Air Pollution Control Title V Permit to Operate Statement of Basis for Permit No. V-SU-00025-2005.02 Administrative Amendment

# BP America Production Company Treating Site #7B Compressor Station Southern Ute Indian Reservation La Plata County, CO

# 1. Facility Information

#### a. Location

The Treating Site #7B Compressor Station is owned and operated by BP America Production Company (BP) and is located within the exterior boundary of the Southern Ute Indian Reservation, in the southwestern part of the State of Colorado. The exact location is Section 3, T32N, R10W, La Plata County, Colorado. The mailing address is:

BP America Production Company 380A North Airport Road Durango, CO 81303

#### b. Contacts

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# **Company Contact:**

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#### **Tribal Contact:**

Brenda Jarrell Air Quality Program Manager Southern Ute Indian Tribe Phone: 970-563-4705

## **Description of Permit Amendment**

On May 12, 2011, the Environmental Protection Agency, Region 8 (EPA) received a request from BP asking for corrections to the description for generator engine emission unit TS7B-8. EPA received a notification from BP of an engine replacement in accordance with the Off Permit Changes Section of the permit on July 14, 2009. The replacement engine was the same make, model, and horsepower rating, and was configured to operate in the same manner as the engine being replaced, and therefore qualified as an alternative operating scenario under the of the permit. The engine data in the notification package, originally submitted by the manufacturer, was incorrect and was submitted by BP in error at the time of the engine replacement. BP is requesting an administrative amendment to correct the serial number of generator engine TS7B-8 in the permit. A review of the engine replacement information indicates that no new requirements were triggered for compressor engine TS7B-1 at the time of installation.

While the permit was open, EPA took the opportunity to update the serial number and installation date for compressor engine emission unit TS7B-1. In accordance with the Off Permit Changes Section of the permit, BP submitted an off permit change notification for the replacement of compressor engine TS7B-1 on May 6, 2009. This engine replacement also qualified as an alternative operating scenario under the permit and did not trigger any new applicable requirements.

In addition, EPA has also taken the opportunity to make some other necessary amendments to the permit while it was open. The potential to emit (PTE) totals were removed from the description of operations in the Source Information Section of the permit. Although the PTE totals were originally included in the permit for descriptive purposes only, EPA has decided to remove that language to avoid any misinterpretation that PTE is an enforceable permit requirement. The PTE for the facility will continue to be discussed in the Statement of Basis for each permit action. The following PTE for the facility was provided in the renewal permit effective October 28, 2007.

Nitrogen Oxides  $(NO_x)$  – 43.7 tpy Carbon Monoxide (CO) – 78.9 tpy Volatile Organic Compounds (VOC) – 20.0 tpy Small Particulates  $(PM_{10})$  – 1.4 tpy Sulfur Dioxide  $(SO_2)$  - 0.04 tpy Total Hazardous Air Pollutants (HAPs) – 1.2 tpy Largest Single HAP (formaldehyde, HCHO) – 0.94 tpy

EPA also corrected certain conditions in the permit to accurately reflect applicable regulatory language. In addition, the correct installation date and date of manufacture for the engines have been added to the permit file.

The following modification has been made to this permit:

- Section I.A. Source Information
  - 1. PTE for the facility was removed from the permit. PTE will continue to be discussed in the Statement of Basis for each permit action.
- Section I.B Source Emission Points
  - 1. Changed the serial number and installation date of generator engine TS7B-8
  - 2. Changed the serial number and installation date of compressor engine TS7B-1
- Section III. Facility-Wide Requirements
  - 1. Corrected text in Section III.A.3. General Recordkeeping Requirements for consistency with the applicable regulatory requirement.
- Section IV. Part 71 Administrative Requirements
  - 1. Corrected text in Section IV.J.4. Group Processing of Minor Permit Modifications to accurately reflect the applicable regulatory language.
  - 2. Corrected text in Section IV.Q.7.(d) Off Permit Changes for consistency with the applicable regulatory requirement.

EPA is making this revision as an administrative amendment in accordance with 40 CFR 71.7(d) and the Administrative Permit Amendments section of this permit. The permit will be reissued as permit number V-SU-00025-2005.02.

For specific applicability information regarding the Part 71 permit for this facility, please see the Statement of Basis for permit number V-SU-0025.05.00.



# Air Pollution Control Title V Permit to Operate Statement of Basis for Permit No. V-SU-0025-05.00

# BP America Production Company Treating Site #7B Compressor Station Southern Ute Reservation La Plata County, Colorado

# 1. Facility Information

#### a. Location

The Treating Site #7B Compressor Station, owned and operated by BP America Production Company ("BP"), is located within the exterior boundary of the Southern Ute Indian Reservation, in the southwestern part of the State of Colorado. The exact location is Section 3, T32N, R10W in La Plata County, Colorado. The mailing address is:

BP America Production Company 380 Airport Road Durango, CO 81303

# b. Company Contacts

**Facility Contact:** 

Julie A. Best, Environmental Coordinator BP America Production Company 380 Airport Road Durango, CO 81303 970-375-7540

## Corporate Contact:

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#### Responsible Official:

Melanie M. Hill, Red Cedar Operations Manager BP America Production Company 380 Airport Road Durango, CO 81303 970-247-6801

# c. Process Description

Treating Site #7B is a compressor station used to treat the gas and water recovered from the coal matrix reservoirs of the San Juan Basin located in Area #7 of the Ignacio Blanco Fruitland Field. Coal bed methane gas wells are produced similarly to conventional gas wells, but with a larger quantity of associated water production. After leaving the well, the production is sent to a wellsite separator which splits the stream into separate gas and water gathering lines prior to entering the treating facility.

At the treating site, the produced gas enters a slug catcher used for additional water and gas separation. The water that drops out combines with the produced water stream from the field and is stored in water tanks. Each water tank has a tank heater used during the winter months to heat the water. The produced water is pumped from the tanks through water injection pumps and reinjected into a deep reservoir for disposal. After leaving the slug catcher, the produced gas enters one of several compressors before passing through a glycol dehydrator unit equipped with a natural gas fired reboiler to further dry the gas. After dehydration, most of the gas is sent through a custody transfer sales meter, while some of the gas is returned to the field to be used as wellsite fuel gas. The gas contains only a negligible amount of hydrogen sulfide (H2S). Therefore, no H2S removal is necessary.

#### d. List of all units and emission-generating activities

In the part 71 initial and supplemental renewal applications for the Treating Site #7B Compressor Station, BP provided the information shown in Tables 1 and 2 below. Table 1 lists emission units and emission generating activities, including any air pollution control devices. Emission units identified as "insignificant" emitting units (IEU's) are listed separately in Table 2.

Table 1 - Emission Units BP America Production Company, Treating Site #7B Compressor Station

Emission Unit Id. No.	Description	Control Equipment	
	1954 hp, Waukesha P9390-GSI Compressor Engine		
		NSCR and AFR	
TS7B-1	Serial No. C-11929/1 Installed 1994	controller	
	50 hp Waukesha VRG330 Generator Engine		
TS7B-8	Serial No. C-1707 Installed 2006	None	

Part 71 allows sources to separately list in the permit application units or activities that qualify as "insignificant" based on potential emissions below 2 tons/year for all regulated pollutants that are not listed as hazardous air pollutants ("HAP") under Section 112(b) and below 1000 lbs/year or the de minimus level established under Section 112(g), whichever is lower, for HAPs. However, the application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to calculate the emissions fee. Units that qualify as "insignificant" for the purposes of the part 71 application are in no way exempt from applicable requirements or any requirements of the part 71 permit.

BP stated in the part 71 permit renewal application that the emission units in Table 2 below are IEU's. The application provided emission calculations, including GLY-CALC analysis for the dehydrators and TANKS 4.0 modeling reports for the tanks. This supporting data justifies the source's claim that these units qualify as IEU's.

Table 2 - Insignificant Emission Units BP America Production Company, Treating Site #7B Compressor Station

Emission Unit ID	Description
TS7B-5	875 MBtu/hr Glycol Reboiler
TS7B-5b	10 MMscf/d Glycol Still Vent
TS7B-5c	10 MMscf/d Glycol Dehydration Unit Flash Tank Vent
TS7B-7	375 MBtu/hr Tank Heater
N/A	3 – 12 MBTU/hr Catalytic Space Heaters
N/A	8 – 48 MBtu/hr Catalytic Space Heaters
N/A	2 – 24 Mbtu/hr Catalytic Space Heaters
N/A	4 - ≤ 500 Gallon Storage Tanks (lube oil, EG, or TEG)
N/A	Fugitive Sources

#### e. Potential to emit

Under 40 CFR 52.21, PTE is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design <u>if</u> the limitation, or the effect it would have on emissions, is federally enforceable.

The PTE for the Treating Site #7B Compressor Station, in tons per year, including federally enforceable restrictions on TS7B-1 is as follows:

Nitrogen Oxides  $(NO_x)$  – 43.7 tpy Carbon Monoxide (CO) – 78.9 tpy Volatile Organic Compounds (VOC) – 20.0 tpy Small Particulates  $(PM_{10})$  – 1.4 tpy Sulfur Dioxide  $(SO_2)$  - 0.04 tpy Total Hazardous Air Pollutants (HAPs) – 1.2 tpy Largest Single HAP (formaldehyde, HCHO) – 0.94 tpy

# f. Construction and Permitting history

See the Potential To Emit History of this facility in Table 3 on the following page.

The Treating Site #7B Compressor Station commenced operation in 1994 as a minor source for PSD but major for Part 71 permitting. The initial Part 71 permit was issued on September 18, 2000. Minor modifications were made to the facility in 1997. None of the modifications triggered a requirement to obtain a PSD permit construct. In the renewal application for their part

71 permit, BP requested that EPA establish requirements in the renewed permit for the existing engine unit TS7B-1 to establish synthetic minor limits for NOx and CO emissions .

This permit action is the first renewal of the part 71 permit and incorporates additional requested synthetic minor limits.

Table 3 – BP Treating Site #7B Compressor Station Potential to Emit History

	Potential to Emit (TPY)					
	NOx	СО	VOC	НСОН	Total HAPs	
1994 – Construction of a new facility						
TS7B-1, 1954 hp, Waukesha P9390-GSI Compressor Engine	190.2	190.2	5.7	1.9	1.9	
TS7B-4, 58 hp, Waukesha VRG330 Compressor Engine	4.93	29.5	0.26	0.7	0.7	
Insignificant Emission Units	1.06	0.9	1.1	0.0	0.5	
Facility PTE for 1996 New Source	196.2	220.6	7.1	2.6	3.1	
PSD Status of Fa	cility: Mi	nor				
1995 – Added TS7B-2						
TS7B-2, 1478 hp, WaukeshaL7042GLCompressor Engine	+142.7	+142.7	+4.3	+1.4	+1.4	
Modification PTE Total (Minor M						
Facility PTE after 1997 Modification	338.9	363.3	11.4	4.0	4.5	
PSD Status of Fac			1101		110	
15D Status of Fa	Cility. 1916	ajoi				
1997 – Added TS7B-3						
TS7B-3, 1333 hp, Waukesha L7042GL Compressor Engine	+21.4	+29.6	+14.3	+1.7	+1.7	
Modification PTE Total (Minor M	odification	ı to a maj	or source)			
Facility PTE after 1997 Modification	360.3	392.9	25.7	5.7	6.2	
PSD Status of Fa	cility: Ma	ajor				
2002 – Removed TS7B-2						
TS7B-2, 1478 hp, WaukeshaL7042GLCompressor Engine	-142.7	-142.7	-4.3	-1.4	-1.4	
Modification PTE Total (R				<del> </del>		
Facility PTE after 2002 Engine Removal		250.2	21.4	4.3	4.8	
PSD Status of Fa	cility: Ma	ajor				
2005 - 2006 – Removed TS7B-3 & TS7B-4; Added TS7B	-8					
	21.4	-29.6	-14.3	-1.7	-1.7	
TS7B-3, 1333 hp, Waukesha L7042GL Compressor Engine	-21.4				-0.7	
TS7B-3, 1333 hp, Waukesha L7042GL Compressor Engine TS7B-4, 58 hp, Waukesha VRG330 Compressor Engine	-21.4 -4.93	-29.5	-0.26	-0.7		
TS7B-4, 58 hp, Waukesha VRG330 Compressor Engine TS7B-8, 50 hp, Waukesha VRG330 Compressor Engine	-4.93 +5.3	-29.5 +21.7	+0.5	+0.04	+0.04	
TS7B-4, 58 hp, Waukesha VRG330 Compressor Engine TS7B-8, 50 hp, Waukesha VRG330 Compressor Engine Change to Insignificant emission units	-4.93	-29.5				
TS7B-4, 58 hp, Waukesha VRG330 Compressor Engine TS7B-8, 50 hp, Waukesha VRG330 Compressor Engine Change to Insignificant emission units  Modification PTE Total (Minor Modification to a	-4.93 +5.3 -0.32	-29.5 +21.7 -0.3	+0.5	+0.04	+0.04	
TS7B-4, 58 hp, Waukesha VRG330 Compressor Engine TS7B-8, 50 hp, Waukesha VRG330 Compressor Engine Change to Insignificant emission units	-4.93 +5.3	-29.5 +21.7	+0.5	+0.04	+0.04	

2007 - Receive Enforceable Restrictions on TS7B-1 to Re	duce PTF	E of NOx &	& CO Emis	sions					
TS7B-1, 1954 hp, Waukesha P9390-GSI w/ Controls		-133.6	+13.2	-0.96	-1.0				
Modification PTE Total (Re	eduction i	in emissio	ns)	•					
Facility PTE after 2005-2006 Restrictions are made									
Enforceable	43.7	78.9	20.0	0.94	1.2				
PSD Status of Facility: Minor									
	•								
2007 PTE Summary									
	Potential to Emit (TPY)								
	NOx	СО	VOC	НСОН	Total HAPs				
TS7B-1, 1954 hp, Waukesha P9390-GSI Compressor Engine	37.7	56.6	18.9	0.9	0.9				
TS7B-8, 50 hp, Waukesha VRG330 Compressor Engine		21.7	0.5	0.04	0.04				
Insignificant Emission Units		0.6	0.54	0.0	0.3				
Total PTE	44.1	79.2	7.3	0.94	1.2				

# 2. Tribe Information -- The Southern Ute Tribe

## a. Indian country:

BP=s Treating Site #7B Compressor Station is located within the exterior boundaries of the Southern Ute Indian Reservation and is thus within Indian country as defined at 18 U.S.C. '1151. The Southern Ute Tribe does not have a federally-approved Clean Air Act (CAA) title V operating permits program nor does EPA=s approval of the State of Colorado=s title V program extend to Indian country. Thus, EPA is the appropriate governmental entity to issue the title V permit to the Treating Site #7B Compressor Station.

#### b. The reservation:

The Southern Ute Indian Reservation is located in Southwestern Colorado adjacent to the New Mexico boundary. Ignacio is the headquarters of the Southern Ute Tribe, and Durango is the closest major city, just 5 miles outside of the north boundary of the Reservation. Current information indicates that the population of the Tribe is about 1,305 people with approximately 410 tribal members living off the Reservation. In addition to Tribal members, there are over 30,000 non-Indians living within the exterior boundaries of the Southern Ute Reservation.

## c. <u>Tribal government</u>:

The Southern Ute Indian Tribe is governed by the Constitution of the Southern Ute Indian Tribe of the Southern Ute Indian Reservation, Colorado adopted on November 4, 1936 and subsequently amended and approved on October 1, 1975. The Southern Ute Indian Tribe is a federally recognized Tribe pursuant to Section 16 of the Indian Reorganization Act of June 18, 1934 (48 Stat.984), as amended by the Act of June 15, 1935 (49 Stat. 378). The governing body of the Southern Ute Indian Tribe is a seven member Tribal Council, with its members elected from the general membership of the Tribe through a yearly election process. Terms of the Tribal Council are three years and are staggered so in any given year 2 members are up for reelection. The Tribal Council officers consist of a Chairman, Vice-Chairman and Treasurer.

#### d. Local air quality and attainment status:

The Tribe maintains an air monitoring network consisting of two sites equipped to collect Oxides of Nitrogen (NO<sub>2</sub>), Ozone (O<sub>3</sub>), Carbon Monoxide (CO) and meteorological data. The Tribe has collected NO<sub>2</sub> and O<sub>3</sub> data at the Ignacio site and Bondad site since June 1, 1982, and April 1, 1997, respectively. Since January 1, 2000, both sites initiated meteorological monitors measuring Wind Speed, Wind Direction, Vertical Wind Speed, Outdoor Temperature, Relative Humidity, Solar Radiation, and Rain/Snow Melt Precipitation. Particulate data (PM<sub>10</sub>) was collected from December 1, 1981 to September 30, 2006, at the Ignacio site and since April 1, 1997 to September 30, 2006, at the Bondad site. The monitors indicate the following averages for the pollutant monitored: An annual average for NO<sub>2</sub>, an hourly average for O<sub>3</sub> and CO, an 8-hour average for CO.

# 3. Establishment of Synthetic Minor Limits

## a. Applicable PTE guidance

Under 40 CFR 52.21, Apotential to emit@ is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design <u>if</u> the limitation, or the effect it would have on emissions, is federally enforceable.

National EPA guidance on PTE states that air pollution control equipment (in this case, NSCR for TS7B-1) can be credited as restricting PTE only if federally enforceable requirements are in place requiring the use of such air pollution control equipment. The primary applicable guidance is a memo titled, AGuidance on Limiting Potential to Emit in New Source Permitting,@ dated June 13, 1989, to EPA Regional Offices, from the Office of Enforcement and Compliance Monitoring (OECA), and the Office of Air Quality Planning & Standards (OAQPS). A later memo to the EPA Regional Offices, dated January 25, 1995, titled AGuidance on Enforceability Requirements for Limiting Potential to Emit through SIP and '112 Rules and General Permits,@ also provides guidance on this topic.

#### b. Components of the PTE restrictions

**Emission Limits:** In response to BP's application request to make enforceable the use of NSCR for engine unit TS7B-1, permit limits for NOx and CO have been established in the permit, as well as, work practice and operational requirements.

**Testing:** In order to determine compliance with the established permit limits, requirements for reference method performance testing for NOx and CO are included as permit conditions. In addition, a requirement to conduct performance testing upon catalyst change out has been included.

**Monitoring**: Monitoring will be accomplished using a portable analyzer semi-annually to monitor for NOx, and CO emissions, weekly temperature measurements to monitor the inlet temperatures of engine exhaust into the catalyst for each engine and monthly measurements of pressure drop across the catalyst.

In order for the NSCR to effectively reduce NOx and CO from TS7B-1, the inlet temperature to the catalyst must be maintained between a minimum and maximum temperature as defined by the catalyst manufacturer and specified in the permit.

# 4. Applicable Requirement Review

The following federally applicable requirements have been reviewed. Applicability status is stated after the discussion of each requirement:

**Chemical Accident Prevention Program:** Based on the permit application, the Treating Site # 7B Compressor Station currently has no regulated substances above the threshold quantities in this rule and therefore is not subject to the requirement to develop and submit a risk management

plan. BP has an ongoing responsibility to submit this plan  $\underline{IF}$  a substance is listed that BP has in quantities over the threshold amount or  $\underline{IF}$  BP ever increases the amount of any regulated substance above the threshold quantity.

**Stratospheric Ozone and Climate Protection - Subpart F:** Air conditioning units that may contain Class I or Class II refrigerants are not located at the Treating Site #7B Compressor Station, so 40 CFR part 82, subpart F does not apply. If BP America Production Company ever decides to install air conditioning units and use its personnel to service the units for the compressor station, then it must comply with the standards of 40 CFR part 82, subpart F, specifically, §82.156, §82.158, §82.161, and §82.166(i), and request a significant modification to this part 71 permit.

**Stratospheric Ozone and Climate Protection - Subpart H:** The Treating Site #7B Compressor Station does not have fire extinguishers on site that use halon, so 40 CFR part 82, subpart H for halon emissions reduction does not apply. If BP America Production Company ever decides to use fire extinguishers that use halon and use its personnel to service, maintain, test, repair, or dispose of equipment that contains halons or use such equipment during technician training, then it must comply with the standards of 40 CFR part 82, subpart H for halon emissions reduction and request a significant modification to this part 71 permit.

#### **New Source Performance Standards (NSPS)**

40 CFR Part 60, Subpart A (General Provisions): This subpart applies to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication of any standard in part 60. Subpart A applies only to sources that are subject to specific subparts of part 60. As explained below, the Treating Site #7B Compressor Station is not subject to any specific subparts of part 60.

<u>40 CFR Part 60, Subpart K</u>: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. This subpart does not apply to storage vessels for petroleum liquids with a storage capacity less than 40,000 gallons, nor to storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer. This subpart does not apply to the storage vessels at the Treating Site #7B Compressor Station because no tanks at the facility were constructed, reconstructed, or modified after June 11, 1973 and prior to May 19, 1978.

<u>40 CFR Part 60, Subpart Ka</u>: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to June 23, 1984. This subpart applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. In addition, this subpart does not apply to petroleum storage vessels with a capacity of less than 420,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer. This subpart does not apply to the Treating Site #7B Compressor Station because all the tanks were constructed after June 23, 1984.

<u>40 CFR Part 60, Subpart Kb</u>: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This subpart applies to storage vessels with a capacity greater than or equal to 75 cubic meters. The subpart does not apply to the storage

vessels at the Treating Site #7B Compressor Station because the facility has no tanks greater than or equal to 75 m<sup>3</sup> that store volatile organic liquids.

40 CFR Part 60, Subpart KKK: Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This subpart applies to compressors and other equipment at onshore natural gas processing facilities. As defined in this subpart, a natural gas processing plant is any processing site engaged in the extraction of natural gas liquids (NGL's) from field gas, fractionation of mixed NGL's to natural gas products, or both. NGL's are defined as the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas. The Treating Site #7B Compressor Station does not extract NGL's from field gas, nor does it fractionate mixed NGL's to natural gas products. Therefore, this subpart does not apply to the Treating Site #7B Compressor Station because it is not a natural gas processing plant as defined in this subpart.

40 CFR Part 60, Subpart LLL: Standards of Performance for Onshore Natural Gas Processing; SO<sub>2</sub> Emissions. This subpart applies to sweetening units and sulfur recovery units at onshore natural gas processing facilities. As defined in this subpart, sweetening units are process devices that separate hydrogen sulfide (H<sub>2</sub>S) and carbon dioxide (CO<sub>2</sub>) from a natural gas stream. Sulfur recovery units are defined as process devices that recover sulfur from the acid gas (consisting of H<sub>2</sub>S and CO<sub>2</sub>) removed by a sweetening unit. The Treating Site #7B Compressor Station does not perform sweetening or sulfur recovery at the facility. Therefore, this rule does not apply.

40 CFR Part 60, Subpart KKKK: Standards of Performance for Stationary Combustion Turbines. This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005. The rule applies to stationary combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour. BP does not operate stationary combustion turbines at the Treating Site #7B Compressor Station. Therefore, this rule does not apply.

#### **National Emissions Standards for Hazardous Air Pollutants (NESHAP)**

<u>40 CFR Part 63, Subpart A (General Provisions)</u>: This subpart contains national emission standards for hazardous air pollutants (HAP's), regulating specific categories of sources that emit one or more HAP's listed under the Clean Air Act. Subpart A applies only to sources that are subject to specific subparts of part 63. As explained below, the Treating Site #7B Compressor Station is not subject to any specific subparts of part 63.

40 CFR Part 63, Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. This subpart applies to the owners and operators of affected units located at natural gas production facilities that are major sources of HAP's, and that process, upgrade, or store natural gas prior to the point of custody transfer, or that process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. The affected units are glycol dehydration units, storage vessels with the potential for flash emissions, and the group of ancillary equipment, and compressors intended to operate in volatile hazardous air pollutant service, which are located at natural gas processing plants.

## Throughput Exemption:

Those sources whose maximum natural gas throughput, as appropriately calculated in 40 CFR 63.760(a)(1)(i) through (a)(1)(iii), is less than 18,400 standard cubic meters per day are exempt from the requirements of this subpart.

# Source Aggregation:

Major source, as used in this subpart, has the same meaning as in 40 CFR 63.2, except that:

- 1.) Emissions from any oil and gas production well with its associated equipment and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units.
- 2.) Emissions from processes, operations, or equipment that are not part of the same facility shall not be aggregated.
- 3.) For facilities that are production field facilities, only HAP emissions from glycol dehydration units and storage tanks with flash emission potential shall be aggregated for a major source determination.

#### Facility:

For the purpose of a major source determination, facility means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in subpart HH. Examples of facilities in the oil and natural gas production category include, but are not limited to: well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

#### Production Field Facility:

Production field facilities are those located prior to the point of custody transfer. The definition of custody transfer (40 CFR 63.761) means the point of transfer after the processing/treating in the producing operation, except for the case of a natural gas processing plant, in which case the point of custody transfer is the inlet to the plant.

# Natural Gas Processing Plant:

A natural gas processing plant is defined in 40 CFR 63.761 as any processing site engaged in the extraction of NGL's from field gas, or the fractionation of mixed NGL's to natural gas products, or a combination of both. A treating plant or gas plant that does not engage in these activities are considered to be production field facilities.

Major Source Determination for Production Field Facilities:

The definition of major source in this subpart (at 40 CFR 63.761) states, in part, that only emissions from the dehydration units and storage vessels with a potential for flash emissions at production field facilities are to be aggregated when comparing to the major source thresholds. For facilities that are not production field facilities, HAP emissions from all HAP emission units shall be aggregated.

#### Area Source Applicability

40 CFR part 63, subpart HH applies to area sources of HAPs. An area source is a HAP source whose total HAP emissions are less than 10 tpy of any single HAP or 25 tpy for all HAPs in aggregate. This subpart requires different emission reduction requirements for triethylene glycol dehydration units found at oil and gas production facilities based on their geographical location. Units located in densely populated areas (determined by the Bureau of Census) and known as urbanized areas with an added 2-mile offset and urban clusters of 10,000 people or more, are required to have emission controls. Units located outside these areas will be required to have the glycol circulation pump rate optimized or operators can document that PTE of benzene is less than 1 tpy.

Applicability of subpart HH to the Treating Site #7B Compressor Station:

The Treating Site #7B Compressor Station does not engage in the extraction of NGLs and therefore is not considered a natural gas processing plant. Hence, the point of custody transfer, as defined in this subpart HH, occurs downstream of the station and the facility would therefore be considered a production field facility. For production field facilities, only emissions from the dehydration units and storage vessels with a potential for flash emissions are to be aggregated to determine major source status. The facility does not have flash tanks and the HAP emissions from the dehydration units alone at the facility are below the major source thresholds of 10 tons per year of a single HAP and 25 tons per year of aggregated HAPs.

With respect to the area source requirements of this subpart, the facility is located outside both an urban area and an urban cluster. Furthermore, uncontrolled benzene emissions from each of the TEG units at the facility were determined to be less than 1 tpy using GRI-GLYCalc Version 4.0, as presented in the supporting documentation in the application. As a result, each dehydration unit at the facility is exempt from the §67.764(d) general requirements for area sources. However, the following general recordkeeping requirement does apply to this facility:

 §63.774(d)(1) – retain the GRI-GLYCalc determinations used to demonstrate that actual average benzene emissions are below 1 tpy.

40 CFR Part 63, Subpart HHH: National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This subpart applies to natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user, and that are a major source of hazardous air pollutant (HAP) emissions. Natural gas transmission means the pipelines used for long distance transport and storage vessel is a tank or other vessel designed to contain an accumulation of crude oil, condensate, intermediate hydrocarbon, liquids, produced water or other liquid and is constructed of wood, concrete, steel or plastic structural support. This subpart does not apply to the Treating Site #7B Compressor Station because it is a natural gas production facility and not a natural gas transmission or storage facility.

40 CFR Part 63, Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This rule establishes national emission limitations and operating limitations for HAPs emitted from stationary reciprocating internal combustion engines (RICE). A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. This rule applies to owners or operators of stationary RICE which are located at a major source of HAP, except if the RICE has a site-rating of 500 brake horse power (bhp) or less. While all stationary RICE with a site-rating of more than 500 bhp located at major sources are subject to the final rule, there are distinct requirements for regulated stationary RICE depending on their design,

use, and fuel. The standards in the final rule have specific requirements for all new or reconstructed RICE and for existing spark ignition 4 stroke rich burn (4SRB) stationary RICE. With the exception of the existing spark ignition 4SRB stationary RICE, other types of existing stationary RICE (i.e., spark ignition 2 stroke lean burn (2SLB), spark ignition 4 stroke lean burn (4SLB), compression ignition (CI), stationary RICE that combust landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, emergency, and limited use units) located at a major source of HAP emissions are not subject to any specific requirement under the final rule.

A stationary RICE is existing if construction or reconstruction of the unit commenced before December 19, 2002. A stationary RICE is new if construction of the unit commenced on or after December 19, 2002. A stationary RICE is reconstructed if the definition of reconstruction in '63.2 is met and reconstruction commenced on or after December 19, 2002.

The Treating Site #7B Compressor Station is not a major HAP source. Therefore, the Treating Site #7B Compressor Station is not subject to the RICE MACT.

**Prevention of Significant Deterioration (PSD):** New major stationary sources of air pollution and major modifications to major stationary sources are required by the Clean Air Act (CAA) to obtain an air pollution permit before commencing construction. Furthermore, when a minor source (one that does not meet the definition of "major,") makes a physical change or change in the method of operation that is by itself a major source, that physical or operational change constitutes a major stationary source that is subject to PSD review.

A major stationary source is any source type belonging to a list of 28 source categories which emits or has the potential to emit 100 tons per year or more of any pollutant subject to regulation under the CAA or any other source type which emits or has the potential to emit such pollutants in amounts equal to or greater than 250 tons per year.

A review of the Treating Site #7B applications, other submittals, and the establishment of federally enforceable requirements to control one of it's engines, indicates that it is not a major stationary source under the definition of 40 CFR 52.21(b)(1) for any pollutant. In addition, based upon the information provided, it appears that the construction sequence at the Treating Site #7B Compressor Station has not triggered Prevention of Significant Deterioration permitting requirements at 40 CFR 52.21. Therefore, this facility has not been required to obtain a PSD permit.

**Compliance Assurance Monitoring (CAM) Rule:** The CAM rule (40 CFR part 64) applies to each Pollutant Specific Emission Unit (PSEU) at a part 71 major stationary source that meets a three-part test. The PSEU must be 1) subject to an emission limitation or standard, 2) use a control device to achieve compliance, and 3) have pre-control emissions that exceed the major source threshold.

While TS7B-1 has a pre-control potential to emit greater than 100 tons per year of NOx and CO, according to 40 CFR 64.2(b)(vi), CAM requirements do not apply to any emission unit that is subject to an emission limit or standard for which an applicable requirement specifies a continuous compliance determination method. The permit conditions for this controlled engine will require demonstrations through semi-annual stack gas concentration monitoring of NOx and CO, parametric monitoring, and maintenance activities. These proposed conditions are sufficient to provide a reasonable assurance of continuous compliance and allow BP to make an informed

certification of compliance. Therefore, the Treating Site #7B Compressor Station is not subject to CAM requirements.

## 5. Conclusion

Since the Treating Site #7B Compressor Station is located in Indian country, the State of Colorado=s implementation plan does not apply to this source. In addition, no tribal implementation plan (TIP) has been submitted and approved for the Southern Ute Tribe, and EPA has not promulgated a Federal implementation plan (FIP) for the area of jurisdiction governing the Southern Ute Indian Reservation. Therefore, the Treating Site #7B Compressor Station is not subject to any implementation plan.

Based on the information provided in BP=s application for the Treating Site #7B Compressor Station, EPA has no evidence that this source is subject to any existing applicable Federal CAA programs except those established in this Federal Operating Permit and the requirements of the Federal operating permit program at 40 CFR part 71.

EPA recognizes that, in some cases, sources of air pollution located in Indian country are subject to fewer requirements than similar sources located on land under the jurisdiction of a state or local air pollution control agency. To address this regulatory gap, EPA is in the process of developing national regulatory programs for preconstruction review of major sources in nonattainment areas and of minor sources in both attainment and nonattainment areas. These programs will establish, where appropriate, control requirements for sources that would be incorporated into part 71 permits. To establish additional applicable, federally-enforceable emission limits, EPA Regional Offices will, as necessary and appropriate, promulgate Federal Implementation Plans (FIPs) that will establish Federal requirements for sources in specific areas. EPA will establish priorities for its direct federal implementation activities by addressing as its highest priority the most serious threats to public health and the environment in Indian country that are not otherwise being adequately addressed. Further, EPA encourages and will work closely with all tribes wishing to develop Tribal Implementation Plans (TIPs) for approval under the Tribal Authority Rule. EPA intends that its Federal regulations created through a FIP will apply only in those situations in which a tribe does not have an approved TIP.

#### 6. General EPA Authority To Issue Part 71 Permits

Title V of the Clean Air Act requires that EPA promulgate, administer, and enforce a Federal operating permits program when a state does not submit an approvable program within the time frame set by title V or does not adequately administer and enforce its EPA-approved program. On July 1, 1996 (61 FR 34202), EPA adopted regulations codified at 40 CFR 71 setting forth the procedures and terms under which the Agency would administer a Federal operating permits program. These regulations were updated on February 19, 1999 (64 FR 8247) to incorporate EPA's approach for issuing Federal operating permits to major stationary sources in Indian country.

As described in 40 CFR 71.4(a), EPA will implement a part 71 program in areas where a state, local, or tribal agency has not developed an approved part 70 program. Unlike states, Indian tribes are not required to develop operating permits programs, though EPA encourages tribes to do so. See, e.g., Indian Tribes: Air Quality Planning and Management (63 FR 7253, February 12, 1998) (also known as the "Tribal Authority Rule"). Therefore, within Indian country, EPA believes it is generally appropriate that EPA administer and enforce a part 71 Federal operating

permits program for stationary sources until tribes receive approval to administer their own operating permits programs.

# 7. <u>Use Of All Credible Evidence</u>

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source and EPA in such determinations.

# 8. Public Participation

#### a. Public Notice

As described in 40 CFR 71.11(a)(5), all part 71 draft operating permits shall be publicly noticed and made available for public comment. The Public Notice of permit actions and public comment period is described in 40 CFR 71(d).

There was a 30 day public comment period for actions pertaining to a draft permit. Public notice was given for this draft permit by mailing a copy of the notice to the permit applicant, the affected state, tribal and local air pollution control agencies, the city and county executives, the State and Federal land managers and the local emergency planning authorities which have jurisdiction over the area where the source is located. A copy of the notice was provided to all persons who have submitted a written request to be included on the mailing list. If you would like to be added to our mailing list to be informed of future actions on these or other Clean Air Act permits issued in Indian country, please send your name and address to the contact listed below:

Kathleen Paser, Part 71 Permit Contact U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202

Public notice was published in the <u>Durango Herald</u> on July 20, 2007, giving opportunity for public comment on the draft permit and the opportunity to request a public hearing.

# b. Opportunity for Comment

Members of the public were given an opportunity to review a copy of the draft permit prepared by EPA, the application, this Statement of Basis for the draft permit, and all supporting materials for the draft permit. Copies of these documents were available at:

La Plata County Clerk=s Office 1060 East 2<sup>nd</sup> Avenue Durango, Colorado 81302

Southern Ute Indian Tribe Environmental Programs Office 116 Mouache Drive Ignacio, Colorado 81137 US EPA Region 8 Air and Radiation Program Office 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202

All documents were available for review at the U.S. EPA Region 8 office Monday through Friday from 8:00 a.m. to 4:00 p.m. (excluding Federal holidays).

Any interested person could submit written comments on the draft part 71 operating permit during the public comment period to the Part 71 Permit Contact at the address listed above. All comments were considered and answered by EPA in making the final decision on the permit. EPA keeps a record of the commenters and of the issues raised during the public participation process.

Anyone, including the applicant, who believed any condition of the draft permit was inappropriate could raise all reasonable ascertainable issues and submitted all arguments supporting their position by the close of the public comment period. Any supporting materials submitted must have been included in full and may not be incorporated by reference, unless the material had already been submitted as part of the administrative record in the same proceeding or consisted of State or Federal statutes and regulations, EPA documents of general applicability, or other generally available reference material.

## c. Opportunity to Request a Hearing

A person could submit a written request for a public hearing to the Part 71 Permit Contact, at the address listed above, by stating the nature of the issues to be raised at the public hearing. Based on the number of hearing requests received, EPA may have held a public hearing whenever it finds there is a significant degree of public interest in a draft operating permit. EPA would provide public notice of the public hearing. If a public hearing was held, any person could submit oral or written statements and data concerning the draft permit.

#### d. Appeal of permits

Within 30 days after the issuance of a final permit decision, any person who filed comments on the draft permit or participated in the public hearing may petition to the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or participate in the public hearing may petition for administrative review, only if the changes from the draft to the final permit decision or other new grounds were not reasonably foreseeable during the public comment period. The 30 day period to appeal a permit begins with EPA=s service of the notice of the final permit decision.

The petition to appeal a permit must include a statement of the reasons supporting the review, a demonstration that any issues were raised during the public comment period, a demonstration that it was impracticable to raise the objections within the public comment period, or that the grounds for such objections arose after such a period. When appropriate, the petition may include a showing that the condition in question is based on a finding of fact or conclusion of law which is clearly erroneous; or, an exercise of discretion, or an important policy consideration which the Environmental Appeals Board should review.

The Environmental Appeals Board will issue an order either granting or denying the petition for review, within a reasonable time following the filing of the petition. Public notice of the grant of review will establish a briefing schedule for the appeal and state that any interested person may file

an amicus brief. Notice of denial of review will be sent only to the permit applicant and to the person requesting the review. To the extent review is denied, the conditions of the final permit decision become final agency action.

A motion to reconsider a final order shall be filed within 10 days after the service of the final order. Every motion must set forth the matters claimed to have been erroneously decided and the nature of the alleged errors. Motions for reconsideration shall be directed to the Administrator rather than the Environmental Appeals Board. A motion for reconsideration shall not stay the effective date of the final order unless it is specifically ordered by the Board.

# e. Petition to reopen a permit for cause

Any interested person may petition EPA to reopen a permit for cause, and EPA may commence a permit reopening on its own initiative. EPA will only revise, revoke and reissue, or terminate a permit for the reasons specified in 40 CFR 71.7(f) or 71.6(a)(6)(i). All requests must be in writing and must contain facts or reasons supporting the request. If EPA decides the request is not justified, it will send the requester a brief written response giving a reason for the decision. Denial of these requests is not subject to public notice, comment, or hearings. Denials can be informally appealed to the Environmental Appeals Board by a letter briefly setting forth the relevant facts.

#### f. Notice to affected states/tribes

As described in 40 CFR 71.11(d)(3)(i), public notice will be given by mailing a copy of the notice to the air pollution control agencies of affected states, tribal and local air pollution control agencies which have jurisdiction over the area in which the source is located, the chief executives of the city and county where the source is located, any comprehensive regional land use planning agency and any state or Federal land manager whose lands may be affected by emissions from the source. The following entities were notified:

- State of Colorado, Department of Public Health and Environment
- State of New Mexico, Environment Department
- Southern Ute Indian Tribe, Environmental Programs Office
- Ute Mountain Ute Tribe, Environmental Programs
- Navajo Tribe, Navajo Nation EPA
- Jicarilla Tribe, Environmental Protection Office
- La Plata County, County Clerk
- Town of Ignacio, Mayor
- National Park Service, Air, Denver, CO
- U.S. Department of Agriculture, Forest Service, Rocky Mountain Region
- Carl Weston
- San Juan Citizen Alliance
- Rocky Mountain Clean Air Action