AIR QUALITY DIVISION
CHAPTER 6, SECTION 3
OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
122 West 25th Street
Cheyenne, Wyoming 82002

PERMIT NO. 3-2-096-2

Issue Date: **June 17, 2013**
Expiration Date: **February 24, 2014**
Effective Date: **June 17, 2013**
Replaces Permit No.: **3-2-096-1**

In accordance with the provisions of W.S. §35-11-203 through W.S. §35-11-212 and Chapter 6, Section 3 of the Wyoming Air Quality Standards and Regulations,

Bentonite Performance Minerals, LLC
Colony Grinding Plant
Section 11, Township 56 North, Range 61 West
Crook County, Wyoming

is authorized to operate a stationary source of air contaminants consisting of emission units described in this permit. The units described are subject to the terms and conditions specified in this permit. All terms and conditions of the permit are enforceable by the State of Wyoming. All terms and conditions of the permit, except those designated as not federally enforceable, are enforceable by EPA and citizens under the Act. A copy of this permit shall be kept on-site at the above named facility.

Steven A. Dietrich — 6-17-13
Steven A. Dietrich, Administrator — Date
Air Quality Division

James A. Ogle — 6/19/13
Todd Parfitt, Director — Date
Department of Environmental Quality

WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

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GENERAL INFORMATION
(modified March 6, 2012)

Company Name: Bentonite Performance Minerals, LLC

Mailing Address: 554 US Hwy 212

City: Belle Fourche State: SD Zip: 57717

Plant Name: Colony Grinding Plant

Plant Location: Section 11, Township 56 North, Range 61 West, Crook County, Wyoming (20 miles west of Belle Fourche, South Dakota, on highway 212)

Plant Mailing Address: 554 US Hwy 212

City: Belle Fourche State: SD Zip: 57717

Name of Owner: Halliburton Energy Services, Inc. Phone: (281) 575-4018

Responsible Official: **Ron Speidel** Phone: **(307) 896-8519**

Alternate Responsible Official: Chip Miller *Phone: (307) 896-2596*
(Amended October 5, 2012)

Plant Manager/Contact: **Ron Speidel** Phone: **(307) 896-8519**

DEQ Air Quality Contact: District 3 Engineer Phone: (307) 673-9337
2100 West 5th Street
Sheridan, WY 82801

SIC Code: 1459

Description of Process: The Colony Grinding Plant is a bentonite clay processing plant. Raw bentonite clay is transported to the plant by haul trucks and stored in outside storage piles to field dry. The clay is worked with farm equipment to reduce the large chunks and promote drying. Clay from the storage piles is crushed and then dried using roll crushers and three 27-MMBtu/hr rotary dryers fired primarily on coal; natural gas is used for start-up and as a back-up fuel. The crushed and dried (C&D) bentonite from the dryers is stored in silos. A small portion is stockpiled outside for bulk rail loadout or used as feedstock material for other processes.

Plant products include: C&D bulk bentonite, granular bentonite, "Baramix" foundry premix products, and "Quik-gel" well field drilling products. These products are sold in bulk and/or smaller bags and are shipped offsite by truck or railcar.

Particulate emissions from the C&D process are controlled by an electrostatic precipitator (ESP) in combination with a multiclone. The ESP controls additional processes throughout the plant along with individual fabric filters.

SOURCE EMISSION POINTS

(modified March 6, 2012) (modified June 17, 2013)

This table may not include any or all insignificant activities at this facility.

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 PERMITS/WAIVERS
	C&D Process Sources		
BV1	Fuel Coal Silo (**bin vent**)	50 TPH	MD-260
ESP	Dryers, Raymond Mills, Granular Packer, Granular Loadout, misc. (electrostatic precipitator-ESP)	64 TPH	MD-260, MD-603A
DBBH	**Dry Bin Dust Collector, Nuisance Dust, SWECOs (cartridge)**	**60 TPH**	**MD-13654**
DDBH	C&D Storage Bunker (baghouse)	64 TPH	AP-2001A
DDBH-2	**C&D Storage Bunker (second baghouse)**	**69.5 TPH**	**wv-10710**
CDRLB	C&D Rail Loadout (baghouse)	850 TPH	MD-1310
	Bulk Process Sources		
BV2	Bulk Bentonite Silo **P** 1 (**bin vent**)	50 TPH	MD-260
BV3	Bulk Bentonite Silo **P** 2 (**bin vent**)	50 TPH	MD-260, **MD-13654**
BV4	Bulk Bentonite Silo **P** 3 (**bin vent**)	50 TPH	MD-260, **wv-12269**
BV13	200-Mesh Surge Bin (cartridge)	50 TPH	AP-J67
BV14	200-Mesh Silo **P** 4 (cartridge)	50 TPH	AP-J67
DPJ	200-Mesh Loadout (baghouse)	50 TPH	AP-J67
PPPSP	Powder Packer/Palletizer (baghouse)	60 TPH	AP-8299
BRLSP	Powder Rail and Truck, Granular Truck Loadout (baghouse)	70 TPH	MD-603A
	Granular Process Sources		
GBH1	Granular Silo #1 (**cartridge**)	15 TPH	AP-1657
GBH2	Granular Silo #2 (**cartridge**)	15 TPH	AP-1656
GBH3	Granular Silo #3 (**cartridge**)	15 TPH	AP-1652
BV6	Granular Receiving Bins (cartridge)	25 TPH	MD-603A
MEGBH	Megatex Screening System (baghouse)	69.5 TPH	AP-2174
MM1&2	**Mt. Mover Storage Units**	**5600 TPY**	**AP-9502**
MME1&2	**(2) Caterpillar 3116 diesel engines**	**86 hp each**	**AP-9502**
	Quik-Gel Process Sources		
BV15	Bore-Gel Silo **P** 5 (baghouse)	50 TPH	MD-603A
MK1	Bore-Gel **Screens, Packer** (baghouse)	25 TPH	MD-603A, **wv-9598**
	Baramix Facility Sources		
BV7	Crude Coal Silo **B-1** (baghouse)	30 TPH	MD-260
BV8	Coal Mill/Silo **B-4** (baghouse)	10 TPH	AP-1145, **wv-11193**
BV5	Baramix Silo **B-2** (bin vent bag filter)	25 TPH	AP-1145
BV9	Baramix Silo **B-3** (**bin vent**)	20 TPH	MD-260
DC3	Baramix Silo **B-5** (**Dixie Cup**)	15 TPH	MD-260
DC4	Baramix Silo **B-6** (**Dixie Cup**)	15 TPH	MD-260
BV12	Baramix Blender/Additives (baghouse)	25 TPH	MD-260
DC5	Baramix Packer Bin (**Dixie Cup**)	50 TPH	AP-1145

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 PERMITS/WAIVERS
BV11	Baramix Finished Silo **B-7** (baghouse)	20 TPH	MD-260
BV10	Baramix Truck Loadout (baghouse)	50 TPH	MD-260
Sly4	Baramix Sly **Baghouse** (baghouse)	30 TPH	MD-260
Grout Plant			
GSBH	Grout System **Mix Tanks, Packer (cartridge)**	2 TPH	AP-8512
Fuel Burning Equipment Sources			
HTRS	Misc. Building Heaters (29), **Gas Firing**	0.02 to 0.20 MMBtu/hr	None
Fugitives and Tanks			
HR1-4	Haul Roads/Vehicle/Front End Loader Operations	N/A	**MD-603A**
SP1-**3**	Material Stockpiles	N/A	None
CB1-2	Coal Unloading Bunkers	N/A	None
MT1-**7**	Material Transfer **(MT3 controlled by DDBH & DDBH-2, MT4 controlled by CDRLB)**	N/A	None
DDB	C&D Storage Bunker **(controlled by DDBH & DDBH-2)**	N/A	AP-2001A
RLO-1	**Granular Rail Loadout (controlled by ESP)**	**200,000 TPY**	**None**
CDRLO	C&D Rail Loadout **(controlled by CDRLB)**	**175,000 TPY**	MD-1310
RLO-3	**Powder Rail Loadout (controlled by BRLSP)**	**200,000 TPY**	**None**
TLO-1	**Powder Truck Loadout (controlled by BRLSP)**	**50,000 TPY**	**None**
TLO-2	**Granular Truck Loadout (controlled by BRLSP)**	**50,000 TPY**	**None**
TLO-3	**Baramix Truck Loadout (controlled by BV10)**	**50,000 TPY**	**None**
TLO-4	**200 Mesh Truck Loadout (controlled by DPJ)**	**N/A**	**None**
TLO-5	**C&D Storage Pile Truck Loadout**	**525 TPY**	**wv-12930**

TOTAL FACILITY ESTIMATED EMISSIONS
(modified June 17, 2013)

For informational purposes only. These emissions are not to be assumed as permit limits.

POLLUTANT	EMISSIONS (TPY)
CRITERIA POLLUTANT EMISSIONS	
Particulate Matter	**248**
PM_{10} Particulate Matter	**190**
Sulfur Dioxide (SO_2)	**194**
Nitrogen Oxides (NO_X)	**237**
Carbon Monoxide (CO)	**8**
Volatile Organic Compounds (VOCs)	**1.6**
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS	**6.9**

Emission estimates are from the operating permit application. The permittee used AP-42 emission factors for estimating CO emissions. HAP emissions include HCl and HF emissions from coal combustion.

FACILITY-SPECIFIC PERMIT CONDITIONS

Facility-Wide Permit Conditions

(F1) SULFUR DIOXIDE EMISSIONS INVENTORY [WAQSR Chapter 14, Section 3]
If actual SO_2 emissions from the facility are 100 TPY or more in calendar year 2000 or any subsequent year, the permittee shall comply with the requirements of WAQSR Ch 14, Sec 3, with the exemptions described in Ch 14, Sec 3(a).

(a) SO_2 emissions shall be estimated in accordance with Ch 14 Sec 3(b), and adjusted in accordance with Ch 14 Sec 3(c) if necessary.

(b) Records used in the calculation of SO_2 emissions shall be maintained in accordance with Ch 14, Sec 3(b).

(c) Reports of SO_2 emissions shall be submitted to the Division in accordance with Ch 14, Sec 3(b) and (c).

Source-Specific Permit Conditions

(F2) VISIBLE AND PARTICULATE EMISSIONS [WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permits/Waivers MD-260, MD-603A, MD-1310, AP-J67, AP-1145, AP-1652, AP-1656, AP-1657, AP-2174, AP-2001A, AP-8299, AP-8512, **AP-9502, wv-9598, wv-10710, wv-11193, wv-12269, and MD-13654**; 40 CFR 60 Subpart OOO] **(modified March 6, 2012) (modified June 17, 2013)**

(a) Visible and particulate emissions from the units listed in Table I shall not exceed the specified limits.

(b) The PPPSP baghouse shall be operated and maintained during all bentonite processing operations. Visible emissions from the baghouse shall not exceed 7 percent opacity, and visible emissions from any other source associated with the PPPSP system shall not exceed 20 percent opacity, as determined by Method 9 of 40 CFR, part 60, Appendix A. **Visible emissions from the Mt. Mover storage trailers, filtering socks (MM1&2), and conveyor transfer points shall not exceed 7 percent opacity as determined by Method 9 of 40 CFR, part 60, Appendix A. Upon the completion of the replacement of BV3 with a CamCorp Model CA 9 cartridge bin vent filter, visible emissions from the new bin vent filter BV3 shall be limited to 7% opacity. Visible emissions from baghouse DBBH shall be limited to 20% opacity as determined by 40 CFR 60, Appendix A, Method 9.**

(c) **Visible emissions from the diesel fired engines (MME1&2) shall not exceed 30 percent opacity except for periods not exceeding ten consecutive seconds. This limitation shall not apply during a reasonable period of warmup following a cold start or where undergoing repairs and adjustment following a malfunction.**

(d) Visible emissions of any contaminant discharged into the atmosphere from any other single emission source shall not exhibit greater than 20 percent opacity except for one period or periods aggregating not more than six minutes in any one hour of not more than 40 percent opacity.

Table I: Visible and Particulate Emission Limits

SOURCE ID#	SOURCE DESCRIPTION		VISIBLE EMISSION (OPACITY) LIMITS	PARTICULATE EMISSION LIMITS		
			percent	lb/hr	TPY	gr/dscf
BRLSP	Powder Rail and Truck, Granular Truck Baghouse		7	0.8		0.02
BV1	Fuel Coal Silo Baghouse		20[a]			0.02
BV2	Bulk Silo **P 1 Bin Vent**		20[a]			0.02
BV3[b]	Bulk Silo **P 2 Bin Vent**	**Existing**	20[a]			0.02
BV3	**Bulk Silo P 2 Bin Vent**	**Replacement**	**7**	**0.2**		**0.005**
BV4	Bulk Silo **P 3 Bin Vent**		**7**	**0.4**		**0.014**
BV5	Baramix Silo **B-2** Bin Vent Bag Filter		7			0.022
BV6	Granular Receiving Cartridge		7	0.14		0.02
BV7	Crude Coal Silo **B-1** Baghouse		20[a]			0.02
BV8	Coal Mill/Silo **B-4** Baghouse		**20**	0.3		0.02
BV9	Baramix Silo **B-3 Bin Vent**		20[a]			0.02

Table I: Visible and Particulate Emission Limits					
SOURCE ID#	SOURCE DESCRIPTION	VISIBLE EMISSION (OPACITY) LIMITS	PARTICULATE EMISSION LIMITS		
		percent	lb/hr	TPY	gr/dscf
BV10	Baramix Truck Loadout Baghouse	7			0.02
BV11	Baramix Finished Silo **B-7** Baghouse	7			0.02
BV12	Baramix Blender/Additives Baghouse	20 [a]			0.02
BV13	200-Mesh **Surge Bin** Cartridge	7			0.022
BV14	200-Mesh Silo **P 4** Cartridge	7			0.022
BV15	Bore-Gel Silo **P** 5 Baghouse	7	0.08		0.02
CDRLB	C&D Rail Loadout Baghouse	7	5.6	24.4	0.01
DC3	Baramix Silo **B-5 Dixie Cup**	20 [a]			0.02
DC4	Baramix Silo **B-6 Dixie Cup**	20 [a]			0.02
DC5	Baramix Packer Bin **Dixie Cup**	7			0.022
DBBH	**Dry Bin Dust Collector Cartridge**	**20 [a]**	**0.5**		**0.005**
DDBH	C&D Storage Bunker Baghouse	7	0.9		0.01
DDBH-2	**C&D Storage Bunker Second Baghouse**	7	**0.4**	**1.8**	**0.005**
DPJ	200-Mesh Loadout Baghouse	7	0.8	3.4	0.022
ESP	Dryers, misc. ESP	20 [a]	20.7	90.7	
GBH1	Granular Silo #1 **Cartridge**	20	0.2		0.02
GBH2	Granular Silo #2 **Cartridge**	20	0.2		0.02
GBH3	Granular Silo #3 **Cartridge**	7	0.2		0.02
GSBH	Grout System **Cartridge**	**40 CFR 60, Subpart OOO §60.674(c)** [c]	0.1		0.01
MEGBH	Megatex Screening System Baghouse	7	1.3		0.01
MK1	Bore Gel **Screens, Packer** Baghouse	7	**0.8**	**3.7**	**0.01**
MM1&2	**(2) Mt. Mover Storage Units (each)**	7			**0.022**
PPPSP	Powder Packer Palletizer Baghouse	7	2.0	8.9	0.02
Sly4	Baramix Sly Baghouse	20 [a]	1.0	4.4	
HTRS	Misc. Building Heaters (29)	20 [a]			

[a] Visible emissions per F2(b)

[b] **Emission limits associated with the existing BV3 will be superseded by the replacement BV3 emission limits when the new CamCorp Model CA 9 cartridge bin vent filter BV3 is installed.**

[c] **On March 6, 2013, 40 CFR 60, Subpart OOO §60.674(c) required quarterly 30-minute inspections using EPA Method 22.**

(F3) FUGITIVE EMISSIONS [WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permits MD-603A, MD-1310, waiver AP-2001A, **and wv-12930**; 40 CFR 60 Subpart OOO] **(modified June 17, 2013)**

(a) All unpaved portions of the haul roads, **access roads** and work areas shall be treated with water and/or chemical dust suppressants on a schedule sufficient to control fugitive dust from vehicular traffic and wind erosion.

(b) Fugitive emissions associated with the 500 ton storage silo/bucket elevator, granular truck loadout system, any transfer points on belt conveyors, or other affected facility under 40 CFR 60 Subpart OOO **shall comply with the opacity limits in Table 3 to Subpart OOO. On March 6, 2013, Subpart OOO required that fugitive emissions from affected facilities that commenced construction, modification, or reconstruction between August 31, 1983 and April 22, 2008** shall not exceed 10 percent opacity**; fugitive emissions associated with any affected facility that commenced construction, modification, or reconstruction after April 22, 2008 shall not exceed 7 percent opacity.**

(c) All fugitive emissions sources associated with the C&D Storage Pile Truck Loadout (TLO-5) shall be limited to 20 percent opacity as determined by 40 CFR 60, Appendix A, Method 9.

(i) **The permittee may load up to 15 trucks per year with a maximum of 525 tons per year of crushed and dried bentonite when railcars are unavailable.**

(d) Fugitive emissions from any other sources shall **be minimized in compliance with the standards in Ch 3, Sec 2(f) of the WAQSR for construction/demolition activities and handling and transportation of materials.**

(F4) NO_X EMISSIONS [WAQSR Ch 3, Sec 3 and Ch 6, Sec 2 Permit MD-603A]

(a) NO_X emissions from the ESP stack shall not exceed 83.5 lb/hr and 233.3 TPY.

(b) NO_X emissions from each of the heaters (HTRS) shall not exceed 0.20 lb/MMBtu heat input.

(F5) SO_2 EMISSIONS [WAQSR Ch 6, Sec 2 Permits MD-260 and MD-603A]

(a) SO_2 emissions from the ESP stack shall not exceed 52.0 lb/hr and 193.4 TPY.

(b) The sulfur content of the dryer fuel coal shall not exceed 1.2 percent.

(F6) COAL USAGE LIMITS AND **ENGINE REQUIREMENTS** [WAQSR Ch 6, Sec 2 Permits/Waivers MD-603A, **AP-9502] (modified March 6, 2012) (modified June 17, 2013)**

(a) **Reserved**

(b) On a calendar year basis, the annual coal usage for the dryers shall not exceed 28,032 tons.

(c) **Each diesel engine (MME1&2) shall not exceed 730 hours of annual operation. The permittee shall operate and maintain non-resettable hour meters to demonstrate compliance with the hours limit.**

(d) Should an engine break down or require an overhaul, the permittee may bring on site and operate a temporary replacement engine until repairs are made. Permanent replacement of an engine must be evaluated by the Division under Ch 6, Sec 2 of WAQSR to determine appropriate permitting action and evaluate the need for additional requirements resulting from the permanent replacement.

(i) The temporary replacement unit shall be identical or similar to the unit replaced with emission levels at or below those of the unit replaced.

(ii) The permittee shall notify the Division in writing of such replacement within five working days, provide the date of startup of the replacement engine, and provide a statement regarding the applicability of any New Source Performance Standards (NSPS) in 40 CFR, Part 60 and/or the applicability of any National Emission Standards for Hazardous Air Pollutants (NESHAPs) in 40 CFR, Part 63.

Testing Requirements

(F7) ESP EMISSIONS TESTING [W.S. 35-11-110 and WAQSR Ch 6, Sec 3(h)(i)(C)(I)]

(a) The permittee shall measure NO_X emissions from the ESP stack at least once every year, and particulate and SO_2 emissions at least once every five years.

(i) For NO_X emissions, Methods 1-4 and 7 or 7E shall be used to assess compliance with the hourly emission limit specified in condition F4. The permittee shall also measure the amount of coal consumed during testing to calculate a pounds of NO_X emitted per ton of coal burned coal emission factor, using the Division approved "Coal Consumption Plan" attached as Appendix A.

(ii) For SO_2 emissions, Methods 1-4 and 6 or 6C shall be used to assess compliance with the hourly limit specified in condition F5. In addition, the permittee shall record coal consumption, coal sulfur content and calculated sulfur retention.

(iii) For particulate emissions, Methods 1-4, and 5 shall be used to assess compliance with the limits specified in condition F2.

(b) Testing shall be conducted in accordance with WAQSR Chapter 5, Section 2(h).

(F8) ADDITIONAL EMISSIONS TESTING [W.S. 35-11-110]

(a) The Division reserves the right to require additional testing as provided under condition G1 of this permit. Should testing be required, test methods found at 40 CFR 60, Appendix A, shall be used as follows:

(i) For visible emissions, Method 9 shall be used.

(ii) For particulate emissions, Methods 1-4, and 5 shall be used.

(iii) For SO_2 emissions, Methods 1-4 and 6 or 6C shall be used.

(iv) For NO_X emissions, Methods 1-4 and 7 or 7E shall be used.

(v) For alternative test methods, or methods used for other pollutants, the approval of the Administrator must be obtained prior to using the test method to measure emissions.

(b) Unless otherwise specified, testing shall be conducted in accordance with WAQSR Ch 5, Sec 2(h).

Monitoring Requirements

(F9) PARTICULATE AND VISIBLE EMISSIONS MONITORING
[WAQSR Ch 6, Sec 3(h)(i)(C)(I); Ch 7, Sec 3(c)(ii); **Ch 6, Sec 2 waivers AP-9502, wv-9598, wv-10710, wv-11193, wv-12930, and MD-13654] (modified March 6, 2012) (modified June 17, 2013)**

(a) The permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix B of this permit, for particulate emissions from the baghouse (BRLSP, BV1, BV2, BV3, BV4, BV7, BV8, BV9, BV10, BV11, BV12, BV15, CDRLB, DC3, DC4, **DBBH**, DDBH, **DDBH-2**, DPJ, GSBH, MEGBH, MK1, PPPSP, and Sly4), cartridge filter (BV5, BV6, BV13, BV14 and DC5), and ESP controlled equipment, and shall conduct monitoring as follows:

(i) The permittee shall conduct, at minimum once daily, Method 22-like visual observations of each unit listed above, in accordance with the CAM plan, to determine the presence of visible emissions.

(ii) The visual observations shall be conducted by a person who is educated on the general procedures for determining the presence of visible emissions but not necessarily certified to perform Method 9 observations.

(iii) Observation of any visible emissions from any of these units shall prompt immediate inspection and corrective action, or the operating device shut down as soon as possible, depending on the cause of the dust.

(iv) The permittee shall maintain the devices in accordance with the CAM Preventative Maintenance and Inspection Plan attached as Appendix C.

(v) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.

(b) The permittee will follow the monitoring as outlined in paragraph (a)(i-iv) of this condition for the granular silo baghouses (GBH1-3), which are not subject to the requirements of CAM. **The permittee shall conduct visible observations of each Mt. Mover storage trailer (MM1&2) on any day that unit is operating, as outlined in paragraph (a)(ii-iii) of this condition.**

(c) For fugitive emissions, **the permittee** shall conduct monitoring as follows:

(i) The permittee shall conduct, at **a** minimum, quarterly visual observations of the fugitive sources listed in conditions F3(b) **and (c)** to assess compliance with the opacity limits specified in **those** conditions.

(ii) The opacity readings shall be conducted by a qualified observer certified in accordance with Section 3.1 of Method 9 and shall follow the requirements and procedures of Method 9.

(iii) Emissions in excess of the limits specified in conditions F3(b) **and (c)** shall prompt maintenance and/or corrective actions.

(iv) The permittee shall adhere to any additional monitoring or testing requirements of 40 CFR 60 Subpart OOO for fugitive emissions from affected facilities under Subpart OOO.

(d) **Reserved**

(e) The permittee shall monitor the amount of water and/or chemical dust suppressants required to control fugitive dust from vehicular traffic and wind erosion, to ensure compliance with condition F3(a).

(f) The permittee shall conduct observations of visible emissions from the diesel engines (MME1&2) during periodic availability assurance tests of these sources, at least semi-annually, to assess compliance with the opacity limit under condition F2(c) and to identify maintenance needs. Observation of emissions in excess of the limit in condition F2(c) shall prompt corrective action.

(g) For periodic monitoring for visible emissions from the heaters (HTRS), the permittee shall monitor the type of fuel used to ensure natural gas is the sole fuel source for these units.

(F10) NO_X EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I); Ch 6, Sec 2 Permit MD-603A]

(a) The permittee shall perform the testing for NO_X emissions from the ESP stack at least annually, as required by condition F7, to ensure the hourly emission limit specified in condition F4 is not exceeded.

(i) The permittee shall monitor the coal consumed by the dryers on a monthly basis.

(ii) Each calendar month the permittee shall calculate the NO_X emissions for that month based on coal usage and the most recent coal emission factor determined in condition F7. The permittee will track the monthly NO_X emissions to ensure on a calendar year basis, the annual NO_X emission limit in condition F4 is not exceeded.

(b) Based on the size of the NO_X emissions from the heaters (HTRS) and their potential impact on ambient standards, the Division is satisfied that no additional NO_X monitoring is warranted for these sources.

(F11) SO_2 EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I)]

(a) The permittee shall perform the testing for SO_2 emissions from the ESP stack as required by condition F7 at least once every 5 years for comparison with the hourly emission limit specified in condition F5, and to verify the percent sulfur retention of the dry bentonite.

(b) The permittee shall monitor the sulfur content of the coal for each coal shipment.

(c) The permittee shall monitor the operating hours of the #1, #2 and #3 dryers, coal consumption of the dryers, and sulfur content of the coal, to calculate the monthly average SO_2 emission rate in lb/hr from the ESP and to ensure the limits specified in condition F5 are not exceeded. The permittee may assume the percent sulfur retention measured during the most recent testing required by condition F7.

(F12) BENTONITE, COAL USAGE, **AND ENGINE** MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I); **Ch 6, Sec 2 Permits/Waivers AP-9502 <u>and wv-12930</u>] (modified March 6, 2012) (<u>modified June 17, 2013</u>)**

(a) **<u>Reserved</u>**

(b) The permittee shall monitor the coal consumed by the dryers on a monthly basis, to ensure on a calendar year basis, the annual limit specified in condition F6(b) is not exceeded (and to determine NO_X emissions as required by condition F10).

(c) The permittee shall monitor the operating hours of each diesel engine (MME1&2) utilizing the meters required by condition F6(c).

<u>(d) The permittee shall monitor the number of trucks and tons of crushed and dried bentonite loaded per calendar year using the C&D Storage Pile Truck Loadout (TLO-5).</u>

<u>Recordkeeping Requirements</u>

(F13) TESTING AND MONITORING RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)] **<u>(modified June 17, 2013)</u>**

(a) For any testing or monitoring required under conditions F7, F8, **<u>and F25</u>**, other than Method 9 observations, the permittee shall record, as applicable, the following:

(i) The date, place, and time of sampling, measurements, or observations;

(ii) The date(s) the analyses or observations were performed;

(iii) The company or entity that performed the analyses or observations;

(iv) The analytical techniques or methods used;

(v) The results of such analyses or observations; and

(vi) The operating conditions as they existed at the time of sampling, measurement, or observations.

(vii) Any corrective actions taken as a result of a test.

(b) For any Method 9 observations required by the Division under conditions F8 or F9, the permittee shall keep field records in accordance with Section 2.2 of Method 9.

(c) For the NO_X testing required by condition F7, the permittee shall also record the following:

(i) The amount of coal consumed during testing; and

(ii) The calculated pounds of NO_X emitted per ton of coal factor and how the factor was derived.

(d) For the SO_2 testing required by condition F7, the permittee shall also record the following:

(i) The amount of coal and sulfur content of the coal used during the test; and

(ii) The calculated sulfur retention of the bentonite and how it was derived.

(e) The permittee shall retain on-site at the facility, the records of each test, measurement, or observation and support information for a period of at least five years from the date of such information.

(F14) VISIBLE EMISSIONS AND CAM RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II) & Ch 7, Sec 3(i)(ii)] **(modified March 6, 2012) (modified June 17, 2013)**

(a) For the visible emissions monitoring specified under condition F9, the permittee shall record, as applicable, the following:
   (i) The date, place, and time of the observation;
   (ii) The company or entity and individual(s) that performed the observation;
   (iii) The observation techniques or methods used;
   (iv) The observation results;
   (v) The operating conditions as they existed at the time of the observation; and
   (vi) Any corrective actions taken upon observing visible emissions from the sources observed in accordance with condition F9(a) or (b), or for fugitive sources **and the diesel engines (MME1&2),** upon detecting non-compliance with opacity limitations.

(b) For the CAM required under condition F9(a), the permittee shall also maintain records of:
   (i) Maintenance activities for the equipment described in condition F9(a) and any deviations from the Preventative Maintenance and Inspection Plan attached as Appendix C.
   (ii) Any written quality improvement plan required pursuant to WAQSR Chapter 7, Section 3(h), any activities undertaken to implement a Quality Improvement Plan (QIP), and other supporting information required to be maintained under WAQSR Chapter 7, Section 3.

(c) For the Method 9 observations required by the Division under condition F9(c), the permittee shall keep field records in accordance with Section 2.2 of Method 9.

(d) The permittee shall retain on-site at the facility the records of each test, measurement, or observation and support information for a period of at least five years from the date of such information.

(F15) FUGITIVE EMISSIONS CONTROL RECORDS
[WAQSR Ch 6, Sec 3(h)(i)(C)(II)]

(a) For monitoring required under condition F9(e), the permittee shall maintain records of the amounts of water/dust suppressant applied, and dates of applications, to achieve compliance with condition F3(a).

(b) The permittee shall retain on-site at the facility all records kept in accordance with this condition for a period of at least five years from the date such records are generated.

(F16) NO_X EMISSIONS MONITORING RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]

(a) For the NO_X monitoring required under condition F10(a), the permittee shall record the coal consumed by the dryers for each month, to calculate the monthly and, on a calendar year basis, annual NO_X emissions from the ESP stack so that compliance with condition F4(a) can be assessed.

(b) The permittee shall retain on-site at the facility all records kept in accordance with this condition for a period of at least five years from the date such records are generated.

(F17) SO_2 EMISSIONS MONITORING RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]

(a) For the SO_2 monitoring required under condition F11, the permittee shall record the operating hours of the #1, #2, and #3 dryers, coal consumed by the dryers, and the sulfur content of the feed coal to calculate the monthly average SO_2 emission rate in lb/hr (based on the most recent test for percent sulfur retention of the dry bentonite) from the ESP stack so compliance with condition F5 can be assessed.

(b) The permittee shall retain on-site at the facility all records kept in accordance with this condition for a period of at least five years from the date such records are generated.

(F18) BENTONITE, COAL AND ENGINE RECORDS
[WAQSR Ch 6, Sec 3(h)(i)(C)(II); **Ch 6, Sec 2 Permit/Waivers AP-9502, and wv-12930**] **(modified March 6, 2012) (modified June 17, 2013)**

For the monitoring required under condition F12:

(a) **Reserved**

(b) The permittee shall maintain coal usage records such that compliance with the annual coal limit specified in condition F6(b) can be assessed.

(c) **The permittee shall maintain records of the total hours of operation of each diesel engine (MME1&2) for each calendar year.**

(d) **The permittee shall maintain records documenting the date and amount, in tons of crushed and dried bentonite, of each truck loadout when the C&D Storage Pile Truck Loadout (TLO-5) is utilized such that compliance with the annual limit specified in condition F3(c) can be assessed.**

(e) The permittee shall retain on-site at the facility all records kept in accordance with this condition for a period of at least five years from the date such records are generated.

Reporting Requirements

(F19) TEST REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III)]

(a) The permittee shall report the results of the emissions tests required under condition F7, and any testing that may be required under condition F8, within 45 days of conducting the tests.

(b) The reports shall include the information specified under condition F13 and shall be submitted to the Division in accordance with condition G4.

(F20) SEMIANNUAL MONITORING REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III)] **(modified March 6, 2012) (modified June 17, 2013)**

(a) The following shall be reported to the Division by January 31 and July 31 each year, for each semiannual period (January 1 to June 30, and July 1 to December 31):

(i) The results of CAM required under condition F9(a) for the baghouse, cartridge filter and ESP controlled equipment. This shall include the following:

(A) Summary information on the number, duration, and cause of excursions, as applicable, and the corrective actions taken;

(B) Whether the permittee has adhered to the Preventative Maintenance and Inspection Plan attached as Appendix C. Any deviations from this plan must be clearly identified in each report. If the permittee has adhered to the plan during the reporting period, this shall be stated in the report.

(C) A description of the action taken to implement a QIP (if required) during the reporting period as specified in Chapter 7, Section 3(h). Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has reduced the likelihood of similar excursions.

(ii) Summary results of the emissions monitoring required under condition F9(b). Only events where visible emissions were noted need to be included in the report, with a brief description of corrective actions taken.

(iii) Summary results of the emissions monitoring required under conditions F9(c) **and (f).** If noncompliance with opacity limitations is detected, then each opacity measurement and any corrective actions taken upon detecting noncompliance shall be included in the report.

(iv) Assurance, in the form of a statement, confirming that the heaters (HTRS) are firing natural gas as specified in condition F9(g).

(v) For NO_X and SO_2 emissions:

(A) The amount of coal consumed by the dryers;

(B) The tons of NO_X produced;

(C) The average sulfur content of the coal consumed by the dryers calculated for each calendar month;

(D) The average SO_2 emission rate in pounds per hour (lb/hr) for the ESP calculated for each calendar month; and

(E) The tons of SO_2 produced.

(F) The results of the most recent NO_X and SO_2 tests required by condition F7.

(b) All instances of deviations from the conditions of this permit must be clearly identified in each report.

(c) The semiannual reports shall be submitted in accordance with condition G4 of this permit.

(F21) ANNUAL BENTONITE, COAL USAGE, DUST CONTROL, AND **ENGINE** REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III); **Ch 6, Sec 2 Permit Waiver wv-12930] (modified March 6, 2012) (modified June 17, 2013)**

(a) The following shall be reported to the Division by January 31 each year for the previous calendar year:

(i) **Reserved**

(ii) The combined total coal consumption of the dryers; and

(iii) A summary report on the fugitive emissions control measures applied to the unpaved haul roads and plant work areas in accordance with condition F3(a). The reports shall include information from the fugitive emissions control records kept in accordance with condition F15.

(iv) The hours of operation of the Caterpillar engines (MME1&2) during the previous calendar year and any exceedances of the hours of operation limits in condition F6(c).

(v) The total number of trucks and tons of crushed and dried bentonite loaded using the C&D Storage Pile Truck Loadout (TLO-5) and any exceedances of the limits in condition F3(c)(i). If TLO-5 was not utilized during the previous calendar year, this shall be reported.

(b) The reports shall be submitted in accordance with condition G4 of this permit.

(F22) REPORTING EXCESS EMISSIONS & DEVIATIONS FROM PERMIT REQUIREMENTS
[WAQSR Ch 6, Sec 3(h)(i)(C)(III)]

(a) General reporting requirements are described under the General Conditions of this permit. The Division reserves the right to require reports as provided under condition G1 of this permit.

(b) Emissions which exceed the limits specified in this permit and which are not reported under a different condition of this permit shall be reported annually with the emission inventory unless specifically superseded by condition G17, condition G19, or other condition(s) of this permit. The probable cause of such exceedance, the duration of the exceedance, the magnitude of the exceedance, and any corrective actions or preventative measures taken shall be included in this annual report. For sources and pollutants which are not continuously monitored, if at any time emissions exceed the limits specified in this permit by 100 percent, or if a single episode of emission limit exceedance spans a period of 24 hours or more, such exceedance shall be reported to the Division within one working day of the exceedance. (Excess emissions due to an emergency shall be reported as specified in condition G17. Excess emissions due to unavoidable equipment malfunction shall be reported as specified in condition G19.)

(c) Any other deviation from the conditions of this permit shall be reported to the Division in writing within 30 days of the deviation or discovery of the deviation.

(F23) GREENHOUSE GAS REPORTS [W.S. 35-11-110] (modified March 6, 2012)
The permittee shall submit to the Division a summary of any report(s) required to be submitted to the EPA under 40 CFR Part 98.

(a) The reports shall be submitted to the Division within 60 days of submission to EPA, in a format as specified by the Division.

(b) The reports shall be submitted in accordance with condition G4(a)(i) of this permit, to the attention of the Division's Emission Inventory Program. A copy need not be sent to the DEQ Air Quality contact.

Other Requirements

(F24) COMMENCEMENT OF CONSTRUCTION
[WAQSR Ch 6, Sec 2 Permit MD-13654] (modified June 17, 2013)
The date of commencement of construction of the Dry Bin Dust Collector baghouse (DBBH) and the replacement of the Bulk Bentonite Silo P2 baghouse (BV3) shall be reported to the Administrator within 30 days of commencement. Approval to construct or modify shall become invalid if construction is not commenced by November 27, 2014 or if construction is discontinued for a period of 24 months or more. The Administrator may extend this period based on satisfactory justification of the requested extension.

(F25) NOTIFICATION OF START-UP AND PERFORMANCE TESTING
[WAQSR Ch 6, Sec 2 Permits/Waivers wv-12930 and MD-13654] (modified June 17, 2013)

(a) Written notification of the actual date of initial start-up for the C&D Storage Pile Truck Loadout (TLO-5), authorized by waiver wv-12930, is required within 15 days after start-up in accordance with WAQSR Ch 6, Sec 2(i)(ii).

(b) The Division shall be notified within 15 days of the startup of DBBH and the CamCorp Model CA 9 cartridge bin vent filter BV3.

(c) In accordance with WAQSR Ch 6, Sec 2(j), initial performance tests shall be conducted on BV3 and DBBH, within 30 days of achieving maximum design rate but not later than 90 days after initial start-up. If maximum design production rate is not achieved within 90 days of start-up, the Administrator may require testing be done at the rate achieved and again when maximum rate is achieved.

(d) Testing for BV3 shall be conducted as follows:

  (i) PM_{10} particulate emissions: testing shall consist of three 1-hour tests following EPA Reference Methods 1-5 and the requirements of 40 CFR 60, Subpart OOO.

  (ii) Opacity: testing shall follow the requirements of Chapter 5, Section 2(i) of the WAQSR. If no visible emissions are observed during opacity testing, the opacity test can be used in lieu of particulate emission testing described in (i) above as a demonstration of compliance with the particulate emission limits in condition F2.

(e) Testing for DBBH shall be conducted as follows:

  (i) PM_{10} particulate emissions: testing shall consist of three 1-hour tests following EPA Reference Methods 1-5 and the requirements of 40 CFR 60, Subpart OOO.

  (ii) $PM_{2.5}$ particulate emissions: testing shall consist of three 1-hour tests following EPA Reference Methods 1-4 and 201A.

  (iii) Opacity: testing shall follow the requirements of Chapter 5, Section 2(i) of the WAQSR.

(f) (i) Prior to any performance testing required by this permit, a test protocol shall be submitted to the Division for approval, at least 30 days prior to testing.

  (ii) Notification of the test date shall be provided to the Division at least 15 days prior to testing.

  (iii) Results of the tests shall include the information specified under condition F13 and shall be submitted to the Division within 45 days of completing the tests.

(g) DBBH and the CamCorp Model CA 9 cartridge bin vent filter BV3 shall be tested for PM_{10} particulate emissions and opacity every five years following the completion of the initial performance test or the last periodic test. Testing shall follow the requirements outlined above in sections (d), (e) and (f) of this condition.

WAQSR CHAPTER 7, SECTION 3
COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

(CAM-1) COMPLIANCE ASSURANCE MONITORING REQUIREMENTS [WAQSR Ch 7, Sec 3(b) and (c)]

The permittee shall follow the CAM plan attached as Appendix B of this permit and meet all CAM requirements of WAQSR Ch 7, Sec 3 as they apply to the baghouse, cartridge filter and ESP controlled equipment listed in condition F9(a). Compliance with the source specific monitoring, recordkeeping, and reporting requirements of this permit meets the monitoring, recordkeeping, and reporting requirements of WAQSR Ch 7, Sec 3, except for additional requirements specified under conditions CAM-2 through CAM-4.

(CAM-2) OPERATION OF APPROVED MONITORING [WAQSR Ch 7, Sec 3(g)]

(a) At all times, the permittee shall maintain the monitoring under this section, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct all monitoring in continuous operation (or at all required intervals) at all times that the pollutant specific emissions unit is operating.

(c) Upon detecting an excursion, the permittee shall restore operation of the pollutant-specific emission unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices. The response shall include minimizing the period of any start-up, shutdown or malfunction and taking any corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion.

(d) If the permittee identifies a failure to achieve compliance with an emission limit for which the monitoring did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing documents a need to modify the existing indicator ranges, the permittee shall promptly notify the Division and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes.

(CAM-3) QUALITY IMPROVEMENT PLAN (QIP) REQUIREMENTS [WAQSR Ch 7, Sec 3(h)]

(a) If the Division or the EPA Administrator determines, based on available information, that the permittee has used unacceptable procedures in response to an excursion or exceedance, the permittee may be required to develop and implement a Quality Improvement Plan (QIP).

(b) If required, the permittee shall maintain a written Quality Improvement Plan (QIP) and have it available for inspection.

(c) The plan shall include procedures for conducting one or more of the following:

(i) Improved preventative maintenance practices.

(ii) Process operation changes.

(iii) Appropriate improvements to control methods.

(iv) Other steps appropriate to correct control.

(v) More frequent or improved monitoring (in conjunction with (i) - (iv) above).

(d) If a QIP is required, the permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(e) Following implementation of a QIP, upon any subsequent determination under paragraph (a) above, the Division may require the permittee to make reasonable changes to the QIP if the QIP failed to address the cause of control device problems, or failed to provide adequate procedures for correcting control device problems as expeditiously as practicable.

(f) Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limit(s) or any existing monitoring, testing, reporting, or recordkeeping requirements that may be applicable to the facility.

(CAM-4) SAVINGS PROVISIONS [WAQSR Ch 7, Sec 3(j)]

Nothing in the CAM regulations shall excuse the permittee from compliance with any existing emission limit or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may be applicable to the facility.

WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND 40 CFR 60 SUBPART OOO REQUIREMENTS FOR NONMETALLIC MINERAL PROCESSING PLANTS
(modified March 6, 2012) (modified June 17, 2013)

SUBPART OOO REQUIREMENTS [40 CFR 60 **Subparts A and** OOO; and WAQSR Ch 5, Sec 2, **and Ch 6, Sec 2 Permits & Waivers AP-J67, MD-603A, AP-1145, AP-1652, AP-2174, AP-8299, AP-8512, AP-9502, AP-9598, MD-13654**]

The permittee shall meet all **applicable** requirements of 40 CFR 60 **Subparts A and OOO** and WAQSR Ch 5, Sec 2 as they apply **to affected facilities in fixed or portable** nonmetallic mineral processing plants (each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, **and** enclosed truck or railcar loading station that commenced construction, modification, or reconstruction after August 31, 1983), **as specified under §60.670. On March 6, 2013, based on information provided to the Division by the permittee, affected facilities included the sources listed in Table II.**

TABLE II: 40 CFR 60 Subpart OOO Sources			
Commenced construction, modification or reconstruction between August 31, 1983 and April 22, 2008		**Commenced construction, modification or reconstruction on or after April 22, 2008**	
SOURCE ID	SOURCE DESCRIPTION	SOURCE ID	SOURCE DESCRIPTION
BRLSP	Powder Rail and Truck, Granular Truck Loadout	**BV3**	**Bulk Silo P 2**
BV5	Baramix Silo **B-2**	**BV4**	**Bulk Silo P 3**
BV6	Granular Receiving Bins	GSBH	Grout System **Packer**
BV10	Baramix Truck **Loadout**	PPPSP *	Powder Packer Palletizer
BV11	Baramix Finished Silo **B-7**		
BV13	200 Mesh Surge Bin		
BV14	200 Mesh Silo **P 4**		
BV15	**Bore**-Gel Silo **P** 5		
DC5	Baramix Packer Bin		
DPJ	200 Mesh Loadout		
GBH3	Granular Silo #3		
MEGBH	Megatex Screening System		
MK1	**Bore**-Gel **Screens, Packer**		
MM1&2	**Mt. Mover Storage Units 1 & 2**		

*** On March 6 2013, PPPSP was exempt from the requirements of §§60.672, 60.674, and 60.675 per §60.670(d)(1).**

The subparts are available at http://www.gpoaccess.gov/cfr/retrieve.html, or from the Division upon request.

WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND 40 CFR 60 SUBPART IIII REQUIREMENTS FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES
(modified March 6, 2012) (modified June 17, 2013)

SUBPART IIII REQUIREMENTS [40 CFR 60 **Subparts A and** IIII; WAQSR Ch 5, Sec 2]

As applicable, the permittee shall meet **the** requirements of 40 CFR 60 **Subparts A and** IIII and WAQSR Ch 5, Sec 2, as they apply to stationary compression ignition (CI) internal combustion engines. **For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.** An affected source is defined at §60.4200.

On March 6, 2013, according to information provided to the Division by the permittee, affected sources at this facility included the Caterpillar diesel engines (MME1&2).

The subparts are available at http://www.gpoaccess.gov/cfr/retrieve.html, or from the Division upon request.

WAQSR CHAPTER 5, SECTION 3
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS)
40 CFR 63 SUBPART ZZZZ REQUIREMENTS FOR
STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES
(modified March 6, 2012) (modified June 17, 2013)

SUBPART ZZZZ REQUIREMENTS [40 CFR 63 **Subparts A and** ZZZZ; WAQSR Ch 5, Sec 3]

The permittee shall meet all requirements of **40 CFR 63 Subparts A and ZZZZ and WAQSR Ch 5, Sec 3** as they apply to each affected source as indicated in §63.6590**(a).** An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. (As required by condition F6(d), if an engine is replaced or reconstructed, subpart applicability will need to be re-evaluated and a statement regarding applicability submitted to the Division.) This facility is currently identified as an area source of HAP emissions. Affected sources at this facility include the Caterpillar diesel engines (MME1&2).

The subparts are available at http://www.gpoaccess.gov/cfr/retrieve.html, or from the Division upon request.

COMPLIANCE CERTIFICATION AND SCHEDULE

Compliance Certification [WAQSR Ch 6, Sec 3(h)(iii)(E)] **(modified March 6, 2012) (modified June 17, 2013)**

(C1) (a) The permittee shall submit by January 31 each year a certification addressing compliance with the requirements of this permit. The certification shall be submitted as a stand-alone document separate from any monitoring reports required under this permit.

(b) (i) For visible and particulate emissions from the ESP, the permittee shall assess compliance with condition F2 by conducting testing required by condition F7 and monitoring required by condition F9(a).

(ii) For visible and particulate emissions from the other sources listed in Table I of this permit, the permittee shall assess compliance with condition F2 by conducting **the testing and** monitoring required by conditions F9(a), (b) and (f) **and F25**.

(iii) For visible fugitive emissions from haul roads and work areas, the permittee shall assess compliance with condition F3(a) by conducting monitoring required by condition F9(e), and by reviewing records kept in accordance with condition F15.

(iv) For visible fugitive emissions from sources subject to Subpart OOO, the permittee shall assess compliance with condition F3(b) by conducting monitoring required by condition F9(c).

(v) **For visible fugitive emissions from the C&D Storage Pile Truck Loadout (TLO-5), the permittee shall assess compliance with condition F3(c) by conducting the monitoring required by condition F9(c) and F12(d), and by reviewing records kept in accordance with condition F14 and F18(d).**

(vi) For NO_X emissions, the permittee shall assess compliance with condition F4(a) by conducting the monitoring required by condition F10(a).

(vii) For SO_2 emissions and sulfur content of the coal, the permittee shall assess compliance with condition F5 by conducting monitoring required by condition F11.

(viii) For coal usage and **engine operation**, the permittee shall assess compliance with condition F6 by conducting monitoring required by condition F12.

(ix) For greenhouse gas reporting, the permittee shall assess compliance with condition F23 by verifying that reports were submitted in accordance with condition F23(b).

(x) For any unit subject to 40 CFR 60 Subpart OOO, the permittee shall assess compliance with Subpart OOO by conducting any applicable testing and monitoring required by §§60.674 and 60.675, and by reviewing the records required by §60.676.

(xi) For any engine subject to 40 CFR 60 Subpart IIII, the permittee shall assess compliance with Subpart IIII by conducting any applicable testing and monitoring required by §§60.4209, 60.4211, 60.4212, and 60.4213, and by reviewing the records required by §§60.4211 and 60.4214.

(xii) The permittee shall assess compliance with Part 63 Subpart ZZZZ by conducting any applicable testing and monitoring required by §§63.6610 through 63.6640 and by reviewing the records required by §§63.6655 and 63.6665.

(c) The compliance certification shall include:

(i) The permit condition or applicable requirement that is the basis of the certification;

(ii) The current compliance status;

(iii) Whether compliance was continuous or intermittent; and

(iv) The methods used for determining compliance.

(d) For any permit conditions or applicable requirements for which the source is not in compliance, the permittee shall submit with the compliance certification a proposed compliance plan and schedule for Division approval.

(e) The compliance certification shall be submitted to the Division in accordance with condition G4 of this permit and to the Assistant Regional Administrator, Office of Enforcement, Compliance, and Environmental Justice (8ENF-T), U.S. EPA - Region VIII, 1595 Wynkoop Street, Denver, CO 80202-1129.

(f) Determinations of compliance or violations of this permit are not restricted to the monitoring requirements listed in paragraph (b) of this condition; other credible evidence may be used.

Compliance Schedule [WAQSR Ch 6, Sec 3(h)(iii)(C) and (D)]

(C2) The permittee shall continue to comply with the applicable requirements with which the permittee has certified that it is already in compliance.

(C3) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.

GENERAL PERMIT CONDITIONS

Powers of the Administrator: [W.S. 35-11-110]

(G1) (a) The Administrator may require the owner or operator of any point source to complete plans and specifications for any application for a permit required by the Wyoming Environmental Quality Act or regulations made pursuant thereto and require the submission of such reports regarding actual or potential violations of the Wyoming Environmental Quality Act or regulations thereunder.

(b) The Administrator may require the owner or operator of any point source to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions, or provide such other information as may be reasonably required and specified.

Permit Renewal and Expiration: [WAQSR Ch 6, Sec 3(c)(i)(C), (d)(ii), (d)(iv)(B), and (h)(i)(B)] [W.S. 35-11-206(f)]

(G2) This permit is issued for a fixed term of five years. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted at least six months prior to the date of permit expiration. If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit is not a violation of WAQSR Chapter 6, Section 3 until the Division takes final action on the renewal application. This protection shall cease to apply after a completeness determination if the applicant fails to submit by the deadline specified in writing by the Division any additional information identified as being needed to process the application.

Duty to Supplement: [WAQSR Ch 6, Sec 3(c)(iii)]

(G3) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after this permit is issued.

Submissions: [WAQSR Ch 6, Sec 3(c)(iv)] [W.S. 35-11-206(c)]

(G4) Any document submitted shall be certified as being true, accurate, and complete by a responsible official.

(a) Submissions to the Division.

(i) Any submissions to the Division including reports, certifications, and emission inventories required under this permit shall be submitted as separate, stand-alone documents and shall be sent to:

Administrator, Air Quality Division
122 West 25th Street
Cheyenne, Wyoming 82002

(ii) A copy of each submission to the Administrator under paragraph (a)(i) of this condition shall be sent to the DEQ Air Quality Contact listed on page 3 of this permit.

(b) Submissions to EPA.

(i) Each certification required under condition C1 of this permit shall also be sent to:

Assistant Regional Administrator
Office of Enforcement, Compliance, and Environmental Justice (8ENF-T)
U.S. EPA - Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129.

(ii) All other required submissions to EPA shall be sent to:

Office of Partnerships and Regulatory Assistance
Air and Radiation Program (8P-AR)
U.S. EPA - Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

Changes for Which No Permit Revision Is Required: [WAQSR Ch 6, Sec 3(d)(iii)]

(G5) The permittee may change operations without a permit revision provided that:

(a) The change is not a modification under any provision of title I of the Clean Air Act;

(b) The change has met the requirements of Chapter 6, Section 2 of the WAQSR and is not a modification under Chapter 5, Section 2 or Chapter 6, Section 4 of the WAQSR and the changes do not exceed the emissions allowed under the permit (whether expressed therein as a rate of emissions or in terms of total emissions); and

(c) The permittee provides EPA and the Division with written notification at least 14 days in advance of the proposed change. The permittee, EPA, and the Division shall attach such notice to their copy of the relevant permit. For each such change, the written notification required shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield, if one exists for this permit, shall not apply to any such change made.

Transfer of Ownership or Operation: [WAQSR Ch 6, Sec 3(d)(v)(A)(IV)]

(G6) A change in ownership or operational control of this facility is treated as an administrative permit amendment if no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Division.

Reopening for Cause: [WAQSR Ch 6, Sec 3(d)(vii)] [W.S. 35-11-206(f)(ii) and (iv)]

(G7) The Division will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

(a) Additional applicable requirements under the Clean Air Act or the WAQSR that become applicable to this source if the remaining permit term is three or more years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended.

(b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit.

(c) The Division or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

(d) The Division or EPA determines that the permit must be revised or revoked to assure compliance with applicable requirements.

Annual Fee Payment: [WAQSR Ch 6, Sec 3(f)(i), (ii), and (vi)] [W.S. 35-11-211]

(G8) The permittee shall, as a condition of continued operations, submit an annual fee to the Division as established in Chapter 6, Section 3 (f) of the WAQSR. The Division shall give written notice of the amount of fee to be assessed and the basis for such fee assessment annually. The assessed fee is due on receipt of the notice unless the fee assessment is appealed pursuant to W.S. 35-11-211(d). If any part of the fee assessment is not appealed it shall be paid to the Division on receipt of the written notice. Any remaining fee which may be due after completion of the appeal is immediately due and payable upon issuance of the Council's decision. Failure to pay fees owed the Division is a violation of Chapter 6, Section 3 (f) and W.S. 35-11-203 and may be cause for the revocation of this permit.

Annual Emissions Inventories: [WAQSR Ch 6, Sec 3(f)(v)(G)]

(G9) The permittee shall submit an annual emission inventory for this facility to the Division for fee assessment and compliance determinations within 60 days following the end of the calendar year. The emissions inventory shall be in a format specified by the Division.

Severability Clause: [WAQSR Ch 6, Sec 3(h)(i)(E)]

(G10) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Compliance: [WAQSR Ch 6, Sec 3(h)(i)(F)(I) and (II)] [W.S. 35-11-203(b)]

(G11) The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act, Article 2 of the Wyoming Environmental Quality Act, and the WAQSR and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Permit Actions: [WAQSR Ch 6, Sec 3(h)(i)(F)(III)] [W.S. 35-11-206(f)]

(G12) This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Property Rights: [WAQSR Ch 6, Sec 3(h)(i)(F)(IV)]

(G13) This permit does not convey any property rights of any sort, or any exclusive privilege.

Duty to Provide Information: [WAQSR Ch 6, Sec 3(h)(i)(F)(V)]

(G14) The permittee shall furnish to the Division, within a reasonable time, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permit, including information claimed and shown to be confidential under W.S. 35-11-1101 (a) of the Wyoming Environmental Quality Act. Upon request by the Division, the permittee shall also furnish confidential information directly to EPA along with a claim of confidentiality.

Emissions Trading: [WAQSR Ch 6, Sec 3(h)(i)(H)]

(G15) No permit revision is required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

Inspection and Entry: [WAQSR Ch 6, Sec 3(h)(iii)(B)] [W.S. 35-11-206(c)]

(G16) Authorized representatives of the Division, upon presentation of credentials and other documents as may be required by law, shall be given permission to:

- (a) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) sample or monitor any substances or parameters at any location, during operating hours, for the purpose of assuring compliance with this permit or applicable requirements.

Excess Emissions Due to an Emergency: [WAQSR Ch 6, Sec 3(l)]

(G17) The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency, as defined in Ch 6, Sec 3(l)(i) of the WAQSR. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- (b) the permitted facility was, at the time, being properly operated;
- (c) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit;

(d) The permittee submitted notice of the emergency to the Division within one working day of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

Diluting and Concealing Emissions: [WAQSR Ch 1, Sec 4]

(G18) No person shall cause or permit the installation or use of any device, contrivance, or operational schedule which, without resulting in reduction of the total amount of air contaminant released to the atmosphere, shall dilute or conceal an emission from a source. This condition shall not apply to the control of odors.

Unavoidable Equipment Malfunction: [WAQSR Ch 1, Sec 5]

(G19) (a) Any source believing that any emissions in excess of established regulation limits or standards resulted from an unavoidable equipment malfunction, shall notify the Division within 24 hours of the incident via telephone, electronic mail, fax, or other similar method. A detailed description of the circumstances of the incident as described in paragraph 5(a)(i)(A) Chapter 1, including a corrective program directed at preventing future such incidents, must be submitted within 14 days of the onset of the incident. The Administrator may extend this 14-day time period for cause.

(b) The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred.

Fugitive Dust: [WAQSR Ch 3, Sec 2(f)]

(G20) The permittee shall minimize fugitive dust in compliance with standards in Ch 3, Sec 2(f) of WAQSR for construction/demolition activities, handling and transportation of materials, and agricultural practices.

Carbon Monoxide: [WAQSR Ch 3, Sec 5]

(G21) The emission of carbon monoxide in stack gases from any stationary source shall be limited as may be necessary to prevent ambient standards from being exceeded.

Asbestos: [WAQSR Ch 3, Sec 8]

(G22) The permittee shall comply with emission standards for asbestos during abatement, demolition, renovation, manufacturing, spraying and fabricating activities.

(a) No owner or operator shall build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

(b) All owners and operators conducting an asbestos abatement project, including an abatement project on a residential building, shall be responsible for complying with Federal requirements and State standards for packaging, transportation, and delivery to an approved waste disposal facility as provided in paragraph (m) of Ch 3, Sec 8.

(c) The permittee shall follow State and Federal standards for any demolition and renovation activities conducted at this facility, including:

(i) A thorough inspection of the affected facility or part of the facility where the demolition or renovation activity will occur shall be conducted to determine the presence of asbestos, including Category I and Category II non-friable asbestos containing material. The results of the inspection will determine which notification and asbestos abatement procedures are applicable to the activity.

(ii) The owner or operator shall follow the appropriate notification requirements of Ch 3, Sec 8(i)(ii).

(iii) The owner or operator shall follow the appropriate procedures for asbestos emissions control, as specified in Chapter 3, Section 8(i)(iii).

(d) No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this paragraph do not apply to spray-applied insulating materials regulated under paragraph (j) of Ch 3, Sec 8.

(e) The permittee shall comply with all other requirements of WAQSR Ch 3, Sec 8.

Open Burning Restrictions: [WAQSR Ch 10, Sec 2]

(G23) The permittee conducting an open burn shall comply with all rules and regulations of the Wyoming Department of Environmental Quality, Division of Air Quality, and with the Wyoming Environmental Quality Act.

(a) No person shall burn prohibited materials using an open burning method, except as may be authorized by permit. ***"Prohibited materials"*** means substances including, but not limited to; natural or synthetic rubber products, including tires; waste petroleum products, such as oil or used oil filters; insulated wire; plastic products, including polyvinyl chloride ("PVC") pipe, tubing and connectors; tar, asphalt, asphalt shingles, or tar paper; railroad ties; wood, wood waste, or lumber that is painted or chemically treated; explosives or ammunition; batteries; hazardous waste products; asbestos or asbestos containing materials; or materials which cause dense smoke discharges, excluding refuse and flaring associated with oil and gas well testing, completions and well workovers.

(b) No person or organization shall conduct or cause or permit open burning for the disposal of trade wastes, for a salvage operation, for the destruction of fire hazards if so designated by a jurisdictional fire authority, or for fire fighting training, except when it can be shown by a person or organization that such open burning is absolutely necessary and in the public interest. Any person or organization intending to engage in such open burning shall file a request to do so with the Division.

Sulfur Dioxide Emission Trading and Inventory Program [WAQSR Ch 14]

(G24) Any BART (Best Available Retrofit Technology) eligible facility, or facility which has actual emissions of SO_2 greater than 100 tpy in calendar year 2000 or any subsequent year, shall comply with the applicable requirements of WAQSR Ch 14, Sections 1 through 3, with the exceptions described in sections 2(c) and 3(a).

Stratospheric Ozone Protection Requirements: [40 CFR Part 82]

(G25) The permittee shall comply with all applicable Stratospheric Ozone Protection Requirements, including but not limited to:

(a) *Standards for Appliances* [40 CFR Part 82, Subpart F]
The permittee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F - Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

(i) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.

(ii) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

(iii) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.

(iv) Persons disposing of small appliances, MVACs and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152).

(v) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.166.

(vi) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

(vii) The permittee shall comply with all other requirements of Subpart F.

(b) *Standards for Motor Vehicle Air Conditioners* [40 CFR Part 82, Subpart B]
If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

STATE ONLY PERMIT CONDITIONS (modified March 6, 2012) (modified June 17, 2013)

The conditions listed in this section are State only requirements and are not federally enforceable.

Ambient Standards

(S1) The permittee shall operate the emission units described in this permit such that the following ambient standards are not exceeded:

POLLUTANT	STANDARD	CONDITION	WAQSR CH. 2, SEC.
PM_{10} particulate matter	50 micrograms per cubic meter	annual arithmetic mean	2 (a)
	150 micrograms per cubic meter	24-hr average concentration with not more than one exceedance per year	
$PM_{2.5}$ particulate matter	15 micrograms per cubic meter	annual arithmetic mean	2 (b)
	35 micrograms per cubic meter	98th percentile 24-hour average concentration	
Nitrogen dioxide	**53 parts per billion**	**annual average concentration**	3
	100 parts per billion	**three-year average of the annual 98th percentile of the daily maximum 1-hour average concentration**	
	0.053 parts per million	**annual arithmetic mean**	
Sulfur **dioxide**	**75 parts per billion**	**three-year average of the annual (99th percentile) of the daily max 1-hr average**	4
	0.5 parts per million	**3-hr blocks not to be exceeded more than once per calendar year**	
Carbon monoxide	10 milligrams per cubic meter	max 8-hr concentration with not more than one exceedance per year	5
	40 milligrams per cubic meter	max 1-hr concentration with not more than one exceedance per year	
Ozone	**0.075** parts per million	**three-year average of the annual fourth-highest daily maximum 8-hr average concentration**	6
Hydrogen sulfide	70 micrograms per cubic meter	½ hour average not to be exceeded more than two times per year	7
	40 micrograms per cubic meter	½ hour average not to be exceeded more than two times in any five consecutive days	
Suspended sulfate	0.25 milligrams SO_3 per 100 square centimeters per day	maximum annual average	8
	0.50 milligrams SO_3 per 100 square centimeters per day	maximum 30-day value	
Lead and its compounds	**0.15** micrograms per cubic meter	maximum arithmetic **3-month** mean **concentration for a 3-year period**	10

Hydrogen Sulfide: [WAQSR Ch 3, Sec 7]

(S2) Any exit process gas stream containing hydrogen sulfide which is discharged to the atmosphere from any source shall be vented, incinerated, flared or otherwise disposed of in such a manner that ambient sulfur dioxide and hydrogen sulfide standards are not exceeded.

Odors: [WAQSR Ch 2, Sec 11]

(S3) (a) The ambient air standard for odors from any source shall be limited to an odor emission at the property line which is undetectable at seven dilutions with odor free air as determined by a scentometer as manufactured by the Barnebey-Cheney Company or any other instrument, device, or technique designated by the Division as producing equivalent results. The occurrence of odors shall be measured so that at least two measurements can be made within a period of one hour, these determinations being separated by at least 15 minutes.

(b) Odor producing materials shall be stored, transported, and handled in a manner that odors produced from such materials are confined and that accumulation of such materials resulting from spillage or other escape is prevented.

SUMMARY OF SOURCE EMISSION LIMITS AND REQUIREMENTS

Source ID#: **ESP** Source Description: **Electrostatic Precipitator (modified June 17, 2013)**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity. 20.7 lb/hr, 90.7 TPY [F2]	WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permit MD-260	Testing once every 5 years [F7]	Compliance Assurance Monitoring (CAM) - monitor visible emissions daily, follow CAM maintenance [F9]	Record CAM results and corrective action [F14]	Report test results [F19] Report CAM results semiannually [F20] Report excess emissions and permit deviations [F22]
SO_2	52.0 lb/hr, 193.4 TPY; 1.2 percent coal sulfur content [F5]	WAQSR Ch 6, Sec 2 Permits MD-260 and MD-603A	Testing once every 5 years [F7]	Monitor dryer operating hours, coal consumption, feed coal sulfur content [F11]	Record testing [F13] Record dryer operating hours, coal consumption, feed coal sulfur content [F17]	Report test results [F19] Report semiannually the monthly average SO_2 emission rates for the previous 6 months [F20] Report excess emissions and permit deviations [F22]
NO_X	83.5 lb/hr, 233.3 tpy [F4] 28,032 TPY annual coal usage for the dryers [F6]	WAQSR Ch 6, Sec 2 Permits MD-603A	Testing once every year [F7]	Monitor monthly and annually coal consumed and NO_X emissions [F10]	Record testing [F13] Record coal consumed [F16] Coal consumption [F18]	Report test results [F19] Report semiannually the NO_X emissions [F20] Report annually the coal consumption [F21] Report excess emissions and permit deviations [F22]

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

Source ID#: **BRLSP, BV5, BV6, BV10, BV11, BV13, BV14, BV15, DC5, DPJ, GBH3, GSBH, MEGBH, MK1, MM1&2, PPPSP, BV3*, BV4**
Source Description: **Powder Rail and Truck & Granular Truck Loadout, Silo #2, Granular Receiving, Baramix Truck Loadout, Finished Silo #7, 200-Mesh Bin, 200-Mesh Silo, Bore-Gel Silo #5, Baramix Packer Bin, 200-Mesh Loadout, Granular Silo #3, Grout System, Megatex Screening System, Bore-Gel, Mt. Mover Storage Trailers, Powder Packer Palletizer, Bulk Silo #2, Bulk Silo #3 (modified March 6, 2012 to include MM1&2) (modified June 17, 2013)**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	7 percent opacity **(40 CFR 60, Subpart OOO §60.674(c) for GSBH only)** Particulate limits [F2]	WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permits and Waivers MD-260, MD-603A, AP-J67, AP-1145, AP-1652, AP-2174, AP-8512, AP-8299, **AP-9502, wv-12269 and MD-13654;** 40 CFR 60 Subpart OOO	Testing if required [F8] **Performance testing for BV3 [F25]**	Monitor visible emissions daily, follow CAM maintenance [F9] **(CAM applies to all but GBH3, MM1 and MM2)**	Record **monitoring** results and corrective action [F14] **Record test results [F13]**	Report **monitoring** results semiannually [F20] Report excess emissions and permit deviations [F22] **Report commencement of construction for BV3 [F24]** **Report start-up within 15 days and performance test results within 45 days [F25]**
Particulate	**WAQSR Ch 5, Sec 2 and 40 CFR 60 Subparts A & OOO**					

*** All table requirements applicable to BV3 are for the CamCorp Model CA 9 cartridge bin vent filter BV3 and will apply when it is installed to replace the existing BV3. The existing BV3 is not subject to the requirements of 40 CFR 60 Subpart OOO and is permitted at 20 percent opacity.**

Source ID#: **BV1, BV2, BV7, BV8, BV9, BV12, CDRLB, DC3, DC4, DBBH, DDBH, DDBH-2, GBH1, GBH2, Sly4** Source Description: **Fuel Coal Silo, Bulk Silo #1, Crude Coal Silo #1, Coal Mill/Silo #4, Silo #3, Baramix Blender/Additives, Dry Bin Dust Collector, C&D Rail Loadout, Silo #5, Silo #6, C&D Storage Bunker, Granular Silo 1, Granular Silo 2, Baramix Sly (modified March 6, 2012 to include DDBH-2) (modified June 17, 2013)**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity, (7% opacity for CDRLB, DDBH and **DDBH-2** only) and particulate emission limits **[F2]**	WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permits and Waivers MD-260, MD-1310, AP-1145, AP-1657, AP-1656, AP-2001A, **wv-10710, wv-11193, MD-13654**	Testing if required [F8] **Performance testing for DBBH [F25]**	Monitor visible emissions daily, follow CAM maintenance [F9] **(CAM applies to all but GBH1 and GBH2)**	Record **monitoring** results and corrective action [F14] **Record test results [F13]**	Report **monitoring** results semiannually [F20] Report excess emissions and permit deviations [F22] **Report commencement of construction for DBBH [F24]** **Report start-up within 15 days and performance test results within 45 days [F25]**

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

Source ID#: **MME1 & 2** Source Description: **(2) Caterpillar 3116 Diesel Engines (modified March 6, 2012) (modified June 17, 2013)**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	**30 percent opacity [F2]** **Annual hours limit. Maintain hour meters. [F6]**	**WAQSR Ch 3, Sec 2, and Ch 6, Sec 2 waiver AP-9502**	**Testing if required [F8]**	**Semiannual observations [F9]** **Maintain and operate hour meters on the engines [F12]**	**Record monitoring results and corrective action [F14]** **Record hours of operation [F18]**	**Report monitoring results semiannually [F20]** **Report annual hours of operation [F21]** **Report excess emissions and permit deviations [F22]**
Additional NO_X, CO, and VOC	**WAQSR Ch 5, Sec 2 and 40 CFR 60 Subparts A & IIII**					
HAPs	**WAQSR Ch 5, Sec 3 and 40 CFR 63 Subparts A & ZZZZ**					

Source ID#: **TLO-5** Source Description: **C&D Storage Pile Truck Loadout (modified June 17, 2013)**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	**20 percent opacity [F3]** **Maximum of 15 trucks/525 tons C&D bentonite loaded per year [F3]**	**WAQSR Ch 3 Sec 2 and Ch 6, Sec 2 Waiver wv-12930**	**Testing if required [F8]**	**Monitor C&D Storage Pile Truck Loadout (TLO-5) operations [F9 and F12]**	**Maintain records of TLO-5 operations [F14 & F18]**	**Notification of start-up within 15 days [F25]** **Annual summary report [F21]** **Report excess emissions and permit deviations [F22]**

Source ID#: **None** Source Description: **Fugitives (modified June 17, 2013)**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	10 percent **or 7 percent** Subpart OOO source; Apply water and/or chemical suppressants to haul roads, **access roads** and work areas; **All other fugitives minimized per WAQSR Ch 3, Sec 2(f)** [F3]	40 CFR 60 Subpart OOO WAQSR Ch 3 Sec 2 and Ch 6, Sec 2 Permit MD-603A	Testing if required [F8]	Quarterly visible emissions observations [F9] Monitor the use of water and/or chemical dust suppressants [F9]	Record visible emissions observations [F14] Maintain records of water and/or chemical dust suppressant use [F15]	Report visible emissions observations semiannually [F20] Summary report of water and/or chemical dust suppressants used [F21] Report excess emissions and permit deviations [F22]

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

Source ID#: **None** Source Description: **Heaters**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F2]	WAQSR Ch 3, Sec 2	Testing if required [F8]	Verification of natural gas firing [F9]	Record any test results [F13]	Report type of fuel fired [F20] Report excess emissions and permit deviations [F22]
NO_X	0.20 lb/MMBtu [F3]	WAQSR Ch 3, Sec 3	Testing if required [F8]	None [F10]	Record any test results [F13]	Report any test results [F19] Report excess emissions and permit deviations [F22]

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

ABBREVIATIONS
(modified March 6, 2012) (modified June 17, 2013)

AQD	Air Quality Division
BACT	Best available control technology (see Definitions)
Btu	British Thermal Unit
C&D	**Crushed and Dried**
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
C.F.R.	Code of Federal Regulations
CI ICE	**Compression ignition internal combustion engine**
CO	Carbon monoxide
DEQ	Wyoming Department of Environmental Quality
EPA	United States Environmental Protection Agency (see Definitions)
ESP	Electrostatic Precipitator
g/hp-hr	Gram(s) per horsepower hour
gal	Gallon(s)
gr	Grain(s)
H_2S	Hydrogen sulfide
HAP(s)	Hazardous air pollutant(s)
hp	Horsepower
hr	Hour(s)
lb	Pound(s)
M	Thousand
MACT	Maximum available control technology (see Definitions)
mfr	Manufacturer
mg	Milligram(s)
MM	Million
MVACs	Motor vehicle air conditioners
N/A	Not applicable
NMHC(s)	Non-methane hydrocarbon(s)
NO_X	Oxides of nitrogen
O_2	Oxygen
PM	Particulate matter
PM_{10}	Particulate matter less than or equal to a nominal diameter of 10 micrometers
ppmv	Parts per million (by volume)
ppmw	Parts per million (by weight)
QIP	Quality Improvement Plan
RICE	Reciprocating internal combustion engine
SCF	Standard cubic foot (feet)
SCFD	Standard cubic foot (feet) per day
SCM	Standard cubic meter(s)
SIC	Standard Industrial Classification
SO_2	Sulfur dioxide
SO_3	Sulfur trioxide
SO_X	Oxides of sulfur
TBD	To be determined
TPD	Ton(s) per day
TPH	Ton(s) per hour
TPY	Tons per year
U.S.C.	United States Code
μg	Microgram(s)
VOC(s)	Volatile organic compound(s)
W.S.	Wyoming Statute
WAQSR	Wyoming Air Quality Standards & Regulations (see Definitions)

DEFINITIONS

"Act" means the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.*

"Administrator" means Administrator of the Air Quality Division, Wyoming Department of Environmental Quality.

"Applicable requirement" means all of the following as they apply to emissions units at a source subject to Chapter 6, Section 3 of the WAQSR (including requirements with future effective compliance dates that have been promulgated or approved by the EPA or the State through rulemaking at the time of issuance of the operating permit):

(a) Any standard or other requirement provided for in the Wyoming implementation plan approved or promulgated by EPA under title I of the Act that implements the relevant requirements of the Act, including any revisions to the plan promulgated in 40 C.F.R. Part 52;

(b) Any standards or requirements in the WAQSR which are not a part of the approved Wyoming implementation plan and are not federally enforceable;

(c) Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D of the Act and including Chapter 5, Section 2 and Chapter 6, Sections 2 and 4 of the WAQSR;

(d) Any standard or other requirement promulgated under Section 111 of the Act, including Section 111(d) and Chapter 5, Section 2 of the WAQSR;

(e) Any standard or other requirement under Section 112 of the Act, including any requirement concerning accident prevention under Section 112(r)(7) of the Act and including any regulations promulgated by EPA and the State pursuant to Section 112 of the Act;

(f) Any standard or other requirement of the acid rain program under title IV of the Act or the regulations promulgated thereunder;

(g) Any requirements established pursuant to Section 504(b) or Section 114(a)(3) of the Act concerning enhanced monitoring and compliance certifications;

(h) Any standard or other requirement governing solid waste incineration, under Section 129 of the Act;

(i) Any standard or other requirement for consumer and commercial products, under Section 183(e) of the Act (having to do with the release of volatile organic compounds under ozone control requirements);

(j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under title VI of the Act, unless the EPA has determined that such requirements need not be contained in a title V permit;

(k) Any national ambient air quality standard or increment or visibility requirement under part C of title I of the Act, but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the Act; and

(l) Any state ambient air quality standard or increment or visibility requirement of the WAQSR.

(m) Nothing under paragraphs (A) through (L) above shall be construed as affecting the allowance program and Phase II compliance schedule under the acid rain provision of Title IV of the Act.

"BACT" or "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each pollutant subject to regulation under the WAQSR or regulation under the Federal Clean Air Act, which would be emitted from or which results for any proposed major emitting facility or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application or production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design,

equipment, work practice or operational standard or combination thereof to satisfy the requirement of Best Available Control Technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results. Application of BACT shall not result in emissions in excess of those allowed under Chapter 5, Section 2 of the WAQSR and any other new source performance standard or national emission standards for hazardous air pollutants promulgated by EPA but not yet adopted by the state.

"Department" means the Wyoming Department of Environmental Quality or its Director.

"Director" means the Director of the Wyoming Department of Environmental Quality.

"Division" means the Air Quality Division of the Wyoming Department of Environmental Quality or its Administrator.

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

"EPA" means the Administrator of the U.S. Environmental Protection Agency or the Administrator's designee.

"Fuel-burning equipment" means any furnace, boiler apparatus, stack, or appurtenances thereto used in the process of burning fuel or other combustible material for the purpose of producing heat or power by indirect heat transfer.

"Fugitive emissions" means those emissions which could not reasonably pass through a stack chimney, vent, or other functionally equivalent opening.

"Insignificant activities" means those activities which are incidental to the facility's primary business activity and which result in emissions of less than one ton per year of a regulated pollutant not included in the Section 112 (b) list of hazardous air pollutants or emissions less than 1000 pounds per year of a pollutant regulated pursuant to listing under Section 112 (b) of the Act provided, however, such emission levels of hazardous air pollutants do not exceed exemptions based on insignificant emission levels established by EPA through rulemaking for modification under Section 112 (g) of the Act.

"MACT" or "Maximum achievable control technology" means the maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory that shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emission standards promulgated for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than:

(a) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emission information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

(b) the average emission limitation achieved by the best performing five sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.

"Modification" means any physical change in, or change in the method of operation of, an affected facility which increases the amount of any air pollutant (to which any state standards applies) emitted by such facility or which results in the emission of any such air pollutant not previously emitted.

"Permittee" means the person or entity to whom a Chapter 6, Section 3 permit is issued.

"Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source 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, shall be treated as part of its design if the limitation is enforceable by EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in title IV of the Act or the regulations promulgated thereunder.

"Regulated air pollutant" means the following:

(a) Nitrogen oxides (NO_X) or any volatile organic compound;

(b) Any pollutant for which a national ambient air quality standard has been promulgated;

(c) Any pollutant that is subject to any standard established in Chapter 5, Section 2 of the WAQSR or Section 111 of the Act;

(d) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or

(e) Any pollutant subject to a standard promulgated under Section 112 or other requirements established under Section 112 of the Act, including Sections 112(g), (j), and (r) of the Act, including the following:

(i) Any pollutant subject to requirements under Section 112(j) of the Act. If EPA fails to promulgate a standard by the date established pursuant to Section 112(e) of the Act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e) of the Act; and

(ii) Any pollutant for which the requirements of Section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to Section 112(g)(2) requirement.

(f) Pollutants regulated solely under Section 112(r) of the Act are to be regulated only with respect to the requirements of Section 112(r) for permits issued under this Chapter 6, Section 3 of the WAQSR.

"Renewal" means the process by which a permit is reissued at the end of its term.

"Responsible official" means one of the following:

(a) For a corporation:

(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(ii) A duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(A) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(B) the delegation of authority to such representative is approved in advance by the Division;

(b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

(c) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or

(d) For affected sources:

(i) The designated representative or alternate designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Act or the regulations promulgated thereunder are concerned; and

(ii) The designated representative, alternate designated representative, or responsible official under Chapter 6, Section 3 (b)(xxvi) of the WAQSR for all other purposes under this section.

"WAQSR" means the Wyoming Air Quality Standards and Regulations promulgated under the Wyoming Environmental Quality Act, W.S. §35-11-101, *et seq.*

Appendix A
Coal Consumption Plan

June 24, 2004

JUN 2004
RECEIVED
AIR QUALITY
DIVISION

BPM Minerals LLC

Colony, Wyoming Plant
HCR 69, Box 112
Belle Fourche, SD 57717

(307) 896-2596
FAX (307) 896-4588

Mr. Mike Stoll
Wyoming – DEQ, Air Quality Section
122 West 25th Street
Cheyenne, WY 82002

Re: BPM Minerals, LLC
Crook County, Wyoming – Colony Plant
Operating Permit 30-096
MD-603A – NO_x Coal Monitoring Condition #10

Dear Mr. Stoll:

By this letter BPM Minerals, LLC (BPM) is submitting a proposal for the Colony Site ESP NO_x monitoring to determine monthly and annual compliance with construction Permit Modification MD603-A, Condition #10. This letter complies with the requirements set forth in the Department's June 17, 2004 letter requesting a proposal for NO_x monitoring at Colony Plant site.

The proposal to determine annual and monthly NO_x compliance will be based on the results of an annual stack test (Method 7e) and measured coal consumption immediately after the stack test. This will yield a number with the units: pounds of NO_x per weight (ton/or pounds) of coal. This number will be termed 'the NOx-coal stack test factor.' Coal usage will be monitored monthly and yearly. The tons of coal used per month (year) will be multiplied by the NOx-coal stack test factor to determine monthly and yearly compliance.

The coal consumption during the stack test will be measured as follows: The Colony plant has three separate furnace systems that consist of a coal day bin, a screw feeder, a coal mill furnace and dryer (see Figure 1 for a system cartoon). BPM plans to install a slide gate and chute on the coal mill auger feeder. This gate will enable BPM to measure the coal feed rate.

The procedure for measuring the coal tons/hour will be to open each of the three slide gate(s) immediately after the stack test and weigh the amount (pounds) of coal collected over a two-minute period. The coal feed (pounds/hour) for each of the three furnace systems (coal day bin, screw feeder, coal mill furnace dryer) will be determined by extrapolating the two-minute feed rate to pounds coal used/hour. This procedure will be repeated for each one hour stack test (twice more) for each furnace.

At the completion of the 3 –one hour stack test the following data will be have been collected:

08-20-2008 032096

05-29-2004 031096

NO_x - pounds/hour (3x – to co-inside with three one-hour tests)
Coal Feed/hour Furnace 1 (3x – to co-inside with three one-hour tests)
Coal feed/hour Furnace 2 (3x – to co-inside with three one-hour tests)
Coal feed/hour Furnace 3 (3x – to co-inside with three one-hour tests)

The coal feed on stack test run 1 for furnaces 1, 2 and 3 will be then averaged to produce a coal feed rate for run 1. Similarly the coal feed for run 2 and run 3 will be calculated. The coal feed rates should be very similar for all three runs as the furnaces typically operate at a set fire temperature. The three coal feed rates will be normalized to one hour (i.e. the pounds of coal used in two minutes will be multiplied by 30 to yield pounds of coal used in one hour) and correspond to the amount of NO_x used during each stack test.

The NOx-coal stack test factor will be calculated by averaging the pounds of NO_x produced/hour (as measured by each stack test) for all three stack tests. Similarly, the three coal consumption usage rates/hour will be averaged. The resulting two numbers will yield the NO_x-coal stack test factor or:

$$\frac{\text{pounds of } NO_x \text{ produced by the furnace per hour}}{\text{pounds of coal consumed (by the three furnaces) per hour.}} = NO_x\text{-coal stack test factor}$$

BPM believes the method outlined above is the most practical and safe way to measure coal consumed per hour and links the NOx produced per hour (as measured by the stack test) to coal consumed per hour.

Please do not hesitate to contact me @703-896-8514 if you have any questions or comments

Sincerely,

John Scheetz

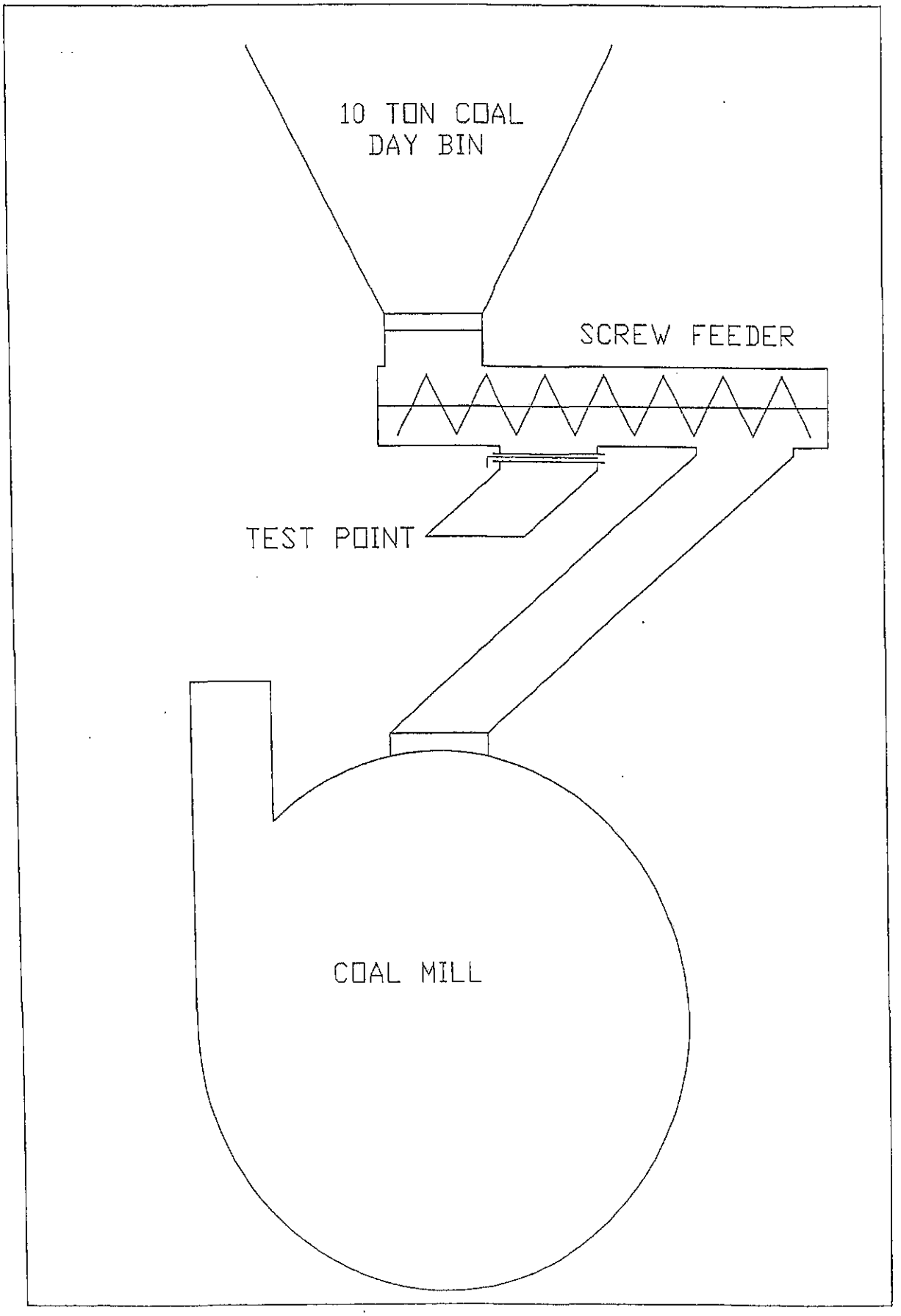
John Scheetz
Environmental Manager

Enclosure:
Figure 1: Coal System Diagram with Proposed Slide Gate

08-20-2008 032096

05-29-2004 031096

Figure 1



08-20-2008 032096

Cartoon of Proposed Modification
to Coal Mill Feed to Measure
Furnace Coal Consumption

BPM Minerals LLC - Colony Plant (Permit 30-096)

05-29-2004 031096

Appendix B

Compliance Assurance Monitoring Plan (CAM)

(modified June 17, 2013)

BENTONITE PERFORMANCE MINERALS COMPLIANCE ASSURANCE MONITORING PLAN: ESP AND FABRIC FILTER FOR PM CONTROL

I. Background

A. Emissions Units:

- Facility: Bentonite Performance Minerals, Colony Plant
- Description: Entire Facility-Bentonite Processing Plant
- Unit Identification:
  - BVI Fuel Coal Silo
  - ESP Electrostatic Precipitator
  - DBBH Dry Bin Dust Collector
  - DDBH C&D Storage Bunker
  - DDBH-2 C&D Storage Bunker
  - CDRLB C&D Rail Loadout
  - BV2 Bulk Silo #1
  - BV3 Bulk Silo #2
  - BV4 Bulk Silo #3
  - BV13 200 Mesh Surge Bin
  - BV14 200 Mesh Silo
  - DPJ 200 Mesh Loadout
  - PPPSP Powder Packer Palletizer
  - BRLSP Bulk Loadout
  - GBH1 Granular Silo #1
  - GBH2 Granular Silo #2
  - GBH3 Granular Silo #3
  - BV6 Granular Receiving Bins
  - MEGBH Megatex System Baghouse
  - MK1 Bore-Gel Baghouse
  - BV15 Bore-Gel Silo 5
  - BV7 Crude Coal Silo (#1)
  - BV8 Coal Mill/Silo
  - BV5 Baramix Silo (#2)
  - BV9 Baramix Silo (#3)
  - DC3 Baramix Silo (#5)
  - DC4 Baramix Silo (#6)
  - BV12 Baramix Blender/Additives
  - DC5 Baramix Packer Bin
  - BV11 Baramix Finished Silo (#7)
  - BV10 Baramix Truck LO
  - Sly4 Baramix Sly Baghouse
  - GSBH Grout System Baghouse
  - MM1&2 Mt. Movers 1&2 Socks

B. Applicable Regulation, Emission Limit and Monitoring Requirements:
- Applicable Regulation: WAQSR Chapter 7, Section 3, Operating Permit
- Emissions Limits: See Operating Permit
- Monitoring Requirements: Dust Observations

C. Control Technology:
- Fabric/Cartridge Filters, Bin Vent Filters and ESP

II. Monitoring Approach

A. Indicator
- Visible dust from discharge of device

B. Measurement Approach
- The device will be observed visually for at least one-minute on a daily basis to determine the presence of visible emissions. If visible emissions are observed, the emission control device will be immediately repaired, or the operating device will be shut down as soon as possible, depending on the cause of the dust.

- The device will be observed for one minute during normal operations (if the unit is operating; if not, it will be so noted). The devices, if maintained properly, have been proven to and will control particulate emissions and opacity within permit limits. The facilities operate on a continual basis and a one-minute visual observation is sufficient time for indication of malfunction of the fabric filter or ESP. Additionally, the facilities are manned continuously while operating and individuals are aware of "dusting" so that the filters are essentially observed on a continual basis.

- Finally, the devices will be operated in accordance with manufacturer's specifications and recommendations, along with a preventative maintenance plan outlined in the operating permit.

C. Indicator Range:
- The indicator for action is no visible dust emissions, i.e. observation of any dust requires action as outlined above.

D. Quality Improvement Threshold (QIP):
- The QIP threshold is five visible sightings from a single unit within a six month reporting period.

E. Performance Criteria:
- Data Representation: Measurements at the emissions point

- Verification of Operational Status: Observations will occur during normal operations of the emissions unit.

- QA/QC Practices and Criteria:
  i. The observer will be familiar with the principals of EPA Method 22.

- Monitoring Frequency and Data Collection Procedure:
  i. A one-minute dust observation will be performed on a daily basis.

III. Justification

A. Background:
- This facility dries, packages and ships bentonite. The emissions are controlled from the individual processes with various fabric/cartridge filters, bin vent filters and electrostatic precipitator.

B. Rationale for Selection of Performance Indicator:
- Dust emissions were selected as the performance indicator because they are indicative of operation of the device in a manner necessary to comply with the particulate emissions and opacity standards. When a device is operated and maintained as per the manufacturer's specifications, there will be very little or no emissions from the exhaust. Therefore, visible dust emissions indicate some type of failure of equipment and can be utilized as a performance indicator.

C. Rationale for Selection of Indicator Level:
- The selected indicator range is no dust emissions. When an excursion occurs, the equipment will be inspected and repaired as necessary at the earliest possible date. If the opacity is within the applicable opacity standard, maintenance will be scheduled as soon as practical. If the opacity is greater than the applicable standard, the equipment will be immediately shut down and repaired as necessary. All repairs and preventative maintenance will be documented in a preventative maintenance plan.
- Dust observations were selected because the observer need not be certified in EPA Method 9, and the indicator of either dust emissions or no dust emissions can be easily detected.
- The frequency of daily observations was selected because a control device operated and maintained per the manufacturer's specifications and recommendations will operate efficiently for extended periods of time. The need for more frequent or longer observations is not apparent.

Appendix C

Preventative Maintenance and Inspection Plan

(modified June 17, 2013)

BENTONITE

Performance Minerals LLC

Colony Plant

Quarterly Preventative Maintenance & Inspection Log For Air Quality Emission Control Devices

Version 9.0

Report Date for Quarter____ Year_____

12-24-2012 320962

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Fuel Coal Silo Baghouse (BV1) Checklist

Check socks_____

_____

Handshake bags_____

_____

Make sure fan is running_____

_____

Remove mud build-up as necessary_____

_____

Check the condition of the fans_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Electrostatic Precipitator (ESP) Checklist:

Top of ESP check for leakage around the hatches _____

_____

Check the panels for spacing and condition of the electrical connections _____

_____

Check the overall condition of the equipment _____

_____

Condition of the transformers _____

_____

ming of each rapper and vibrator _____

_____

Condition of the hopper, take out screw, motor, and drive _____

_____

Check the ductwork and neck for dust build-up _____

_____

Condition of the fan, motor, and drive _____

_____

Annual thermography of the ESP _____

_____

Any maintenance completed on the ESP _____

_____

_____

Any additional maintenance required on the ESP _____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

12-24-2012 320962

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Dry Bin Baghouse (DBBH) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week _____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the ductwork for dust build-up _____

_____

Check condition of the fan, motor, and drive_____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

C&D Bunker Baghouse (DDBH) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the ductwork for dust build-up _____

_____

Check condition of the fan, motor, and drive_____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

12-24-2012 320962

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

C&D Bunker Baghouse (DDBH-2) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the ductwork for dust build-up _____

_____

Check condition of the fan, motor, and drive_____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse_____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

C&D Rail Loadout Baghouse (CDRLO) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board and selenoids for proper firing sequence and cleaning of bags_____

_____

Check rotating arm and cleaning fan _____

_____

Check the ductwork for dust build-up _____

_____

Check condition of fan, motor, and drive _____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Bulk Bentonite Silo #1 (BV2) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th Week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board, selenoids and pneumatic cleaning _____

_____

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Any maintenance completed on the binvents _____

_____

_____

Any additional maintenance required on the binvents _____

_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Bulk Bentonite Silo #2 (BV3) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board, selenoids and pneumatic cleaning _____

_____

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Any maintenance completed on the binvents _____

_____

_____

Any additional maintenance required on the binvents _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Bulk Bentonite Silo #3 (BV4) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board, selenoids and pneumatic cleaning _____

_____

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Any maintenance completed on the binvents _____

_____

_____

Any additional maintenance required on the binvents _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

200-Mesh Cartridge Filter (BV13) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board, selenoids and pneumatic cleaning _____

_____

ıeck for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Any maintenance completed on the binvents_____

_____

_____

Any additional maintenance required on the binvents _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

200-Mesh Silo Binvents (BV14) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board, selenoids and pneumatic cleaning _____

_____

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Any maintenance completed on the binvents _____

_____

_____

Any additional maintenance required on the binvents_____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

New Truck Loadout Baghouse (DPJ) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the cleaning sequence and timer _____

_____

ıeck the ductwork and hopper for dust build-up _____

_____

Check condition of the fan, motor, and drive _____

_____

Any maintenance completed on the baghouse _____

_____

Any additional maintenance required on the baghouse _____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Powder Packer and Palletizer Baghouse (PPPSP) Checklist:

Record the pressure reading (weekly) : 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week _____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____
_____

Check the solenoids to ensure pulse cleaning of the bags _____
_____

Check the ductwork for dust build-up _____
_____

Condition of the fan, motor, and drive _____
_____

Any maintenance completed on the baghouse _____
_____
_____

Any additional maintenance required on the baghouse _____
_____
_____

Date of Inspection inside baghouse:: _____Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Powder Rail Loadout Baghouse (BRSLP) Checklist:

Check the pressure reading weekly : 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the cleaning sequence and timer _____

_____

neck the ductwork and hopper for dust build-up _____

_____

Check condition of the fan, motor, and drive _____

_____

Any maintenance completed on the baghouse _____

_____

Any additional maintenance required on the baghouse _____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Granular Silo #1 Baghouse (GBH1) Checklist:

Record the pressure reading weekly: 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing sequence of pneumatic cleaning of socks _____
_____

Check the solenoids to ensure pulse cleaning of the bags _____
_____

Check the condition of the fans_____
_____

Any maintenance completed on the baghouse _____
_____
_____

Any additional maintenance required on the baghouse _____
_____
_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Granular Silo #2 Baghouse (GBH2) Checklist:

Record the pressure reading weekly: 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing sequence of pneumatic cleaning of socks _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the condition of the fans_____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Granular Silo #3 Baghouse (GBH3) Checklist:

Record the pressure reading weekly: 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing sequence of pneumatic cleaning of socks _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the condition of the fans_____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Granular/Powder Receiving Bin vents (BV6) Checklist:

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Check timing board and selenoids_____

_____

ıy maintenance completed on the binvents _____

_____

_____

Any additional maintenance required on the binvents _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

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Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Megatex Baghouse (Minerals Machine) (MEGBH) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the ductwork for dust build-up _____

_____

Condition of the fan, motor, and drive _____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Bore-Gel Baghouse (MK1) Checklist:

Enter the pressure reading (weekly) : 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

ıeck the ductwork for dust build-up _____

_____

Condition of the fan, motor, and drive _____

_____

Check the rotary valve_____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Bore-Gel Silo Baghouse (BV15) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the ductwork for dust build-up _____

_____

Condition of the fan, motor, and drive _____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Crude Coal Silo Baghouse (BV7) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the ductwork for dust build-up _____

_____

Condition of the fan, motor, and drive _____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse:: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Silo Baghouse (BV8) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

_____

Check the solenoids to ensure pulse cleaning of the bags _____

_____

Check the ductwork for dust build-up _____

_____

Condition of the fan, motor, and drive _____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Baramix Silo #2 Binvent (BV5) Checklist:

Check timing sequence of pneumatic cleaning of socks _____

_____

Check the solenoids and timing board to ensure pulse cleaning of the bags _____

_____

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Any maintenance completed on the binvents _____

_____

_____

Any additional maintenance required on the binvents _____

_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Baramix Silo 3 Baghouse (BV9) Checklist

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week_____ 11th week_____ 12th week_____ 13th week_____

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Check timing board and selenoids_____

_____

Any other maintenance completed on the binvents _____

_____

_____

Any additional maintenance required on the binvents _____

_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

DC-3 (Baramix Silo #5 Dixie Cup), DC-4 (Baramix Silo Dixie Cup) and DC-5 (Baramix Packer Bin Vent Bag filter) Checklist:

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Check and clean cartridges and socks_____

_____

Date of Inspection of Dixie cup _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Baramix Blender/Additives Baghouse (BV12) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board, selenoids and pneumatic cleaning of socks_____

_____

Check the condition of the fan_____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Baramix Finished Silo (BV11) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board, selenoids and pneumatic cleaning _____

_____

Check for moisture by opening enclosures_____

_____

Remove mud build-up as necessary _____

_____

Any maintenance completed on the binvents _____

_____

_____

Any additional maintenance required on the binvents _____

_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Baramix Truck Loadout Baghouse (BV10) Checklist:

Record the pressure reading (weekly): 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check timing board, selenoids and pneumatic cleaning of socks_____

_____

Check the condition of the fan_____

_____

Any maintenance completed on the baghouse _____

_____

_____

Any additional maintenance required on the baghouse _____

_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Baramix Packer-Rail Loadout Baghouse (Sly4) Checklist:

Check the pressure reading weekly : 1st week_____ 2nd week_____ 3rd week_____

4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____

9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the pressure drop _____

_____

Check the ductwork and hopper for dust build-up _____

_____

Condition of the fan, motor, and drive _____

_____

Check rotating arm and cleaning fan _____

_____

Any maintenance completed on the baghouse _____

_____

Any additional maintenance required on the baghouse _____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Grout System Baghouse (GSBH) Checklist:

Enter the pressure reading (weekly) : 1st week_____ 2nd week_____ 3rd week_____
4th week _____ 5th week_____ 6th week_____ 7th week_____ 8th week_____
9th week_____ 10th week _____ 11th week_____ 12th week_____ 13th week_____

Check the timer board for proper firing sequence _____

Check the solenoids to ensure pulse cleaning of the bags _____

Check the ductwork for dust build-up _____

Condition of the fan, motor, and drive _____

Check the rotary valve_____

Any maintenance completed on the baghouse _____

Any additional maintenance required on the baghouse _____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Quarterly Preventative Maintenance & Inspection Log for Emission Control Devices

Air Quality Permit #3-2-096-1

Mt. Movers (MM1&2) Checklist:

Enter the hour reading (twice quarterly) MM1: 1st week_____ Last week_____

MM 2: 1st week_____ Last week_____

Check hydraulics fittings for leaks _____

_____

Check the condition of the socks and sock weather protection covers for rust.

_____

_____

_____

_____

ondition of the conveyor belt motor, and drive

_____

_____

_____

_____

Any maintenance completed on the bags/ MM1&2 Units.

_____

_____

_____

Any additional maintenance required on the bags/units _____

_____

_____

Date of Inspection inside baghouse: _____ Time: _____

Name: _____

Pressurized Vessel Inspection Log:

Air Quality Permit #3-2-096-1

Date of Inspection: _____ Time: _____

Name: _____

1) Test all relief valves to insure mechanisms are free.
2) Check pressure rating on relief valves and make sure it is the appropriate one for that pressure vessel. The pressure vessel is stamped with maximum pressure rating and the relief valve should be the same or less.
3) Check the CFM rating on the relief valve. Equipment manufactures generally oversize CFM rating by approximately 25%. (our 20-100 compressor produces 500 cfm, therefore the relief valve must be rated for at least 500 cfm and ideally around 750 cfm.
4) Do a visual check for anything out of the ordinary such as signs of rust, dents, or damage or leaks. Also look for any potential threat to the system such as something lying against or in close proximity to the tank or piping.
5) Check pressure gauges to insure the system is being run within designed limits.

LOCATIONS:

____ 1. **#1 & 2 AC, (air compressors in welding shop)**

A. Check separators inside compressor doors.

B. Check both air dryer towers.

____ 2. **#3 AC, (west of #1 mill)**

A. Check separator.

B. Check both air dryer towers.

____ 3. **#4 AC (south of BMX control room)**

A. Check separator

B. Check both air dryer towers

____ 4. Garden Denver 300 h.p.

____ 5. Bore-Gel Packer Receiver Tank, (northeast of packer)

____ 6. Transporter Receiver Vessel, (large tank, red oxide in color southwest of bulk shack)

____ 7. Transporter Surge Tank, (smaller white tank, southwest of bulk shack)

____ 8. Lab AC, (in middle room)

____ 9. Cat House AC, (north of diesel fuel tanks)

____ 10. Field Shop AC

____ 11. Mining Service Maintenance compressor

____ 13. New Atlas carpco

I, Ron Speidel, duly swear on my oath that I am the Permittee's delegated signature authority for Bentonite Performance Minerals, LLC. I am the Responsible Official's delegated authority of signature for Bentonite Performance Minerals WAQD Permit 3-2-096-1 and understand the responsibilities and liabilities associated with the permit. Non-compliance with permit conditions is a violation of the Clean Air Act, Article 2 of the Wyoming Environmental Quality Act and Wyoming Air Quality Standards and Regulations.

I certify under penalty of law that, based on the information and belief formed after reasonable inquiry, the statements and information contained in this document are true, accurate and complete.

_____ _____

Ron Speidel
Colony Plant Manager for
Bentonite Performance Minerals, LLC

Date

Appendix D through G
Reserved