD in the anaerobic digester tanks. These tanks maintain an oxygen-poor environment and an appropriate residence time with a suitable bacterial population to allow digestion of dissolved and suspended solids. This treatment process generates digester gas, which contains primarily methane (CH_4) and carbon dioxide (CO_2), with small quantities (generally less than 2,500 ppm) of hydrogen sulfide (H_2S). The boilers provide heat to the digester tanks and burn only natural gas as fuel. The flares are used to incinerate excess digester gas that cannot be used as fuel.

The facility is located in at 6450 York Street in Adams County, within the Denver Metro Area. The Denver Metro Area is classified as attainment/maintenance for particulate matter less than 10 microns (PM_{10}) and carbon monoxide. Under that classification, all SIP-approved requirements for PM_{10} and CO will continue to apply in order to prevent backsliding under the provisions of Section 110(l) of the Federal Clean Air Act. The Denver Metro Area is classified as nonattainment for ozone and is part of the 8-hr Ozone Control Area as defined in Colorado Regulation No. 7, Section II.A.1.

This facility is within 100 km of a Class I area, Rocky Mountain National Park and there are no states within 50 miles.

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 This 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 permit (formerly issued to Trigen-Colorado Energy Corporation): 84AD057.

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 as State-only requirements. **State-only enforceable conditions are:** Permit Condition Number(s): Section II -Conditions 1.10 (NSPS General Provisions) and 1.14 (opacity), as noted and Section IV - Conditions 3.d, 3.g (last paragraph), 14 and 18 (as noted)

1.5 All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section IV of this permit.

2. Alternative Operating Scenarios

2.1 The following alternative operating scenario is incorporated into this permit in order to allow the permittee to bring in a cold cleaner solvent degreaser for temporary use during equipment overhauls. Temporary is defined as 120 days in any twelve month period. This temporary cold cleaner solvent degreaser is in addition to the cold cleaner solvent degreaser included in Section II, Condition 3 of this permit.

2.1.1 The permittee may use any cold cleaner solvent degreaser that meets the design requirements of and is operated in accordance with the requirements in Colorado Regulation No. 7, Section X.B. Operation of such cold cleaner solvent degreaser is subject to the Recordkeeping and Reporting requirements in Section IV, Condition 22.e of this permit.

2.1.2 The transfer and storage of waste and used solvents from the cold cleaner solvent degreasers are subject to the following requirements (Colorado Regulation No. 7, Section X.A.3 and 4):

2.1.2.1 In any disposal or transfer of waste or used solvent, at least 80 percent by weight of the solvent/waste liquid shall be retained (i.e., no more than 20 percent of the liquid solvent/solute mixture shall evaporate or otherwise be lost during transfers).

2.1.2.2 Waste or used solvents shall be stored in closed containers unless otherwise required by law.

2.1.3 The facility must, contemporaneously with making a change from one operating scenario to another, maintain records at the facility of the scenario under which it is operating (Colorado Regulation No. 3, Part A, Section IV.A.1). Either electronic or hard copy records are acceptable.

2.2 **Temporary turbine replacement (8/23/06 version).** The following Alternative Operating Scenario (AOS) for temporary and permanent combustion turbine replacement and turbine component replacement has been reviewed in accordance with the requirements of Regulation No. 3., Part A, Section IV.A, Operational Flexibility-Alternative Operating Scenarios, and Regulation No. 3, Part B, Construction Permits, and Regulation No. 3, Part D, Major Stationary Source New Source Review and Prevention of Significant Deterioration and has been found to meet all applicable substantive and procedural requirements. This permit incorporates and shall be considered a Construction Permit for any combustion turbine replacement performed in accordance with this AOS, and the permittee shall be allowed to perform such turbine or turbine component replacement without applying for a revision to this permit or obtaining a new Construction Permit.

2.2.1 Routine Turbine Component Replacements

2.2.1.1 The following physical or operational changes to the turbines in this permit are not considered a modification for purposes of NSPS GG, NSR/PSD, or Regulation No. 3:

a. Replacement of stator blades, turbine nozzles, turbine buckets, fuel nozzles, combustion chambers, seals, and shaft packings, provided that they are of the same design as the original.

b. Changes in the type or grade of fuel used, if the original gas turbine installation, fuel nozzles, etc. were designed for its use.

c. An increase in the hours of operation (unless limited by a permit condition).

d. Variations in operating loads within the engine design specification.

e. Any physical change constituting routine maintenance, repair, or replacement.

2.2.1.2 Turbines undergoing any of the above changes are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping), and shall be subject to any shield afforded by this permit. If replacement of any of the components listed in Condition 2.2.1.1.a or e above results in a change in serial number for the turbine, a letter explaining the action as well as a revised APEN and appropriate filing fee shall be submitted to the Division within 30 days of the replacement.

2.2.1.3 Note that the repair or replacement of components must be of genuinely the same design. Except in accordance with the Alternate Operating Scenario set forth below, the Division does not consider that this allows for the entire replacement (or reconstruction) of an existing turbine with an identical new one or one similar in design or function. Rather, the Division considers the repair or replacements to encompass the repair or replacement of components at a turbine with the same (or functionally similar) components.

2.2.2 Temporary Turbine Replacement

The following AOS is incorporated into this permit in order to deal with a turbine breakdown or periodic routine maintenance and repair of an existing onsite turbine that requires the use of a temporary replacement turbine. "Temporary" is defined as in the same service for 270 operating days or less in any 12 month period. The 270 days is the total number of days that the turbine is in operation. If the turbine operates only part of a day, that day counts towards the 270 day total. Note that the compliance demonstrations made as part of this AOS are in addition to any compliance demonstrations required by this permit.

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

Results of all tests and the associated calculations pursuant required by this AOS shall be submitted to the Division within 30 calendar days of the test. Results of all tests shall be kept on site for five (5) years and made available to the Division upon request.

The permittee shall maintain a log on-site to contemporaneously record the start and stop date of any turbine replacement, the manufacturer, model number, horsepower, and serial number of the turbine(s) that are replaced during the term of this permit, and the manufacturer, model number, horsepower, and serial number of the replacement turbine.

2.2.2.1 The permittee may **temporarily** replace an existing permitted turbine provided such replacement turbines are combustion turbines without modifying this permit**,** so long as the emissions from the temporary replacement turbine comply with the emission limitations for the existing permitted turbine as determined in Condition 2.2.3. Measurement of emissions from the temporary replacement turbine shall be made as set forth in Condition 2.2.3.

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

2.2.3 Portable Analyzer Testing

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

All portable analyzer testing required by this permit shall be conducted using the Division's Portable Analyzer Monitoring Protocol (ver March 2006 or newer) as found on the Division's website at:
http://www.cdphe.state.co.us/ap/down/portanalyzeproto.pdf

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

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

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

2.2.4 Additional Sources

The replacement of an existing turbine with a new turbine is viewed by the Division as the installation of a new emissions unit, not "routine replacement" of an existing

unit. The AOS is therefore essentially an advanced construction permit review. The AOS cannot be used for additional new emission points for any site; a turbine that is being installed as an entirely new emission point and not as part of an AOS-approved replacement of an existing onsite turbine must go through the appropriate Construction/Operating permitting process prior to installation.

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

3.1 Based on the information provided by the applicant, this source is not categorized as a PSD major stationary source as of the issue date of this permit. Any future modification at this facility which is major by itself (i.e. Potential to Emit of $\geq$ 250 tons/year) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.

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

3.2 This source is categorized as a NANSR major stationary source (Potential to Emit of NO_X $\geq$100 tons/year). Future modifications at this facility resulting in a significant net emissions increase (see Regulation No. 3, Part D, Sections II.A.26 and 42) for VOC or NO_X or a modification which is major by itself (Potential to Emit $\geq$ 100 tons/year or either VOC or NO_X) may result in the application of the NANSR review requirements.

3.3 Operating Permit 95OPAD072, which covers the wastewater treatment processes and was issued to the Metro Wastewater Reclamation District, is to be considered in conjunction with this operating permit for purposes of determining the applicability of NANSR or PSD review regulations.

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

4.1 Based upon the information provided by the applicant, the sources addressed in this permit are 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:

None.

6. Summary of Emission Units

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

Emission Unit Number	AIRS Stack Number	Facility Identifier	Description	Startup Date	Pollution Control Device
S015 & S016	001	P012 & P013	Two (2) Solar Centaur, Model No. 40-T4700GSC, Combustion Turbine Generator Units, Each Rated at 42.78 MMBtu/hr and Driving a 3515 kW Generator, Serial Nos. 4691C (Unit # 5) and 4661C (Unit # 6). Natural Gas and Digester Gas Fired.	September 2000	Uncontrolled
S001 thru S004	009	P001 thru P004	Four (4) Superior, Model No. 12SGTA, Internal Combustion Clean Burn Electric Generators (Co-Generators), Each Rated at 27.2 MMBtu/hr and Driving a 1.2 MW Generator, Serial Nos. 299899 (Unit # 1), 299919 (Unit # 2), 299929 (Unit #3) and 299909 (Unit #4). Digester Gas Fired.	1984 modified in 1989 to remove catalytic converters	Uncontrolled
S005 thru S007	010	B001 thru B003	Three (3) Cleaver-Brooks, Model No. CB200X-300, Fire Tube Boilers, Each Rated at 12.5 MMBtu/hr, Serial Nos. L-61282 (B001), L-61281 (B002) and L-70086 (B003). Natural Gas Fired.	1977 (B001 & B002) 1981 (B003)	Uncontrolled
S018 thru S021	017	P014 thru P017	Four (4) Varec, Model No. 244WS01921000, Rated at 167.5 MMBtu/hr Total. Used to Combust Digester Gas	January 2006	Uncontrolled
S017		M001	Solvent Cold Cleaner Degreaser		Uncontrolled

SECTION II - Specific Permit Terms

1. Cogeneration Facility

Two (2) Solar Centaur Combustion Turbines, Each Rated at 3515 kW and 42.78 MMBtu/hr
Four (4) superior Internal Combustion Engines, Each Rated at 1.2 MW and 27.2 MMBtu/hr
Three (3) Cleaver Brooks Boilers, Each Rated at 12.5 MMBtu/hr
Four (4) Varec Flares, Rated at 167.5 MMBtu/hr <u>Total</u>

Unless Otherwise Specified, Limits are for Turbines, Engines, Boilers and Flares Combined

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
Fuel Restrictions	1.1.	See Condition 1.1.		N/A	Certification	Annually
PM	1.2.	N/A	17.26 tons/yr	See Condition 1.2.	Recordkeeping and Calculation	Monthly
		for each turbine: 0.188 lbs/MMBtu – digester gas 0.191 lbs/MMBtu – natural gas			Fuel Restriction	Only Natural Gas or Digester Gas is Used as Fuel
		for each boiler: 0.259 lbs/MMBtu				
		for each flare: 0.1 gr/dscf corrected to 12% CO_2				
PM_{10}		N/A	17.26 tons/yr		Recordkeeping and Calculation	Monthly
VOC		N/A	12.6 tons/yr			
CO		N/A	99 tons/yr			
SO_2	1.3.	169.6 tons/yr		See Condition 1.3.	Recordkeeping and Calculation	Monthly
		for each turbine: 150 ppmvd @ 15% O_2 **OR** Use of Fuel Which Contains Less than 0.8 Weight % Sulfur		N/A	Fuel Sampling, Fuel Restriction	See Condition 1.3
		for each turbine: 0.80 lbs/MMBtu			Fuel Restriction	

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
NO_X	1.4.	**for each turbine:** 151 ppmvd @ 15% O_2 corrected to ISO conditions		N/A	Performance Test	Within the Last 18 Months of Permit Term
		86.85 tons/yr			Recordkeeping and Calculation	Monthly
RACT Requirements – **For Each Turbine**	1.5.	CO: 50 ppmvd @ 15% O_2		N/A	Performance Test	Within the Last 18 Months of Permit Term
		PM_{10}: Good Combustion Practices			Fuel Restriction	Only Natural Gas or Digester Gas is Used as Fuel
Fuel Use	1.6.	**Digester Gas: Prior to Startup of New Flares:** N/A **Upon Startup of New Flares:** 226.8 Mscf/hr	**Digester Gas:** 1,488 MMscf/yr **Natural Gas:** 96 MMscf/yr	N/A	Fuel Flow Meters	3-Hour Rolling Average, Monthly
Fuel Sampling Requirements	1.7.	N/A	N/A	N/A	See Condition 1.7.	
H_2S	1.8.	Digester Gas Concentration Not to Exceed 1,680 ppm		N/A	Continuously	3-Hour Rolling Average
		N/A	5.3 tons/yr		Recordkeeping and Calculation	Monthly
H_2S Continuous Monitoring Requirements	1.9.	N/A	N/A	N/A	See Condition 1.9.	
NSPS General Provisions **for Turbines, Flares and Boiler No. 3 – State Only Requirement for Flares and Boiler No. 3**	1.10.	N/A	N/A	N/A	As Required by NSPS General Provisions	Subject to NSPS General Provisions

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
Performance Test Requirements **for Turbines**	1.11	N/A	N/A	N/A	EPA Reference Methods	Within the Last 18 Months of the Permit Term
Opacity	1.12.	Not to Exceed 20% Except as Provided for in 1.13		N/A	See Condition 1.12.	
Opacity	1.13.	For Certain Operational Activities - Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes		N/A	See Condition 1.13.	
State-Only Opacity - **for Turbines, Boiler No. 3 and Flares**	1.14.	Not to Exceed 20%		N/A	See Condition 1.14.	
Insignificant Activities	1.15.	SO_2 Emissions Not to Exceed 1 ton/yr		See Condition 1.15.	Recordkeeping and Calculation	One-Time
Btu Content of the Fuel	1.16	N/A	N/A	N/A	See Condition 1.16.	
Flares: RACT – VOC, CO and PM_{10}	1.20	RACT has been Determined to be Good Combustion Practices and Use of Digester Gas as Fuel		N/A	See Condition 1.20.	

1.1 The **turbines, engines, boilers and flares** are subject to the following fuel restrictions:

1.1.1 **The turbines** may burn either natural gas or digester gas.

1.1.2 **The boilers** may burn natural gas.

1.1.3 **The flares and engines** may burn digester gas.

1.2 PM, PM_{10}, CO and VOC emissions are subject to the following requirements:

1.2.1 **Total** Emissions of PM, PM_{10}, CO and VOCs **from the turbines, engines, boilers and flares combined** shall not exceed the limitations stated above (Colorado Construction Permit 84AD057). Monthly emissions from each emission unit shall be calculated by the end of the subsequent month using the emission factors (EF) identified in the table below in the following equation:

$$\text{tons/month} = \frac{(\text{EF, lbs/MMBtu}) \times (\text{Fuel Use, MMscf/mo}) \times (\text{Heat Content of Fuel, MMBtu/MMscf})}{2000 \text{ lbs/ton}}$$

When calculating emissions from digester gas combustion, the lower heating value of the fuel as determined by Condition 1.16 shall be used in the above equation. When calculating emissions from natural gas combustion, the higher heating value of the fuel as determined by Condition 1.16 shall be used in the above equation.

Emission Source	Emission Factor (lbs/MMBtu)				Source of Emission Factor
	PM	PM_{10}	VOC	CO	
Turbines					
Digester Gas	1.32×10^{-2}	1.32×10^{-2}	0.037	0.129	VOC and CO based on manufacturer's guarantee. PM and PM_{10} from AP-42 (dated 4/00), Section 3.1, Table 3.1-2b
Natural Gas	6.6×10^{-3}	6.6×10^{-3}	0.0615	0.107	VOC and CO based on manufacturer's guarantee. PM and PM_{10} from AP-42 (dated 4/00), Section 3.1, Table 3.1-2a
Engines					
Digester Gas	8.10×10^{-3}	8.10×10^{-3}	2.41×10^{-4}	0.499	From Stack Test conducted on 6/5 & 6/95.
Boilers					
Natural Gas	7.45×10^{-3}	7.45×10^{-3}	5.39×10^{-3}	0.082	AP-42, Section 1.4, Table 1.4-1 (dated 3/98)
Flares					
Digester Gas	1.35×10^{-3}	1.35×10^{-3}	5.93×10^{-3}	3.08×10^{-2}	PM, PM_{10} and CO From Stack Tests conducted on 6/7/95. VOC from AP-42, Section 1.4, Table 1.4-1 (dated 3/98)

Monthly emissions from each turbine, engine, boiler and flare 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

1.2.2 Particulate Matter (PM) emissions **from each turbine** shall not exceed the above limitations (Colorado Regulation No. 1, Section III.A.1). In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits is

presumed since only natural gas or digester gas is permitted to be used as fuel in the turbines.

Note that the numeric PM standards were determined using the design heat input for the turbines (40.74 MMBtu/hr, each, for natural gas and 42.78 MMBtu/hr, each, for digester gas) in the following equation:

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

1.2.3 Particulate Matter (PM) emissions **from each boiler** shall not exceed the above limitations (Colorado Construction Permit 84AD057). In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits is presumed since only natural gas is permitted to be used as fuel in the boilers.

Note that the numeric PM standards were determined using the design heat input for the boilers (12.5 MMBtu/hr each) in the following equation:

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

1.2.4 Particulate Matter (PM) emissions **from each flare** shall not exceed the above limitations (Colorado Regulation No. 1, Section III.B.2.a). In the absence of credible evidence to the contrary, compliance with the particulate matter standards is presumed since only digester gas is permitted to be burned in the flares.

1.3 Sulfur Dioxide (SO_2) emissions shall not exceed the following limitations:

1.3.1 **Total** Sulfur Dioxide (SO_2) emissions **from the turbines, engines, boilers and flares combined** shall not exceed the above limitations (Colorado Construction Permit 84AD057). Monthly SO_2 emissions from each emission unit shall be calculated by the end of the subsequent month using the following equations:

SO_2 (tons/mo) = SO_2 (natural gas) + SO_2 (digester gas)

<u>Digester Gas</u>

SO_2 (tons/mo) = sum of the daily SO_2 emissions

SO_2 (tons/day, tpd) = SO_2 engines + SO_2 turbines + SO_2 flares

<u>Engines</u>

$$SO_2\,(tpd) = \frac{[Q_E \times C_d \times 1 \text{ lbmole } H_2S/385 \text{ scf } H_2S \times 1 \text{ lbmole } SO_2/\text{lbmole } H_2S \times 64 \text{ lb } SO_2/\text{lbmole } SO_2]}{2000 \text{ lbs/ton}}$$

<u>Turbines</u>

$$SO_2\ (tpd) = \frac{[Q_T \times C_d \times 1\ lbmole\ H_2S/385\ scf\ H_2S \times 1\ lbmole\ SO_2/lbmole\ H_2S \times 64\ lb\ SO_2/lbmole\ SO_2]}{2000\ lbs/ton}$$

Flares

$$SO_2\ (tpd) = \frac{[Q_F \times C_W \times 1\ lbmole\ H_2S/385\ scf\ H_2S \times 1\ lbmole\ SO_2/lbmole\ H_2S \times 64\ lb\ SO_2/lbmole\ SO_2]}{2000\ lbs/ton}$$

Where: Q_E = Quantity of digester gas combusted in the engines, in MMscf/day, at 1 atm and 68°F
Q_T = Quantity of digester gas combusted in the turbines, in MMscf/day, at 1 atm and 68°F
Q_F = Quantity of digester gas combusted in the flares, in MMscf/day, at 1 atm and 68°F
C_W = H_2S Concentration of digester gas as measured (ppmv, scf H_2S/MMscf gas). This is wet gas.
C_D = H_2S Concentration of dry digester gas. $C_D = C_W/0.90$

Note that the highest 3-hr average H_2S concentration per day shall be used to calculate emissions. In addition, although daily emissions are used to determine monthly emissions, daily emission calculations need only be performed once a month.

Natural Gas

$$SO_2\ (tons/mo) = \frac{\text{gas burned, MMscf/mo} \times \text{EF (lbs/MMBtu)} \times \text{(Heat Content Fuel, MMBtu/MMscf)}}{2000\ lbs/ton}$$

When calculating emissions from natural gas combustion, the higher heating value of the fuel as determined by Condition 1.16 shall be used in the above equation.

Unit	Emission Factor (EF), lbs/MMBtu	Source of Emission Factor
Turbines	3.4×10^{-3}	AP-42, Section 3.1, Table 3.1-2a (dated 4/00)
Boilers	5.88×10^{-4}	AP-42, Section 1.4, Table 1.4-1 (dated 3/98)

Monthly emissions, from each turbine, engine, boiler and flare 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 one of the following requirements:

1.3.2.1 Sulfur Dioxide (SO_2) emissions from each turbine shall not exceed 150 ppmvd at 15% O_2 **OR**

1.3.2.2 No fuel, which contains sulfur in excess of 0.8 percent by weight, shall be used in these combustion turbines (40 CFR Part 60 Subpart GG §§ 60.333(a) & (b), as adopted by reference in Colorado Regulation No. 6, Part A).

Compliance with the above limitations shall be monitored as follows:

1.3.2.3 In the absence of credible evidence to the contrary, compliance with the above requirements is presumed when natural gas is used as fuel. The pipeline quality natural gas used as fuel shall meet the requirements in Condition 1.7.

1.3.2.4 In the absence of credible evidence to the contrary, compliance with the SO_2 emission limitation is presumed, provided the concentration of H_2S in the digester gas remains at or below the limitations specified in Condition 1.8.1 of this permit.

Note that this is based on the heat content of the digester gas being no less than 416 Btu/scf.

1.3.3 Sulfur Dioxide (SO_2) emissions **from each turbine** shall not exceed 0.80 lbs/mmBtu, (Colorado Regulation No. 1, Section VI.B.4.c.(i)). Compliance with the SO_2 limitation shall be monitored as follows:

1.3.3.1 In the absence of credible evidence to the contrary, compliance with the SO_2 limitations is presumed whenever natural gas is used as fuel in these turbines.

1.3.3.2 In the absence of credible evidence to the contrary, compliance with the SO_2 emission limitation is presumed, provided the concentration of H_2S in the digester gas remains at or below the limitations specified in Condition 1.8.1 of this permit.

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

1.4.1 Nitrogen Oxide (NO_X) emissions **from each turbine** shall not exceed 151 ppmvd at 15% O_2 and ISO standard ambient conditions (Colorado Construction Permit 84AD057, as modified under the provisions of Section I, Condition 1.3). Compliance with this NO_X limitation shall be monitored by conducting a performance test, within the last 18 months of the permit term in accordance with the provisions in Condition 1.11 of this permit and 40 CFR Part 60 Subpart A, § 60.8 and Subpart GG § 60.335.

1.4.2 **Total** emissions of NO_X **from the turbines, engines, boilers and flares combined** shall not exceed the above limitations (Colorado Construction 84AD057). Monthly emissions from each emission unit shall be calculated by the end of the subsequent month using the emission factors (EF) identified in the table below in the following equation:

$$\text{tons/month} = \frac{(\text{EF, lbs/MMBtu}) \times (\text{Fuel Use, MMscf/mo}) \times (\text{Heat Content of Fuel, MMBtu/MMscf})}{2000 \text{ lbs/ton}}$$

When calculating emissions from digester gas combustion, the lower heating value of the fuel as determined by Condition 1.16 shall be used in the above equation. When calculating emissions from

natural gas combustion, the higher heating value of the fuel as determined by Condition 1.16 shall be used in the above equation.

Unit	Emission Factor (lbs/MMBtu)	Source of Emission Factor
Turbines		
Digester Gas	0.232	Manufacturer's Guarantee
Natural Gas	0.530	Manufacturer's Guarantee
Engines		
Digester Gas	0.339	From Stack Tests conducted on 6/5 & 6/95.
Boilers		
Natural Gas	0.098	AP-42, Section 1.4, Table 1.4-1 (dated 3/98)
Flares		
Digester Gas	3.66×10^{-2}	From Stack Tests conducted on 6/7/95.

Monthly emissions from each turbine, boiler, flare and engine shall be summed together and a twelve month rolling total of emissions shall be maintained 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 The **turbines** are subject to Reasonably Available Control Technology (RACT) requirements as follows:

1.5.1 RACT for the turbines has been determined to be good combustion practices and Carbon Monoxide (CO) emissions **from each turbine** not to exceed 50 ppmv at 15% oxygen at full load and ISO standard conditions (Colorado Construction Permit 84AD057). Compliance with the CO RACT emission limitation shall be monitored by conducting a performance test, within the last 18 months of the permit term in accordance with the provisions in Condition 1.11 of this permit, using EPA Reference Method 10, with results corrected to ISO standard conditions.

1.5.2 RACT for the turbines for PM_{10} emissions has been determined to be good combustion practices and use of natural gas or digester gas as fuel.

Good combustion practices constitute monitoring and control of several operating parameters. These parameters include, but are not limited to fuel flow rate, primary and secondary air flows, carbon monoxide concentration in the flue gas, level of excess air, and recirculating air flow. All relevant parameters and their optimal operating ranges shall be identified, documented, maintained and shall be made available to the Division upon request.

1.6 Fuel Consumption **from the turbines, engines flares and boilers** are subject to the following limitations:

1.6.1 **Total** digester gas fuel consumption from the turbine, engines and flares shall not exceed the above <u>hourly</u> limitation, calculated as a 3-hr rolling average (as provided

for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part B, Section II.A.6 and Part C, Section X, based on the application submitted on May 17, 2004). Compliance with the hourly limitation shall be monitored as follows:

1.6.1.1 Fuel usage shall be monitored and recorded hourly using fuel meters and other records as necessary. Total hourly fuel use shall be calculated as follows:

$$Q = Q_T + Q_E + Q_F$$

Where: Q = Total gas flow as combusted (MMscf/hr)
Q_T = Total metered flow to turbines (MMscf/hr)
Q_E = Total metered flow to engines (MMscf/hr)
QF = Total metered flow to flares (MMscf/hr)

For data replacement purposes, $Q_W = Q_D/0.9$, the 0.9 is used to convert dry gas to wet gas (10% water presumed for wet gas). The flares combust wet gas (Q_W) and the engines and turbines combust dry gas (Q_D).

Total hourly data shall be used to calculate a 3-hr rolling average. The fuel flow meters shall be operated and maintained in accordance with a quality assurance/quality control plan incorporating manufacturer's recommendations and good engineering practices. Such plan shall be made available to the Division upon request.

Exceedances of the short-term fuel consumption limit shall be reported semi-annually in the excess emission report required by Condition 2.4.

1.6.1.2 In the event that the fuel meters are malfunctioning, the highest recorded 3-hr average of total fuel flow from the 48-hr period prior to the malfunction shall be used to monitor compliance with the short-term fuel use limitation. Note that if there is no gas flow through a malfunctioning fuel meter at the time of the malfunction, the data replacement provisions do not apply to that fuel meter.

Periods when the fuel flow meters malfunctioned and the data replacement provisions have been implemented shall be reported semi-annually in the excess emission report required by Condition 2.4.

1.6.2 **Total** annual fuel consumption (as combusted) **from the turbines, engines, flares and boilers combined** shall not exceed the above limitations (Colorado Construction Permit 84AD057). Fuel consumed by the turbines, engines, flares and boilers shall be monitored and recorded monthly using fuel meters and other records as necessary. Monthly quantities of fuel consumed by the turbines, engines, boilers and flares shall be summed together and 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 previous twelve months data.

1.7 The permittee shall monitor the sulfur and nitrogen content of the fuel being fired in the turbine. (Colorado Construction Permit 84AD057 and 40 CFR Part 60 Subpart GG § 60.334(b), as adopted by reference in Colorado Regulation No. 6, Part A – based on custom fuel monitoring schedule approved by EPA in a letter dated January 17, 2002). Compliance with the fuel monitoring requirements shall be monitored as follows:

1.7.1 **Natural Gas:** The permittee shall maintain records demonstrating that the natural gas burned meets the definition of natural gas as defined in 40 CFR Part 60 Subpart GG § 60.331(u) (20 grains or less of total sulfur per 100 standard cubic feet). The demonstration shall be made using the gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less (40 CFR Part 60 Subpart GG § 60.334(h)(3)(i)). These records shall be made available to the Division upon request.

In addition, since an allowance for fuel bound nitrogen was not claimed, nitrogen sampling for natural gas is not required in accordance with the provisions in 40 CFR Part 60 Subpart GG § 60.334(h)(2).

1.7.2 **Digester Gas:** Digester gas shall be sampled and analyzed for sulfur content using the continuous H_2S monitor required by Condition 1.9 of this permit.

Note that in a January 17, 2002 letter to the source, EPA indicated that future analysis of nitrogen in digester gas is not required.

1.8 The **turbines, engines and flares** are subject to the following H_2S requirements:

1.8.1 The concentration of H_2S in the digester gas shall not exceed 1680 ppmv on a 3-hour rolling average (Colorado Construction Permit 84AD057, as modified under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part B, Section II.A.6 and Part C, Section X, based on the application submitted on May 17, 2004).

Compliance with the H_2S concentration limitation shall be monitored using the continuous monitoring system required by Condition 1.9. When the H_2S concentration approaches the above limitation, the permittee shall take measures to lower the H_2S concentration in the digester gas. These measures may include adding ferric or ferrous chloride to the wastewater treatment system.

Excess emissions shall be reported semi-annually, in accordance with the requirements in Condition 2.4, for any period when the 3-hour rolling average of H_2S in the digester gas exceeds the above limitation.

1.8.2 **Total** emissions of H_2S **from the turbines, engines and flares combined** shall not exceed the above limitations (Colorado Construction Permit 84AD057). Monthly

emissions from each emission unit shall be calculated by the end of the subsequent month using the following equation:

H_2S (tons/mo) = Sum of the daily H_2S emissions

H_2S (tons/day) = H_2S engines + H_2S turbines + H_2S flares

Engines

$$H_2S \text{ (tons/day)} = \frac{[(1-0.96) \times Q_E \times C_d \times 1 \text{ lbmole } H_2S/385 \text{ scf } H_2S \times 34 \text{ lb } H_2S/\text{lbmole } H_2S]}{2000 \text{ lbs/ton}}$$

Turbines

$$H_2S \text{ (tons/day)} = \frac{[(1 - 0.96) \times Q_T \times C_d \times 1 \text{ lbmole } H_2S/385 \text{ scf } H_2S \times 34 \text{ lb } H_2S/\text{lbmole } H_2S]}{2000 \text{ lbs/ton}}$$

Flares

$$H_2S \text{ (tons/day)} = \frac{[(1 - 0.96) \times Q_F \times C_W \times 1 \text{ lbmole } H_2S/385 \text{ scf } H_2S \times 34 \text{ lb } H_2S/\text{lbmole } H_2S]}{2000 \text{ lbs/ton}}$$

Where:
Q_E = Quantity of digester gas combusted in the engines, in MMscf/day, at 1 atm and 68°F
Q_T = Quantity of digester gas combusted in the turbines, in MMscf/day, at 1 atm and 68°F
Q_F = Quantity of digester gas combusted in the flares, in MMscf/day, at 1 atm and 68°F
C_W = H_2S Concentration of digester gas as measured (ppmv, scf H_2S/MMscf gas). This is wet gas.
C_D = H_2S Concentration of dry digester gas. $C_D = C_W/0.90$

Note that the highest 3-hr H_2S concentration per day shall be used to calculate emissions. In addition, although daily emissions are used to determine monthly emissions, daily emission calculations need only be performed once a month.

Monthly emissions from each turbine, boiler, flare and engine shall be summed together and a twelve month rolling total of emissions shall be maintained to monitor compliance with the annual emission limitations. Each month a new twelve month total shall be calculated using the previous twelve months total.

1.9 A continuous monitoring system shall be installed, maintained, calibrated and operated to measure and record the H_2S concentration, in ppmv, of the digester gas (Colorado Construction Permit 84AD057). The H_2S continuous monitoring system shall meet the requirements in Condition 2.

1.10 **State-Only Requirement for the flares and Boiler No. 3:** Regulation No. 6, Part A, Subpart A, General Provisions apply to **the turbines, flares and Boiler No. 3** as follows:

1.10.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with

an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere. (§ 60.12)

1.10.2 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source (Colorado Construction Permit 84AD057 and 40 CFR Subpart A § 60.11(d)).

1.10.3 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)).

Note that none of the equipment subject to this condition are equipped with air pollution control devices. Startup, shutdown and malfunctions for the turbines and boiler No. 3 must be recorded. In accordance with Section II, Condition 2.4.1.3, the permittee is required to report the date and time identifying each period during which the continuous monitoring system is inoperative.

1.11 Performance tests for NO_X and CO emissions **from the turbines** shall be conducted as specified in Conditions 1.4.1 and 1.5.1. A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to any performance of the test 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 test. In order to facilitate the Division's ability to make plans to witness the test, notice of the date (s) for the stack test shall be submitted to the Division at least thirty (30) calendar days prior to the test. 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.

1.12 Except as provided for in Condition 1.13 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 Construction Permit 84AD057 and Colorado Regulation No. 1, Section II.A.1). This opacity standard applies to **each turbine, boiler, engine and flare**. In the absence of credible evidence to the contrary, compliance with the 20% opacity limit shall be presumed since only natural gas or digester gas is permitted to be used as fuel for these units.

1.13 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, process modifications, or adjustment or occasional cleaning of control equipment shall not exceed 30% for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Construction Permit 84AD057 and Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to **each turbine, boiler, engine and flare.** In the absence of credible evidence to the contrary, compliance with the 30% opacity limit shall be presumed since only natural gas or digester gas is permitted to be used as fuel for these units.

1.14 **State-Only Requirement:** Opacity of emissions **from each turbine, flare and boiler No. 3** shall not exceed 20% opacity (Colorado Regulation No. 6, Part B, Section II.C.3). In the absence of credible evidence to the contrary, compliance with the 20% opacity requirement is presumed since only natural gas or digester gas is permitted to be used as fuel for these units.

Note that 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 1.13 during periods of building of a new fire, cleaning of fire boxes, soot blowing, process modifications and adjustment or occasional cleaning of control equipment.

1.15 Emissions of SO_2 from insignificant activities related to the project to install the combustion turbines shall not exceed 1 ton/yr (Colorado Construction Permit 84AD057). A worse case calculation for SO_2 emissions from any insignificant activity related to the addition of the combustion turbines shall be conducted and retained on site. The calculations and any supporting documentation shall be made available to the Division upon request.

Note that the Division considers that based upon the information available, that the only insignificant activity related to the project to install the combustion turbines that would be a source of SO_2 emissions is the use of propane to ignite the turbines.

1.16 The Btu content of the fuel shall monitored as follows:

1.16.1 The Btu content of the natural gas used as fuel shall be verified annually using tariff sheets. The Btu content of the natural gas shall be based on the higher heating value of the fuel. Calculations of monthly emissions shall be made using the heat content determined from the most recent tariff sheet.

1.16.2 The Btu content of the digester gas used as fuel shall be verified semi-annually using the appropriate ASTM Methods or equivalent, if approved in advance by the Division. The Btu content of the digester gas shall be based on the lower heating value of the fuel. Calculations of monthly emissions shall be made using the heat content derived from the most recent required analysis.

1.17 The **flares** are subject to RACT requirements for CO, PM_{10} and VOC (Colorado Regulation No. 3, Part B, Section III.D.3.a.(i) and Colorado Regulation No. 7, Section II.C.2). RACT has been determined to be good combustion practices (operation according to manufacturer specifications) and combustion of digester gas.

2. Continuous H_2S Monitoring System Requirements

2.1 Equipment and QA/QC Requirements

2.1.1 The H_2S Continuous Monitoring System (CMS) is subject to the requirements of 40 CFR Part 60. The monitoring system shall meet the equipment, installation and performance specifications of 40 CFR Part 60, Appendix B, Performance Specification 7. This CMS is subject to the quality assurance/quality control requirements in 40 CFR Part 60 Appendix F and Subpart A § 60.13.

2.1.2 The quality assurance/quality control plan required by 40 CFR Part 60, Appendix F shall be made available to the Division upon request. Revisions shall be made to the plan at the request of the Division.

2.2 General Provisions

2.2.1 The permittee shall ensure that the continuous monitoring systems required are in operation and monitoring H_2S concentration 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), as adopted by reference in Colorado Regulation No. 6, Part A).

2.2.2 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 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 requirements of 40 CFR Part 60 prior to use.

2.2.3 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 items 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.

2.2.4 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 A, B and F (40 CFR Part 60 Subpart A § 60.7(f), as adopted by reference in Colorado Regulation No. 6, Part A).

2.3 Data Replacement Requirements

When the H_2S continuous monitoring system is unable to provide quality assured data for the entire 24-hour period of a day, the H_2S concentration shall be determined by either of the following methods:

2.3.1 A backup continuous monitoring system may be used to monitor the H_2S concentration of the gas, provided the back-up monitoring system meets the requirements in Section II.2 of this permit. If a backup monitoring system is used, the next semi-annual report required by Condition 2.4 of this permit shall identify the dates and times the backup monitors were in use.

2.3.2 The H_2S concentration of the gas shall be presumed to equal the highest reading recorded during the previous 30-day period until such time as digester gas samples can be collected and analyzed using EPA Reference Method 15 twice per week. From the time the first sample is obtained and analyzed, the most recent analysis shall be used to calculate SO_2 and H_2S emissions as required by Condition 1.3.1 and 1.8.2, respectively. If the current H_2S concentration is approaching the limitations specified in Condition 1.8.1 of this permit, measures will be taken to lower the H_2S concentration in the digester gas.

2.4 Recordkeeping and Reporting Requirements

Note that for purposes of reporting as specified in this section, excess emissions are defined in Conditions 1.6.1, 1.7.2 and 1.8.1 of this permit.

2.4.1 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, semi-annually, a report of excess emissions for all pollutants monitored for that semi-annual period (40 CFR Part 60 Subpart A § 60.7(c), as adopted by reference in Colorado Regulation No. 6, Part A). This report shall consist of the following information and/or reporting requirements as specified by the Division:

2.4.1.1 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), as adopted by reference in Colorado Regulation No. 6, Part A).

2.4.1.2 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), as adopted by reference in Colorado Regulation No. 6, Part A).

2.4.1.3 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), as adopted by reference in Colorado Regulation No. 6, Part A).

2.4.1.4 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), as adopted by reference in Colorado Regulation No. 6, Part A).

2.4.2 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, semi-annually, a summary report for that semi-annual period (40 CFR Part 60 Subpart A § 60.7(c), as adopted by reference in Colorado Regulation No. 6, Part A). 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 2.4.1 need not be submitted unless required by the Division (40 CFR Part 60 Subpart A § 60.7(d)(1), as adopted by reference in Colorado Regulation No. 6, Part A).

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 2.4.1 shall both be submitted (40 CFR Part 60 Subpart A § 60.7(d)(1), as adopted by reference in Colorado Regulation No. 6, Part A).

SECTION III - 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.

Emission Unit Description & Number	Applicable Requirement	Justification
Boilers and Engines	40 CFR Part 60, Subparts D, Da, Db and Dc (as adopted by reference in Colorado Regulation No. 6, Part A)	These requirements are not applicable as these units have a design heat input capacity less than the applicable level (D, Da & Db) and were constructed prior to June 19, 1989 (Dc).
Engines	Colorado Regulation No. 6, Part B, Section II	These requirements are not applicable as these units do not meet the definition of fuel-burning equipment.
Boilers 1 and 2	Colorado Regulation No. 6, Part B, Section II	These requirements are not applicable as these units were constructed prior to January 30, 1979. **Note that this shield does not apply to Boiler No. 3.**
Boiler No. 3	Colorado Regulation No. 6, Part B, Section II.D **– SO_2 requirements only**	The SO_2 requirements do not apply since this boiler does not burn coal or fuel oil and is not a turbine.
Turbines	40 CFR Part 60, Subparts D, Da (as adopted by reference in Colorado Regulation No. 6, Part A)	These requirements are not applicable as these units have a design heat input capacity less than the applicable level.
Flares	Colorado Regulation No. 6, Part B, Sections VII.C **(grain loading standard only)**, D& E	These requirements are not applicable, since the Division's policy (PS Memo 99-2, dated May 6, 1999) specifies that although a flare is considered an incinerator, the grain loading standards do not apply to flares. Subsequently, the monitoring requirements and test methods and procedures do not apply. **Note that the 20% opacity requirement still applies.**
Flares	40 CFR Part 60 Subpart A, § 60.18, as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A.	These requirements are not applicable since the flares are not control devices used to comply with applicable subparts of 40 CFR Part 60 and 61 or Colorado Regulation No. 6, Part B.

Emission Unit Description & Number	Applicable Requirement	Justification
Boilers	40 CFR Parts 72, 73, 75, 76, 77 and 78 – Acid Rain Program. Parts 72 and 76, as adopted by reference in Colorado Regulation No. 18.	These requirements are not applicable since the boilers do not produce electricity for sale.
Engines		These requirements are not applicable since the engines commenced commercial operation prior to November 15, 1990 and each engine serve a generator with nameplate capacity less than 25 MW.
Turbines		These requirements are not applicable since the turbines meet the definition of a cogeneration facility (commenced commercial operation after November 15, 1990 and supplies ≤ 1/3 of its electrical output capacity **OR** ≤ 219,000 MWe-hr actual electric output on an annual basis).
Facility	40 CFR Part 60 Subparts K and Ka, as adopted by reference in Colorado Regulation No. 6, Part A	These requirements are not applicable since the facility does not have petroleum liquid storage tanks greater than 40,000 gallon capacity.
Facility	40 CFR Part 60 Subpart Kb, as adopted by reference in Colorado Regulation No. 6, Part A	These requirements are not applicable since the facility does not have any volatile organic liquid storage tanks greater than 40 cubic meter capacity.
Facility	40 CFR Part 60 Subpart O, as adopted by reference in Colorado Regulation No. 6, Part A.	These requirements are not applicable since this facility does not burn wastes containing more than 10% sewage sludge.
Facility	40 CFR Part 60 Subparts Ca, Cb, E, Ea and Eb, as adopted by reference in Colorado Regulation No. 6, Part A.	These requirements are not applicable as solid waste (E) and/or municipal solid waste (Ca, Cb, Ea & Eb) is not burned at this facility.
Facility	Colorado Regulation No. 6, Part B, Section VI.	These requirements are not applicable as municipal solid waste is not burned at this facility.
Engines	Colorado Regulation No. 7, Section XVI	These requirements are not applicable since the engines are not permitted to burn natural gas as fuel.
Turbines	40 CFR Part 63 Subpart YYYY, as adopted by reference in Colorado Regulation No. 8, Part E, Section III.	These requirements are not applicable since the facility is not a major source for HAP emissions.
Engines P001 thru P004	40 CFR Part 63 Subpart ZZZZ, as adopted by reference in Colorado Regulation No. 8, Part E, Section III.	In accordance with the provisions in 40 CFR Part 63 Subpart ZZZZ § 63.6590(b)(3), these engines are not subject to the requirements in Subparts A and ZZZZ since they are existing (commenced construction or reconstruction prior to December 19, 2002) 4-cycle lean burn engines.
Facility	40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV.	These requirements are not applicable since none of the emission units at this facility are equipped with a control device that is used to meet an emission limitation or standard to which they are subject and have pre-control emissions that equal or exceed the major source level.

2. General Conditions

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

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

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

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

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

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

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

3. Streamlined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

Permit Condition	Streamlined (Subsumed) Requirements
Section II, Condition 1.2.2.	Regulation No. 6, Part B, Section II.C.2 [particulate matter standard] **- State-only Requirement**
Section II, Condition 1.2.3.	**For boiler No. 3 only:** Regulation No. 6, Part B, Section II.C.2 [particulate matter standard] **- State-only Requirement**
Section II, Condition 1.3.3.	Regulation No. 6, Part B, Section II.D.3.a [SO_2 emissions not to exceed 0.80 lbs/mmBtu] **- State-only Requirement**
Section II, Condition 1.11.	**For the turbines only:** Regulation No. 6, Part B, Section I.A [NSPS General Provisions] **- State-only Requirement**

SECTION IV - General Permit Conditions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

5. Emergency Provisions

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

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

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

b. the permitted facility was at the time being properly operated;

c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

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

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

6. Emission Standards 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, “emission standards for asbestos.”

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.

a. For sources located in an ozone non-attainment area or the Denver Metro Attainment Maintenance Area, 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.

   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.

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

c. 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.

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

A - INSPECTION INFORMATION
B - MONITORING AND PERMIT DEVIATION REPORT
C - COMPLIANCE CERTIFICATION REPORT
D - NOTIFICATION ADDRESSES
E - PERMIT ACRONYMS
F - PERMIT MODIFICATIONS

*DISCLAIMER:

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

APPENDIX A - Inspection Information

Directions to Plant

The facility is located on 6450 York Street. It is approximately 1/4 mile east of Interstate 270. Suez Denver Metro, LLC equipment is located in the Cogeneration Building and Digester Building.

Check in at the Metro Administration Building (1st building on the left after entering main gate at York Street entrance). NOTE: If RED LIGHT is flashing at main gate, DO NOT ENTER – this indicates a possible chemical (Chlorine or Sulfur Dioxide) leak at the site.

Safety Equipment Required

Hard Hat, Safety Shoes, and Hearing Protection.

Facility Plot Plan

Figures 1 and 2 (following page) shows the plot plan as submitted on July 31, 2006 with the source's Title V Renewal Operating Permit Application.

List of Insignificant Activities

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

Specific categories of insignificant activities identified in the Operating Permit application are as follows:

<u>Air conditioning and ventilation systems (Reg 3, part C.II.E.3.c)</u>

<u>Fuel Burning Equipment < 5 mmBtu/hr (Reg 3, Part C.II.E.3.k)</u>

Pilot lights for (4) new flares (each 0.016 mmBtu/hr)

<u>Chemical storage tanks or containers less than 500 gal (Reg 3 Part C.II.E.3.n)</u>

Miscellaneous maintenance products and cleaners (one in 55 gal drum, others in small consumer size containers)
Turbine wash chemicals
Cooling water loop treatment chemicals (direct feed from two (2) 55-gal drums and one (1) 5-gal drum)
Water softener treatment system (open air mixing tank for make-up salt solution)
Engine dipping tank (sodium hydroxide, 215-gal for overhaul only)

Welding, soldering and brazing operations using no lead-based compounds (Reg 3 Part C.II.E.3.r)

Aerosol can usage (Reg 3 Part C.II.E.3.u)

Sawing operations that are ancillary and not part of production (Reg 3 Part C.II.E.3.v)

Adhesive use not related to production (Reg 3 Part C.II.E.3.y)

Caulking operations not part of a production process (Reg 3 Part C.II.E.3.aa)

Landscaping and site housekeeping devices < 10 hp (Reg 3 Part C.II.E.3.bb)

Portable power washers (gasoline powered)

Landscaping use of pesticides, fumigants, and herbicides (Reg 3 Part C.II.E.3.dd)

Emergency events such as accidental fires (Reg 3, Part C.II.E.3.ff)

Plastic pipe welding (Reg 3 Part C.II.E.3.hh)

Operations involving acetylene, butane, propane and other flame cutting torches (Reg 3, Part C.II.E.kk)

Chemical storage areas less than 5,000 gal capacity (Reg 3 Part C.II.E.3.mm)

Lubrication oil storage (55-gal drums and 240-gal portable totes, variety of lubricant greases)
Engine dipping tank (sodium hydroxide, 600 gal for overhaul only)
Engine dipping rinse tank (water, 215-gal for overhaul only)
Routine maintenance chemicals stored in fire safety cabinet in gas compressor room
Cleaning product drums staged in compressor room and engine room

Architectural painting (Reg 3 Part C.II.E.nn)

Emissions of air pollutants that are not criteria or non-criteria reportable pollutants (Reg 3 Part C.II.E.3.oo)

Janitorial activities and products (Reg 3 Part C.II.E.3.pp)

Sources of odorous emissions that do not utilize control equipment for control of odorous emissions (Reg 3 Part C.II.E.3.rr)

Office emissions, including cleaning, copying and restrooms (Reg 3 Part C.II.E.3.tt)

Equipment used exclusively for portable steam cleaning (Reg 3 Part C.II.E.3.ww)

Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively (Reg 3 Part C.II.E.3.xx)

Storage of butane, propane or LPG in tanks < 60,000 gal (Reg 3 Part C.II.E.3.zz)

Two (2) staged 30 gal propane cylinders (ignition fuel for turbines 5 and 6, normally not vented)

Storage of lube oil in tanks < 40,000 gal (Reg 3 Part C.II.E.3.aaa)

3 – 4 portable lubricating oil totes (~ 240-gal), 2 on engine room mezzanine, 1-2 (for reciprocating engines) in Suez Denver Metro, LLC lube oil storage area
One used oil tote in Suez Denver Metro, LLC lube oil storage area, engine room
Two (2) 400 gal lubrication oil sumps (one for each turbine)
Four (4) 300-gal lubrication oil sumps (one for each engine)

Venting of compressed natural gas, butane or propane gas cylinders < 1 gal (Reg 3 Part C.II.E.3.bbb)

Butane fueled torches (used in soldering activities)

Fuel burning equipment < 10 mmBtu/hr used solely for comfort heating (Reg 3 Part C.II.E.3.ggg)

Hot water heating

Electric motors driving equipment at non-commercial machined shops (Reg 3 Part C.II.E.iii)

Forklifts (Reg 3 Part C.II.E.kkk)

Handling equipment and associated activities for glass that is destined for recycling (Reg 3 Part C.II.E.lll)

Use of pesticides, fumigants and herbicides (Reg 3 Part C.II.E.3.ttt)

Non-asbestos demolition (Reg 3 Part C.II.E.3.vvv)

Stationary internal combustion engines - limited hours or size (Reg 3 Part C.II.E.3.xxx)

One (1) 3 hp gasoline driven portable sump pump
One (1) 10 hp, 6259 watt, gasoline driven portable generator

Sandblast equipment when blast media is recycled and the blasted material is collected (Reg 3 Part C.II.E.3.www)

Non-potable water pipeline vents (Reg 3 Part C.II.E.3.zzz)

Steam vents and safety release valves (Reg 3 Part C.II.E.3.aaaa)

Venting of natural gas lines for safety purposes (Reg 3 Part C.II.E.3.dddd)

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APPENDIX B

Reporting Requirements and Definitions

with codes ver 2/20/07

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

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

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

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

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

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

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

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

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

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

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit

requirements, including those attributable to malfunctions as defined in this Appendix, the probable cause of such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

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

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

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

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

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

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

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

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

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

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

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

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

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

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

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

Startup, Shutdown, Malfunctions and Emergencies

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

Startup, Shutdown, and Malfunctions

[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.

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: Suez Denver Metro, LLC – Metro Wastewater Cogeneration Facility
OPERATING PERMIT NO: 01OPAD212
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
S015 & S016	Two (2) Solar Centaur, Model No. 40-T4700GSC, Combustion Turbine Generator Units, Each Rated at 42.78 MMBtu/hr and Driving a 3515 kW Generator, Serial Nos. 4691C (Unit # 5) and 4661C (Unit # 6). Natural Gas and Digester Gas Fired.					
S001 thru S004	Four (4) Superior, Model No. 12SGTA, Internal Combustion Clean Burn Electric Generators (Co-Generators), Each Rated at 27.2 MMBtu/hr and Driving a 1.2 MW Generator, Serial Nos. 299899 (Unit # 1), 299919 (Unit # 2), 299929 (Unit #3) and 299909 (Unit #4). Digester Gas Fired.					
S005 thru S007	Three (3) Cleaver-Brooks, Model No. CB200X-300, Fire Tube Boilers, Each Rated at 12.5 MMBtu/hr, Serial Nos. L-61282 (B001), L-61281 (B002) and L-70086 (B003). Natural Gas Fired.					
S018 thru S021	Four (4) Varec, Model No. 244WS01921000 Flares, Rated at 167.5 MMBtu/hr Total. Used to Combustion Digester Gas.					
S017	Solvent Cold Cleaner Degreaser					
CMS	Continuous Monitoring System, Digester Gas Fuel					

Operating Permit Unit ID	Unit Description	Deviations noted During Period?[1]		Deviation Code[2]	Malfunction/Emergency Condition Reported During Period?	
		YES	NO		YES	NO
Fuel Flow Monitoring	Continuous Digester Gas Fuel Flow Monitoring (turbines, reciprocating engines, flares)					
	Facility-Wide Conditions					
	General Conditions					
	Insignificant Activities					

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

[2]Use the following entries as appropriate:

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

Monitoring and Permit Deviation Report - Part II

FACILITY NAME: Suez Denver Metro, LLC – Metro Wastewater Cogeneration Facility
OPERATING PERMIT NO: 01OPAD212
REPORTING PERIOD:

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

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

OPERATING PERMIT UNIT IDENTIFICATION:

Operating Permit Condition Number Citation

Explanation of Period of Deviation

Duration (start/stop date & time)

Action Taken to Correct the Problem

Measures Taken to Prevent a Reoccurrence of the Problem

Dates of Malfunctions/Emergencies Reported (if applicable)

Deviation Code _____ Division Code QA: _____

SEE EXAMPLE ON THE NEXT PAGE

EXAMPLE

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

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

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

OPERATING PERMIT UNIT IDENTIFICATION:

Asphalt Plant with a Scrubber for Particulate Control - Unit XXX

Operating Permit Condition Number Citation

Section II, Condition 3.1 - Opacity Limitation

Explanation of Period of Deviation

Slurry Line Feed Plugged

Duration

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

Action Taken to Correct the Problem

Line Blown Out

Measures Taken to Prevent Reoccurrence of the Problem

Replaced Line Filter

Dates of Malfunction/Emergencies Reported (if applicable)

5/30/06 to A. Einstein, APCD

Deviation Code _____ Division Code QA: _____

Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME: Suez Denver Metro, LLC - Metro Wastewater Cogeneration Facility

FACILITY IDENTIFICATION NUMBER: 0010097

PERMIT NUMBER: 01OPAD212

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 Report

ver 2/20/07

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

FACILITY NAME: Suez Denver Metro, LLC – Metro Wastewater Cogeneration Facility

OPERATING PERMIT NO: 01OPAD212
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
S015 & S016	Two (2) Solar Centaur, Model No. 40-T4700GSC, Combustion Turbine Generator Units, Each Rated at 42.78 MMBtu/hr and Driving a 3515 kW Generator, Serial Nos. 4691C (Unit # 5) and 4661C (Unit # 6). Natural Gas and Digester Gas Fired.						

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
S001 thru S004	Four (4) Superior, Model No. 12SGTA, Internal Combustion Clean Burn Electric Generators (Co-Generators), Each Rated at 27.2 MMBtu/hr and Driving a 1.2 MW Generator, Serial Nos. 299899 (Unit # 1), 299919 (Unit # 2), 299929 (Unit #3) and 299909 (Unit #4). Digester Gas Fired.						
S005 thru S007	Three (3) Cleaver-Brooks, Model No. CB200X-300, Fire Tube Boilers, Each Rated at 12.5 MMBtu/hr, Serial Nos. L-61282 (B001), L-61281 (B002) and L-70086 (B003). Natural Gas Fired.						
S018 thru S021	Four (4) Varec, Model No. 244WS01921000 Flares, Rated at 167.5 MMBtu/hr Total. Used to Combustion Digester Gas						
S017	Solvent Cold Cleaner Degreaser						
CMS	Continuous Monitoring System, Digester Gas Fuel						
Fuel Flow Monitoring	Continuous Digester Gas Fuel Flow Monitoring (turbines, reciprocating engines, flares)						
	Facility-Wide Conditions						
	General Conditions						
	Insignificant Activities [4]						

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

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

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

NOTE:

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

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

II. Status for Accidental Release Prevention Program:

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

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

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

III. Certification

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

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

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

_____

Printed or Typed Name | Title

_____

Signature | Date Signed

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

APPENDIX D

Notification Addresses

1. **Air Pollution Control Division**

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

ATTN: Jim King

2. **United States Environmental Protection Agency**

Compliance Notifications:

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

Permit Modifications, Off Permit Changes:

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

APPENDIX E

Permit Acronyms

Listed Alphabetically:

AIRS -	Aerometric Information Retrieval System
AP-42-	EPA Document Compiling Air Pollutant Emission Factors
APEN -	Air Pollution Emission Notice (State of Colorado)
APCD -	Air Pollution Control Division (State of Colorado)
ASTM -	American Society for Testing and Materials
BACT -	Best Available Control Technology
BTU -	British Thermal Unit
CAA -	Clean Air Act (CAAA = Clean Air Act Amendments)
CCR -	Colorado Code of Regulations
CEM -	Continuous Emissions Monitor
CF -	Cubic Feet (SCF = Standard Cubic Feet)
CFR -	Code of Federal Regulations
CO -	Carbon Monoxide
COM -	Continuous Opacity Monitor
CRS -	Colorado Revised Statute
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate in mmBtu/hr
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

PM10 -	Particulate Matter Under 10 Microns
PPM -	Parts per Million
PPMV -	Parts per Million, Volume
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
SO2 -	Sulfur Dioxide
TPY -	Tons Per Year
TSP -	Total Suspended Particulate
VOC -	Volatile Organic Compounds

APPENDIX F

Permit Modifications

DATE OF REVISION	MODIFICATION TYPE	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION
3/25/09	Administrative Amendment	Page Following Cover Page	Changed the name from "Colorado-Golden Energy Corporation" to "Suez Denver Metro, LLC"
		Page Headers	Changed the name from "Colorado-Golden Energy Corporation" to "Suez Denver Metro, LLC"
		Section I	Corrected the Reg 7 citation for the 8-hour ozone control area in Condition 1.1. Corrected Condition 3.2 to indicate that only NO_X potential to emit exceeds 100 tons/yr.
		Appendix A	Changed the name from "Colorado-Golden Energy Corporation" to "Suez Denver Metro, LLC" under "directions to plant" and in two locations in the insignificant activity list.
		Appendices B and C	Changed the name from "Colorado-Golden Energy Corporation" to "Suez Denver Metro, LLC" on the report/compliance certification forms.