Air Pollution Control Title V Permit to Operate Statement of Basis for Final Permit No. V-C-0001-06.00 First Permit Renewal September 2008

Williston Basin Interstate Pipeline Company Hardin Compressor Station Crow Reservation Big Horn County, Montana

1. Facility Information

a. Location

The Williston Basin Interstate Pipeline Company (WBI) Hardin Compressor Station is located on the Crow Indian Reservation in the south central part of the State of Montana. The physical address is 2981 Sarpy Creek Road in Hardin, Montana. It is located at SW ¹/₄ SE ¹/₄ of Section 17, Township 1 South, Range 34 East, and 45° 44' 19.9314" N latitude, and -107° 32' 38.3994" W longitude, at an elevation of 2,970 feet above mean sea level. The facility is located in Big Horn County, Montana. The mailing address is:

Hardin Compressor Station Williston Basin Interstate Pipeline Company (subsidiary of WBI Holdings, Inc.) P.O. Box 131 Glendive, Montana 59330

b. Contacts

The Company Contact:

Todd Senescall, Staff Engineering Asst. WBI Holdings, Inc. Post Office Box 131 Glendive, Montana 59330 (406) 359-7200

The Responsible Official:

Scott A. Fradenburgh Director of Pipeline Operations Williston Basin Interstate Pipeline Company Post Office Box 131 Glendive, Montana 59330 (406) 359-7225 The Facility Contact: Bob Schomer WBI Hardin Compressor Station Post Office Box 131 Glendive, Montana 59330 (406) 665-2281

The Tribal Contact: Roberta Fitch Harjo, Dir. Environmental Protection Program Crow Tribe P.O. Box 159 Crow Agency, Montana 59022 (406) 638-3700

c. Description of operations

The Hardin Compressor Station is owned and operated by WBI. The Hardin Compressor Station is a natural gas boosting facility located in south central Montana. The facility is located within the exterior boundaries of the Crow Indian Reservation.

The Hardin Compressor Station provides natural gas compression along the transmission line. The gas is compressed from approximately 300 psig to approximately 780 psig at maximum normal operating conditions and does not exceed 800 psig which is the maximum allowable. The compressor station is a booster along the gas transmission system. A small portion of the natural gas is taken off the compression line to be used as fuel for the units to run the station.

The Hardin Compressor Station is a major source subject to the part 71 operating permit requirements due to its potential emissions of nitrogen oxides (NOx) and carbon monoxide (CO). The potential emissions, in tons per year (tpy) are 399 tpy for NOx and 654 tpy for CO.

d. Permitting and/or construction history

Hardin Compressor Station commenced operation in 1954. The four Ingersoll-Rand 62K VG 660BHP reciprocating engines were installed in 1954. In 1999, the Waukesha Model F1197G, 100 kW generator set was added and replaced a 60 kW Buda model JL 1535 generator that was originally installed in the 1950s.

EPA issued an initial title V (part 71) Permit to Operate to the Hardin Compressor Station on June 17, 2002. EPA has never modified the initial permit. This Statement of Basis supports the final first renewal of the initial title V operating permit.

EPA has no record of any federal New Source Review (NSR) permitting activity, at this facility.

e. List of all units and emission-generating activities

WBI provided in its renewal application the information contained in Tables 1 and 2. Table 1 lists emission units and emission generating activities. Emission units identified as "insignificant" are listed separately in Table 2.

Part 71 allows sources to separately list in the permit application units or activities that qualify as "insignificant" based on potential emissions below 2 tpy for all regulated pollutants that are not listed as a

hazardous air pollutant (HAP) under Clean Air Act (CAA) section 112(b) and below 1,000 lbs/year or the de minimis 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 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.

Table 1 - Emission UnitsWilliston Basin Interstate Pipeline CompanyHardin Compressor Station

Emission Unit Id.	D	Control Equipment	
	5.94 MMBtu/hr, Ingersoll-Rand	None	
	Compressor Engines. Natural g		
Unit 1	Serial Number: 62NL846	Installed: 1954	
Unit 2	Serial Number: 62NL847	Installed: 1954	
Unit 3	Serial Number: 62NL848	Installed: 1954	
Unit 4	Serial Number: 62NL849	Installed: 1954	
	1.305 MMBtu/hr, Waukesha F1	197G, 100 kW Generator Set. Natural	None
	gas fired:		
GEN-1	Serial Number: 1109881	Installed: 1999	

Table 2 - Insignificant Emission UnitsWilliston Basin Interstate Pipeline CompanyHardin Compressor Station

Description
45 - Valves on station piping, potential fugitive natural gas emissions
149 -Flanges on station piping, potential fugitive natural gas emissions
10 - Open-ended lines on station piping, potential fugitive natural gas emissions
10 - Pressure relief valves on station piping, potential fugitive natural gas emissions
1 - 1.95 MM Btu/hr natural gas fired plant boiler (space heating)
1 - 30,000 Btu/hr natural gas-fired domestic water heater
1 - 40,000 Btu/hr natural gas fired domestic water heater
1 - 70,000 Btu/hr natural gas fired shop heater
1 - 75,000 Btu/hr natural gas-fired auxiliary building heater
1 - 50,000 Btu/hr natural gas furnace
1 - 175,000 Btu/hr natural gas heater
1 - 1,000 gallon used oil tank
1 - 1,000 gallon ethylene glycol storage tank
1 - 1,200 gallon ethylene glycol storage tank
1 - 3,200 gallon ethylene glycol/water storage tank
1 - 500 gallon methanol storage tank
2 - 2,630 gallon above ground steel new oil storage tanks
1 - 1,000 gallon waste water tank
1 - 1,000 gallon slop tank
1 - Office air conditioning unit, installed 1998
In-plant vehicle traffic
Repair and maintenance activities

f. Potential to emit

Potential to emit (PTE) means the maximum capacity of WBI's Hardin Compressor Station to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the Hardin Compressor Station to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, may be treated as part of its design <u>if</u> the limitation is enforceable by EPA. PTE is meant to be a worse case emissions calculation. Actual emissions may be much lower.

There are no emission controls on the four natural gas-fired compressor engines [Units 1 - 4] or the natural gas fired Waukesha generator set (GEN-1). Table 3 includes PTE data provided by WBI in its renewal application.

Emission Unit ID	Regulated Air Pollutants							
	NO _x (tpy)	VOC (tpy)	SO ₂ (tpy)	PM ₁₀ (tpy)	CO (tpy)	Lead (tpy)	HAP (tpy)	CH ₂ O (tpy)
Unit 1	95.6	2.8	0.01	0.3	159.3	0.0	0.48	0.4
Unit 2	95.6	2.8	0.01	0.3	159.3	0.0	0.48	0.4
Unit 3	95.6	2.8	0.01	0.3	159.3	0.0	0.48	0.4
Unit 4	95.6	2.8	0.01	0.3	159.3	0.0	0.48	0.4
GEN 1	16.8	0.3	0.00	0.06	16.8	0.0	0.09	0.09
IEUs and Fugitive Emissions*	0.0	0.19	0.00	0.0	0.0	0.0	<0.02	<0.02
TOTAL	399	11.69	0.04	1.3	654	0	2.03	1.71

Table 3 - Potential to Emit in Tons per YearWilliston Basin Interstate Pipeline CompanyHardin Compressor Station

* Fugitive emission sources include connections, flanges, open-ended lines, pumps, valves, etc. and were estimated using American Petroleum Institute (API) emission factors

 NO_x - oxides of nitrogen

VOC - volatile organic compounds

 SO_2 - sulfur dioxide

PM₁₀ - particulate matter with a diameter 10 microns or less

CO - carbon monoxide CH₂O – formaldehyde

HAP - hazardous air pollutants (see Clean Air Act Section 112(b))

IEUs – Insignificant Emission Units

The PTE of regulated pollutants for the facility as a whole are as follows:

Nitrogen Oxides (NOx) – 399 tpy Carbon Monoxide (CO) – 654 tpy Volatile Organic Compounds (VOC) – 11.69 tpy Small Particulates (PM_{10}) – 1.3 tpy Sulfur Dioxide (SO₂) – 0.04 tpy Total Hazardous Air Pollutants (HAPs) – 2.03 tpy Largest Single HAP (formaldehyde, CH₂O) – 1.71 tpy

g. Actual emissions

In its application, WBI speciated the actual VOC emissions from the Hardin Compressor Station into the respective HAPs, and it is provided in Table 4.

Emission	Hazardous Air Pollutant (tpy)						
Unit Ia.	Acetaldehyde	Acrolein	Benzene	Formaldehyde	Toluene	Xylenes	
Unit 1	0.025	0.0225	0.03	0.42	0.01	0.01	
Unit 2	0.025	0.0225	0.03	0.42	0.01	0.01	
Unit 3	0.025	0.0225	0.03	0.42	0.01	0.01	
Unit 4	0.025	0.0225	0.03	0.42	0.01	0.01	
GEN1	<0.01	0.00	< 0.01	<0.01	< 0.01	<0.01	
Fug	0.00	0.00	<0.01	0.00	<0.01	<0.01	
TOTAL	0.10	0.09	0.12	1.67	0.05	0.05	

Table 4 - Hazardous Air Pollutant Actual Emissions for 2006Williston Basin Interstate Pipeline CompanyHardin Compressor Station

2. Tribe Information

a. Indian country

The Hardin Compressor Station is located within the exterior boundaries of the Crow Indian Reservation and is, therefore, within Indian country, as defined at U.S.C. 18 §1151. The Crow Indian Tribe does not have a federally approved CAA title V operating permits program nor does EPA's approval of the State of Montana's title V operating permits program extend to Indian country. Thus, EPA is the appropriate government entity to issue the title V permit to the Hardin Compressor Station.

b. The Reservation

The Crow Indian Reservation is located in south-central Montana adjacent to the Wyoming border and is characterized by "checkerboard" ownership, including lands held in trust by the Federal Government for the Crow Tribe, individual tribal allotments held in trust, fee lands, and other federal lands. The land within the exterior boundaries of the Crow Indian Reservation comprises approximately 2.2 million acres that lie in an area about 100 miles wide (east to west) and 60 miles long (north to south). Crow Agency is the headquarters of the Crow Tribe, and Billings is the closest city to the north, at 10 miles north of the Reservation border. Sheridan, Wyoming is the closest city to the south, located 15 miles south of the Reservation border. U.S. Census Bureau data from 2000 indicate that there were 6,894 people living on the Reservation, of which 5,165 were Native Americans, and approximately 1,725 were non-Indians living within the exterior boundaries of the Crow Reservation. Currently available information from the Crow Tribe indicates the number of enrolled tribal members is 11,357, with 8,143 members (71.1%) residing on the Reservation.

c. Tribal government

The Crow Indian Tribe was originally governed by the Constitution of the <u>Crow Indian Tribe</u> <u>Indian Reservation, Montana</u> adopted in June 24, 1948, and approved May 23, 1949. The Crow Indian Tribe repealed its 1948 Constitution and By-Laws in July 2001, replacing it with the Crow Constitution and By-Laws of 2001, which established three branches of government, the Executive, Legislative, and Judicial branches for governance of the Crow Indian Tribe. The new constitution provides a separation and balance of power between the branches and an independent Tribal Court. The Legislative body of the Crow Indian Tribe consists of six legislative districts with three elected representatives from each district serving terms of 4 years. The Executive Branch consists of 4 elected officers Chairman, Vice-Chairman, Secretary and Vice-Secretary also serving terms of 4 years.

d. Local air quality and attainment status

The Crow Indian Reservation is in south-central Montana. According to the Montana Air Monitoring Network Review, 2003: "Due to the diverse nature of the terrain and climate in this region, dispersion characteristics are variable. Mountainous terrain can provide shelter from prevailing winds and severely limit dispersion of pollutants in one area while funneling high winds into another to greatly enhance the dispersion." The topography of the Reservation includes the northern end of the Bighorn Mountains in the south and the Wolf Mountains in the east. The Bighorn River and its tributaries drain a valley approximately 50 to 60 miles wide on the Reservation. No air monitoring stations on the Reservation currently report data to AQS; however, recent air monitoring in nearby areas of Big Horn County (including the vicinities of Hardin and Decker) show no exceedences of the PM₁₀ standard. The Reservation is believed to have generally good air quality.

e. Airshed designation

The Northern Cheyenne Indian Reservation, which is adjacent to the east and shares the airshed with the Crow Reservation, is a redesignated Class I airshed. The Northern Cheyenne Reservation is located southeast and 25 miles downwind of the Hardin Compressor Station.

3. Applicable Requirements

a. <u>Applicable requirement review</u>

Based on the information provided by WBI in its part 71 permit renewal application, the Hardin Compressor Station is subject to the following applicable requirements:

Stratospheric Ozone and Climate Protection - Subpart F

Recycling and Emissions Reduction (Air Conditioning Units): The Hardin Compressor Station has an air conditioning unit, installed in 1998, which is located in the "office" building. The 1 ½ ton air conditioning unit is charged with an R22 refrigerant. The Hardin Compressor Station must comply with the standards of 40 CFR part 82, subpart F for recycling and emissions reduction, if it services, maintains,

repairs, or disposes of the air conditioning unit in any way. Specifically, the Hardin Compressor Station must comply with §§82.156, 82.158, 82.161 and 82.166(i).

Off Permit Changes and Alternative Operating Scenarios

The initial part 71 operating permit for Hardin Compressor Station allowed for compressor engine replacement or overhaul. The draft renewal permit continues this allowance and contains updated conditions based on the promulgation of new applicable NSPS and NESHAP rules since issuance of the initial permit. Language has been included in the final permit to allow for off permit replacement of individual compressor engines with engines of the same make, model, heat input capacity rating, and configured to operate in the same manner as the engine being replaced, provided that each replacement satisfies the provisions in the Off Permit Changes section of the final permit specific to engine replacement. The primary purpose of the Off Permit Changes provisions is to ensure that NESHAP and NSPS requirements are not triggered and that PSD permitting requirements are not circumvented by off permit changes. Related language has also been included in the Alternative Operating Scenarios section in the final renewal permit.

Additionally, WBI requested in its permit application the allowance of alternative operating scenarios for shutdown and startup sequences necessitated by emergency, maintenance, or changes in transportation volume demand. According to WBI, when one of these sequences is initiated for maintenance purposes, any system components requiring repair are isolated by closing appropriate inlet and discharge valves. Internal pressure is dissipated to the atmosphere through a relief/blowdown valve, subsequent to component isolation. The compressors themselves are relieved of internal pressure through a vent stack after a unit shut-down to facilitate subsequent startup. Unit startup involves purging of the compressor cylinders and bottles. Additionally, the U.S. Department of Transportation (DOT) mandates an emergency shutdown (ESD) system at the facility. Block valves close to isolate the entire facility during an ESD sequence, which can be triggered either manually or by atmospheric gas detection, and facility pressure is relieved to the atmosphere. DOT requires one ESD trial per year in order to confirm integrity of the system.

EPA Region 8 does not provide allowances for excess emissions during periods of startup, shutdown, maintenance, or malfunctions in part 71 permits issued from this office. As stated in guidance dated February 15, 1983, and titled <u>Policy on Excess Emissions During Startup</u>, Shutdown, Maintenance, and Malfunctions:

"Startup and shutdown of equipment are considered part of the normal operation of a source and should be accounted for in the planning, design, and implementation of the process and control equipment. Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emissions limitations during such periods."

The determination of whether excess emissions during such periods are a violation of the CAA shall be at the discretion of EPA's Office of Enforcement, Compliance, and Environmental Justice, and will be based on information available to EPA, which may include, but not be limited to monitoring results, review of operating and maintenance procedures, manufacturer's specifications, industry practices,

or inspection of the facility. Therefore, this requested operating scenario has not been incorporated into the final permit as an allowed alternative operating scenario.

It should also be noted that when approving terms and conditions for reasonably anticipated operating scenarios identified by sources, EPA must be certain that such terms and conditions of the alternative operating scenario meet all applicable requirements [40 CFR 71.6(a)(9)(iii)]. Since WBI stated in the application that it could not quantify expected emissions during startup or shutdown sequences, EPA would not have been able to approve the requested alternative operating scenarios, had it otherwise been allowed.

However, the Alternative Operating Scenarios section of the final permit maintains the provision contained in the initial permit that requires maintenance and operation in a manner consistent with good air pollution control practices for minimizing emissions.

b. Other requirements considered

The following Federal applicable requirements have been considered for applicability to WBI's Hardin Compressor Station. Based on information supplied by WBI in its application, it was determined that the Hardin Compressor Station is **not** subject to these requirements.

Stratospheric Ozone and Climate Protection - 40 CFR Part 82, Subpart H

Halon Emissions Reduction (Halon Fire Extinguishers): Based on the information provided by WBI, there are no halon fire extinguishers at the Hardin Compressor Station; therefore, 40 CFR part 82, subpart H for halon emission reduction does not apply. However, should WBI obtain, 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 the part 71 permit.

Chemical Accident Prevention Program

Based on the information provided by WBI, the Hardin Compressor Station is part of a pipeline facility, as defined at 49 CFR 192.3, and is regulated by the DOT under 49 CFR part 192. The definition of "stationary source" does not apply to transportation of any regulated substance that is subject to oversight or regulation under 49 CFR parts 192, 193, or 195. Therefore, the Hardin Compressor Station is not subject to the requirements of 40 CFR part 68.

Prevention of Significant Deterioration (PSD)

A review of the Hardin Compressor Station application shows that it is a major stationary source, according to the definition in 40 CFR 52.21(b)(1), of NOx and CO emissions. As explained below, this facility has not yet been required to obtain a PSD permit. However, any major modification or net emissions increase associated with a modification to this facility would require that the Hardin

Compressor Station obtain a pre-construction permit pursuant to federal regulations at 40 CFR 52.21(b)(2).

In its initial part 71 permit application, WBI provided information relating to the construction history of Hardin Compressor Station.

The Hardin Compressor Station commenced operation in 1954, prior to promulgation of 40 CFR part 52. Hardin Compressor Station was, therefore, considered an existing facility when the rule became effective and was not required to obtain a PSD pre-construction permit. EPA has no record of any federal permitting activity at this facility other than the initial title V operating permit.

The Waukesha Model F1197G, 100 kW generator set was installed in 1999 and replaced a 60 kW Buda model JL 1535 generator set. Based upon the information provided, it appears that this construction sequence at the Hardin Compressor Station did not trigger PSD permitting requirements of 40 CFR 52.21, because the PTE of the modification was 16.8 tpy each for both NOx and CO emissions, which is below the significance thresholds for emissions increases of 40 tpy (NOx) and 100 tpy (CO), respectively (Table 5).

Install Date	Emission Unit	NOx potential emissions (tpy)	CO potential emissions (tpy)
1954	Unit 1 Reciprocating Engine Unit 2 Reciprocating Engine Unit 3 Reciprocating Engine Unit 4 Reciprocating Engine	95.6 95.6 95.6 95.6	159.3 159.3 159.3 159.3
	FACILITY PTE FOR 1954 EXISTING SOURCE (status: existing major PSD source)	382.4	637.2
1999	GEN1 Generator	16.8	16.8
	SUBTOTAL OF 1999 MODIFICATION (minor modification to existing major PSD source)	16.8	16.8
	FACILITY PTE AFTER 1999 MODIFICATION (status: existing major PSD source)	399.2	654

 Table 5 – Summary of Construction Sequence in Relation to PSD Permitting Requirements

 Hardin Compressor Station

Note: this table only considers the major emitting units for the pollutant with current PTE above the major source threshold of 250 tpy. Installation dates for insignificant units was not required on the application forms. Best judgement indicates including the minimal IEU emissions at the appropriate time frame in the calculations illustrated in this table would not affect the outcome of the analysis.

New Source Performance Standards (NSPS)

<u>40 CFR Part 60, Subpart A</u>: General Provisions. This subpart applies to the owner or operator of any stationary source that contains an affected facility, the construction or modification of which is

commenced after the date of publication of any standard in part 60. The general provisions under subpart A apply to sources that are subject to the specific subparts of part 60.

The Hardin Compressor Station is not subject to any specific subparts of 40 CFR part 60. Therefore, the general provisions of 40 CFR part 60 do not apply.

<u>40 CFR Part 60, Subpart Dc</u>: Standards of Performance for Small Industrial Commercial -Institutional Steam Generating Units. This rule applies to steam generating units with a maximum design heat input capacity between 10 MMBtu/hour and 100 MMBtu/ hour, which were constructed, modified or reconstructed after June 9, 1989.

This subpart does not apply to the Hardin Compressor Station's 1.96 MMBtu/hr natural gas-fired Weil-McLein (Model Number LBG-16S, installed in December 1991) plant boiler (space heater), because the unit has a capacity less than 10 MMBtu/hour.

<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 rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. Subpart K does not apply 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 used oil tank, the slop oil tank, or the two new oil tanks at the Hardin Compressor Station because their storage capacities are less than 40,000 gallons.

<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 rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. Subpart Ka 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 used oil tank, the slop oil tank, or the two new oil tanks at the Hardin Compressor Station because their storage capacities are less than 40,000 gallons.

<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 rule applies to storage vessels with a capacity greater than or equal to 75 cubic meters used to store volatile organic liquids (VOLs).

All tanks at the Hardin Compressor Station have a capacity less than 75 cubic meters (approximately 19,813 gallons); therefore, this rule does not apply.

<u>40 CFR Part 60, Subpart KKK</u>: Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This rule 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 from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. Natural gas liquids are defined as the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas.

The Hardin Compressor Station does not extract or fractionate natural gas liquids from field gas and therefore does not meet the definition of a natural gas processing plant under this subpart.

<u>40 CFR Part 60, Subpart LLL</u>: Standards of Performance for Onshore Natural Gas Processing; SO₂ Emissions. This rule 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 (H₂S) and carbon dioxide (CO₂) from a sour natural gas stream. Sulfur recovery units are defined as process devices that recover sulfur from the acid gas (consisting of H₂S and CO₂) removed by a sweetening unit.

The Hardin Compressor Station does not perform sweetening or sulfur recovery at the facility and therefore is not subject to this subpart.

<u>40 CFR Part 60, Subpart JJJJ</u>: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. This subpart establishes emission standards and compliance requirements for the control of emissions from stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification or reconstruction after June 12, 2006, where the SI ICE are manufactured on or after specified manufacture trigger dates. The manufacture trigger dates are based on the engine type, fuel used, and maximum engine horsepower.

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator [See 40 CFR 60.4230(a)].

All four of the Ingersoll-Rand 62KVG stationary SI ICE and the generator currently operating at the Hardin Compressor Station (Units 1-4 and GEN 1) commenced construction, reconstruction, or modification prior to June 12, 2006. Therefore, this subpart does not apply under the Current Operating Scenario and would not apply under an Alternative Operating Scenario if replacement engines commence construction, reconstruction, or modification prior to June 12, 2006 or the cost of an engine overhaul is less than 50 percent of the cost to purchase a new engine. *However, if any future replacement compressor engines commence construction, modification, or reconstruction on or after June 12, 2006, the off permit changes provision in the permit will not be allowed and the replacement will require a minor modification to the permit so that conditions can be added to the permit to cover applicable general provisions of part 60, and specific applicable requirements of NSPS, subpart JJJJ. Replacement or overhaul of the generator would also be subject to the same requirements.*

<u>40 CFR Part 60, Subpart KKKK</u>: 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. There are no combustion turbines operated at the Hardin Compressor Station; therefore, this rule does not apply.

National Emissions Standards for Hazardous Air Pollutants (NESHAP)

<u>40 CFR Part 63, Subpart A</u>: General Provisions. This subpart contains national emissions standards for HAPs that regulate specific categories of sources that emit one or more HAP regulated pollutants under the CAA. The general provisions under subpart A apply to sources that are subject to the specific subparts of part 63.

As explained below, the Hardin Compressor Station is not subject to any specific standards of 40 CFR part 63; therefore the facility is not subject to the general provisions of 40 CFR part 63, subpart A.

<u>40 CFR Part 63, Subpart HH</u>: 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 HAPs, 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 HAP service, which are located at natural gas processing plants.

Throughput Exemption

Those sources whose maximum natural gas throughput, as appropriately calculated in 63.760(a)(1)(i) through (a)(1)(ii), 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 §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 processing plant, and natural gas processing plants.

Production Field Facility

Production field facilities are those located prior to the point of custody transfer. 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 Natural Gas Liquids (NGLs) from field gas, or the fractionation of mixed NGLs to natural gas products, or a combination of both. A treating plant or compression facility that does not engage in these activities is considered to be a production field facility.

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 locations. 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 Hardin Compressor Station

The Hardin Compressor Station does not process, upgrade or store natural gas. The Hardin Compressor Station is a booster station along the natural gas transmission line. Therefore it is not subject to subpart HH.

<u>40 CFR Part 63, Subpart HHH</u>: National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This rule 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 major sources of HAP emissions. Natural gas transmission means the pipelines used for long distance transport, and storage facility 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. A compressor station that transports natural gas prior to the point of custody transfer or to a natural gas processing plant (if present) is not considered a part of the natural gas transmission and storage source category.

The Hardin Compressor Station meets the definition of a natural gas transmission and storage facility. However, the Hardin Compressor Station is not a major source of HAP emissions. Additionally, the rule defines the affected source as "each glycol dehydration unit." Since the Hardin Compressor Station does not have any glycol dehydration units and it is not a major source of HAP emissions, it is not subject to subpart HHH.

<u>40 CFR Part 63, Subpart YYYY</u>: National Emission Standards for Hazardous Air Pollutants from Stationary Combustion Turbines. This rule establishes national emission limitations and work practice standards for HAPs emitted from Stationary Combustion Turbines. The affected source includes the stationary combustion turbine located at a major source of HAP emissions.

The Hardin Compressor Station does not have any stationary combustion turbines and is not a major source of HAP; therefore, this subpart does not apply.

<u>40 CFR Part 63, Subpart ZZZZ</u>: 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).

This rule applies to owners or operators of new and reconstructed stationary RICE of any horsepower rating which are located at a <u>major or area</u> source of HAP. While all stationary RICE located at major or area sources are subject to the final rule (promulgated January 18, 2008, amending the final rule promulgated June 15, 2004), there are distinct requirements for regulated stationary RICE depending on their design, use, horsepower rating, fuel, and major or area HAP emission status.

Major HAP Sources

The standard now applies to engines with a horsepower rating of less than or equal to 500 hp in addition to those engines with a horsepower rating greater than 500 hp. The standard continues to have specific requirements for new or reconstructed RICE and for existing SI 4 stroke rich burn (4SRB) stationary RICE located at a major HAP facility.

With the exception of the existing SI 4SRB stationary RICE, other types of existing stationary RICE (i.e., SI 2 stroke lean burn (2SLB), SI 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.

Existing RICE: A stationary RICE with a site rating of greater than 500 hp is existing at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced before December 19, 2002. A stationary RICE with a site rating of less than or equal to 500 hp is existing at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced before June 12, 2006.

New RICE: A stationary RICE with a site rating of greater than 500 hp is new at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after December 19, 2002. A stationary RICE with a site rating of less than or equal to 500 hp is new at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after June 12, 2006.

Area (minor) HAP Sources

The standard now has specific requirements for new and reconstructed stationary RICE located at minor sources of HAPs, for engines with horsepower ratings less than, equal to, or greater than 500 hp. The area source standards for new stationary RICE reference the requirements of NSPS JJJJ for Spark Ignition Internal Combustion Engines. Existing RICE located at an area HAP source are not subject to any specific requirement under the final rule.

Existing RICE: A stationary RICE is existing at an area source of HAP emissions if construction or reconstruction of the unit commenced before June 12, 2006. The area source standards do not apply to existing stationary RICE.

New RICE: A stationary RICE is new at an area source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after June 12, 2006.

Applicability of subpart ZZZZ to the Hardin Compressor Station

None of the engines at this facility are subject to the major source MACT standards at subpart ZZZZ since the PTE is below the major source threshold of 25 tpy for the aggregate of HAP emissions and below 10 tpy for any single HAP.

Generator GEN 1 was constructed in 1999 and has not been reconstructed or modified since, according to the definitions in §63.2; therefore it is not subject to the new area source standards. Engine Units 1 through 4 were constructed in 1954 and have not been reconstructed or modified, according to the definitions in §63.2, since June 12, 2006; therefore, the engines are not subject to the new area source standards. WBI has performed temporary engine swing-outs in order to perform maintenance on the compressor engines, as allowed by the Alternative Operating Scenarios and Off Permit Changes provisions of the initial permit. *However, if any of the compressor engines Units 1 through 4 are replaced by engines that commence construction, modification, or reconstruction on or after June 12, 2006, replacement using the off permit changes provisions will not be allowed and will require a minor modification to the permit so that conditions can be added to the permit to cover applicable general provisions of part 60, and specific applicable requirements of NSPS, subpart JJJJ.*

Compliance Assurance Monitoring (CAM) Rule

According to 40 CFR 64.2(a), the CAM rule applies to <u>each</u> Pollutant Specific Emission Unit (PSEU) that meets the following three criteria: 1) is subject to an emission limitation or standard; 2) uses a control device to achieve compliance; and 3) has pre-control emissions that exceed or are equivalent to the major source threshold.

None of the emission units at Hardin Compressor Station are subject to an emission limit or use add-on control devices to achieve compliance; therefore, none of the emission units are subject to the CAM requirements.

c. Conclusion

Since the Hardin Compressor Station is located in Indian country, the State of Montana's implementation plan does not apply to this source. In addition, no tribal implementation plan (TIP) has been submitted and approved for the Crow Tribe, and EPA has not promulgated a federal implementation plan (FIP) for the area of jurisdiction governing the Crow Indian Reservation. Therefore, the Hardin Compressor Station is not subject to any implementation plan.

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 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 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.

4. EPA Authority

a. General authority to issue part 71 permits

Title V of the CAA 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 part 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 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 will administer and enforce a part 71 federal operating permits program for stationary sources until a tribe receives approval to administer their own operating permits program.

5. Use of All Credible Evidence

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.

6. Public Participation

a. Public notice

There was a 30-day public comment period for actions pertaining to the draft permit. Public notice was given for the 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 also 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:

Claudia Smith, Part 71 Permit Contact U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202-1129

Public Notice was published in the <u>Billings Gazzette</u> and the <u>Big Horn County News</u> on July 31, 2008, 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 the opportunity to review a copy of the draft permit prepared by EPA, the application, the statement of basis for the draft permit, and all supporting materials for the draft permit. Copies of these documents were available at:

Big Horn County, County Clerk and Recorder 121 3rd Street Hardin, Montana 59034-0908 (406) 665-9730

and

Crow Tribe Baacheeitche Avenue Crow Agency, Montana 59022 (406) 638-3715

and

U.S. EPA Region 8 Montana Operations Office Federal Building 10 West 15th Street, Suite 3200 Helena, MT 59626 (406) 457-2690

and

U.S. EPA Region 8 Air Program Office 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202-1129 (303) 312-6520

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. EPA keeps a record of the commenters and of the issues raised during the public participation process. All comments have been considered and answered by EPA in making the final decision on the permit.

Anyone, including the applicant, who believed any condition of the draft permit was inappropriate could raise all reasonable ascertainable issues and submit 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 have been incorporated by reference, unless the material was already 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 in section 8.a above, by stating the nature of the issues to be raised at the public hearing. No request for a public hearing was received.

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 was given by mailing a letter notifying 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. Per the notification letter these affected Stakeholders could request a copy for review of the draft permit and Statement of Basis prepared by EPA. The following entities were notified:

State of Montana, Department of Environmental Quality State of Wyoming, Department of Environmental Quality Crow Tribe, Chairman, Crow Tribal Council Crow Tribe, Environmental Protection Program Office Big Horn County, County Clerk and Recorder Northern Cheyenne Tribe, Department of Environmental Protection City of Billings, Montana, Mayor City of Sheridan, Wyoming, Mayor National Park Service, Air, Denver, CO U.S. Department of Agriculture, Forest Service, Rocky Mountain Region