

**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. 3-2-124

Issue Date: **December 9, 2013**
Expiration Date: **December 9, 2018**
Effective Date: **December 9, 2013**
Replaces Permit No.: **31-124**

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,

**M-I L.L.C.
M-I Greybull Bentonite Processing Plant
Section 5, Township 52 North, Range 93 West
Big Horn 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
Steven A. Dietrich, Administrator
Air Quality Division

12-9-13
Date

Todd Parfitt
Todd Parfitt, Director
Department of Environmental Quality

12/16/13
Date

WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

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GENERAL INFORMATION

Company Name: **M-I L.L.C.**

Mailing Address: **5950 North Course Drive**

City: **Houston** State: **TX** Zip: **77072**

Plant Name: **M-I Greybull Bentonite Processing Plant**

Plant Location: **Section 5, Township 52 North, Range 93 West, Big Horn County, Wyoming (Road 26, Lane 33; approximately two miles north of Greybull)**

Latitude/Longitude: **44.5196N/-108.0617W**

Plant Mailing Address: **P.O. Box 832**

City: **Greybull** State: **WY** Zip: **82426**

Name of Owner: **M-I LLC** Phone: **(307) 765-4496**

Responsible Official: **Joseph Cheatham** Phone: **(307) 765-4496**

Plant Manager/Contact: **Joseph Cheatham** Phone: **(307) 765-4496**

DEQ Air Quality Contact: **District 4 Engineer** Phone: **(307) 332-6755**
510 Meadowview Drive
Lander, WY 82520

SIC Code: **1459 – Clay, Ceramic and Refractory Minerals**

Description of Process: **Raw bentonite from the stockpile area is crushed, ground and dried in either of two types of mills. The processed material is then pneumatically sized and transported to holding tanks for shipment, or packaged for shipment. Raw bentonite from stockpiles is also crushed, dried and screened for granular operation.**

SOURCE EMISSION POINTS

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

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 Permits/Waivers
ES1	Crushers (Baghouse)	80 TPH	MD-658
ES3	Old Mill Dracco (Baghouse)	60 TPH	MD-658
ES4	Old Warehouse Packer (Baghouse)	40 TPH	MD-658, AP-7703 and MD-14198
ES5	Truck Warehouse Packer Tank Vent (Baghouse)	60 TPH	wv-9997, MD-12068 and MD-14198
ES6	Truck Warehouse Packer (Baghouse) [§]	60 TPH	MD-658, AP-7703 and wv-9997
ES6b	Truck Warehouse Packer (Baghouse) [§]	100 TPH	MD-12068 and MD-14198
ES7	Fines Silo Vent (Baghouse)	30 TPH	MD-658
ES8	Williams Mill Middle (Baghouse)	36 TPH	MD-658, AP-7703
ES9	Williams Mill East (Baghouse)	18 TPH	MD-658, AP-7703
ES10	Williams Mill West (Baghouse)	18 TPH	MD-658, AP-7703
ES12	Supreme Tank Vent (Baghouse)	36 TPH	MD-658, AP-7703
ES13	Halliburton Tank Vent (Baghouse)	36 TPH	MD-658, AP-7703
ES14	New Warehouse Packer (Baghouse)	45 TPH	AP-2629, AP-7703
ES15	Granular Packer (Baghouse)	36 TPH	AP-1445, AP-7703
ES16	Old Warehouse Dracco (Baghouse)	30 TPH	CT-759, MD-658
ES17	KLP Production (Baghouse)	30 TPH	MD-658
ES18	KLP Granular Loadout (Baghouse)	20 TPH	wv-10000
ES19	KLP Aspirator (Baghouse)	100 TPH	MD-658
ES20	West Gel Tank Vent (Baghouse)	200 TPH	AP-7703
ES21	#2 Dryer (Baghouse)	50 TPH	MD-658
ES22	Stockyard (fugitives)	NA	None
ES23	C&D/Crude Hopper (Baghouse)	250 TPH	wv-1971
ES24	C&D/Crude Hopper (fugitives)	N/A	wv-1971
ES25	Hole Plug Bagging Operation (fugitives)	10 TPY	AP-8642
ES26	Plant Feed Hoppers (fugitives)	N/A	None
ES30	Dryer #1 (Baghouse)	60 TPH	MD-12068
ES31	Raymond Mill #1 (Baghouse)	26.7 TPH	MD-12068
ES32	Raymond Mill #2 (Baghouse)	26.7 TPH	MD-12068
ES33	Raymond Mill #3 (Baghouse)	26.7 TPH	MD-12068
ES34	Truck Warehouse Raymond Mill Tank Vent (Baghouse)	N/A	MD-12068
ES35	West Gel Truck Loadout Filter Module	N/A	AP-7703
ES36	West Gel Rail Loadout Filter Module	N/A	AP-7703
P1 & P2	West Gel Truck and Rail Loadouts (fugitives)	N/A	AP-7703
P3 & P4	Arrowhead Truck and Rail (fugitives)	N/A	None

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 Permits/Waivers
P5 & P6	TAC Truck and Rail Loadouts (fugitives)	N/A	None
P7 & P8	C&D Truck and Rail Loadouts (fugitives)	N/A	None
P9 & P10	Halliburton Truck and Rail Loadouts (fugitives)	N/A	None
P11	Granular Rail Loadout (fugitives)	N/A	None
P12-P14	Supreme Tank and Rail Loadouts (fugitives)	N/A	None
P15	C&D Rail Loadout (fugitives)	N/A	None
P18	Fines Loadout (fugitives)	N/A	None

^a Upon completion of the requirements under permit MD-12068, ES6 will be referred to as ES6b

TOTAL FACILITY ESTIMATED EMISSIONS

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

POLLUTANT	EMISSIONS (TPY)
CRITERIA POLLUTANT EMISSIONS	
Particulate Matter	173
PM ₁₀ Particulate Matter	161
Sulfur Dioxide (SO ₂)	Negligible
Nitrogen Oxides (NO _x)	94
Carbon Monoxide (CO)	57
Volatile Organic Compounds (VOCs)	37
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS	1.3

Emission estimates are from the operating permit application, taking into account changes to ES-4, ES-5, and ES-6b from permit MD-14198.

FACILITY-SPECIFIC PERMIT CONDITIONS

Source-Specific Permit Conditions

- (F1) **VISIBLE EMISSIONS** [WAQSR Chapter 6, Section 2 Permits/Waivers CT-759, MD-658, AP-1445, wv-1971, AP-7703, AP-9436, wv-10000 and MD-12068; 40 CFR 60 Subpart OOO]
- (a) Sources subject to §60.674(c) of 40 CFR 60, Subpart OOO, including the truck warehouse packer (ES6b) and dryer #2 (ES21), shall exhibit no visible emissions except as allowed in §60.674(c).
 - (b) Visible emissions from the following sources shall not exceed 7% opacity: crushers (ES1), old mill Dracco (ES3), granular packer (ES15), old warehouse Dracco (ES16), KLP production (ES17), KLP granular loadout (ES18), KLP aspirator (ES19), west gel tank (ES20), C&D loadout (ES23), truck warehouse Raymond mill tank (ES34), and rail loadout spouts (ES35 and ES36). Sources subject to 40 CFR 60, Subpart OOO, including the fines silo (ES7), shall also not exhibit greater than 7% opacity unless otherwise specified under Subpart OOO.
 - (i) The bin vent filter for ES20 and filter modules for ES35 and ES36 shall be operated and maintained during all associated material transfer operations.
 - (c) Visible emissions from baghouses ES30-33 shall not exceed 20% opacity.
 - (d) Fugitive emissions from the loading bin (hopper) and conveyor of the C&D loadout (ES24), and rail loadouts (P1 and P2), shall not exceed 10% opacity. Additional requirements may apply under 40 CFR 60 Subpart OOO for fugitive emissions at the facility.
 - (e) Fugitive emissions associated with the new warehouse packing system shall not exceed 7% opacity. Fugitive emissions subject to 40 CFR 60, Subpart OOO, including fugitive emissions associated with dryer #2 and the hole plug bagging operation (ES25), shall also not exhibit greater than 7% opacity unless otherwise specified under Subpart OOO.
 - (f) Fugitive emissions from open railcar loading operations associated with ES16 and the portable vacuum source shall not exceed 20% opacity.
 - (g) Visible emissions of any contaminant discharged into the atmosphere from any other single emission source, including the old warehouse packer (ES4), truck warehouse packer (ES5), truck warehouse packer (ES6), Williams mills middle, east and west (ES8, ES9, ES10), Supreme tank vent (ES12), Halliburton tank vent (ES13), and new warehouse packer (ES14), shall not exhibit greater than 20% opacity.
- (F2) reserved
- (F3) **PARTICULATE EMISSIONS** [WAQSR Ch 6, Sec 2 Permits/Waivers MD-658, AP-1445, wv-1971, AP-2629, AP-7703, wv-10000, and MD-12068]
 Particulate emissions from the units listed in Table I shall not exceed the specified limits.

Table I. PM ₁₀ Particulate Emission Limits			
Source ID#	Source Description	Emission Rates	
		gr/dscf	lb/hr
ES1	Crushers	0.01	0.3
ES3	Old Mill Dracco	0.01	0.6
ES4	Old Warehouse Packer	0.02 ^a	3.3 ^a
ES5	Truck Warehouse Packer Tank Vent	0.02	0.3
ES6	Truck Warehouse Packer	0.01 ^a	3.5 ^a
ES6b	Truck Warehouse Packer	0.0075 ^{a, b}	2.6 ^{a, b}
ES7	Fines Silo Vent	0.01	1.2
ES8	Williams Mill Middle	0.02	1.7
ES9	Williams Mill East	0.02	6.0
ES10	Williams Mill West	0.02	6.0
ES12	Supreme Tank Vent	0.02	0.3
ES13	Halliburton Tank Vent	0.02	0.3

Table I: PM ₁₀ Particulate Emission Limits			
Source ID#	Source Description	Emission Rates	
		gr/dscf	lb/hr
ES14	New Warehouse Packer	0.01	1.4
ES15	Granular Packer	0.02	2.0
ES16	Old Warehouse Dracco	0.01	1.7
ES17	KLP Production	0.01	1.2
ES18	KLP Granular Loadout	0.01	0.2
ES19	KLP Aspirator	0.01	1.2
ES20	West Gel Tank Vent	0.01	0.3
ES21	Dryer #2	0.01	3.0
ES23	C&D/Crude Hopper	0.02	0.4
ES30	Dryer #1	0.01 ^a	2.2 ^a
ES31	Raymond Mill #1	0.01 ^a	0.8 ^a
ES32	Raymond Mill #2	0.01 ^a	0.8 ^a
ES33	Raymond Mill #3	0.01 ^a	0.8 ^a
ES34	Truck Warehouse Raymond Mill Tank Vent	0.01 ^a	0.3 ^a
ES35	West Gel Truck Loadout	0.01	0.1
ES36	West Gel Rail Loadout	0.01	0.1

^a Filterable only

^b Upon completion of the requirements under permit MD-12068, source ES6 will be referred to as ES6b. Emission limits for ES6b will be effective on and after the date on which performance tests are conducted as required by condition F5(b).

(F4) OPERATING HOUR LIMITATIONS AND COMMENCEMENT OF CONSTRUCTION

[WAQSR Ch 6, Sec 2 Permits MD-12068 and MD-14198]

- (a) Operation of the following equipment is limited as specified below:
- (i) The Old Warehouse Packer (ES4) is limited to 2,200 hours of operation per calendar year.
 - (ii) The Truck Warehouse Packer Tank (ES5) is limited to 6,240 hours of operation per calendar year.
 - (iii) The Truck Warehouse Packer (ES6b) is limited to 6,240 hours of operation per calendar year.
- (b) Approval to construct or modify the new packer system under MD-12068 shall become invalid if construction is not commenced within 24 months after receipt of such approval or if construction is discontinued for a period of 24 months or more. The Administrator may extend the period based on satisfactory justification of the requested extension.
- (i) The date of commencement of construction of the new packer system shall be reported to the Administrator within 30 days of commencement.

Testing Requirements

(F5) INITIAL PERFORMANCE TESTING [WAQSR Ch 6, Sec 2 Permits/Waivers AP-1445, AP-7703, wv-9997, MD-12068, and Division letter 3/19/09]

- (a) Performance tests shall be conducted on the granular packer (ES15) and C&D loadout (ES23) using EPA Reference Method 9.
- (i) The Method 9 tests must follow the methods and procedures outlined in 40 CFR 60 Subpart OOO.
 - (ii) The Method 9 testing shall be conducted during the next scheduled operation of the system, within 30 days of beginning operation.
 - (iii) Notification of the test date shall be provided to the Division at least 15 days prior to testing. Test results shall be submitted to this Division within 30 days of completion.
- (b) Performance tests shall be conducted on the truck warehouse packer tank vent (ES5), truck warehouse packer baghouse (ES6b), truck warehouse Raymond mill tank vent filter (ES34), west gel tank bin vent

(ES20), and each loadout spout (ES35 and ES36) 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.

- (i) A test protocol shall be submitted to this office for review and approval prior to testing. Notification of the test date shall be provided to the Division at least 15 days prior to testing. Results shall be submitted to this Division within 45 days of completion
- (ii) Particulate and opacity testing shall be conducted as follows:
 - (A) PM emissions from source ES5: Testing shall consist of three 1-hour tests following EPA Reference Methods 1-5 and the requirements of Subpart OOO of 40 CFR part 60.
 - (B) PM₁₀ emissions from sources ES6b, ES34, ES20, ES35, ES36: Testing shall consist of three 1-hour tests following EPA Reference Methods 1-5 and the requirements of Subpart OOO of 40 CFR part 60.
 - (C) PM_{2.5} emissions from sources ES6b and ES34: Testing shall consist of three 1-hour tests following EPA Reference Methods 1-4 and 201A, to verify that the emissions are as represented in the application for WAQSR Ch 6 Sec 2 permit MD-12068.
 - (D) Opacity from ES5, ES6b, ES34, ES20, ES35, ES36: Testing shall follow the requirements of Ch 5, Sec 2(i) of the WAQSR.
 - (E) For sources ES5, ES34 and ES20 only, if no visible emissions are observed during opacity testing, the opacity test can be used in lieu of the particulate emission testing required in sections (A) and (B) above.
 - (F) For source ES34, if condition 8(iv) of permit MD-12068 is revised accordingly or other written authorization is obtained from the Division, if no visible emissions are observed during opacity testing, the opacity test can be used in lieu of the particulate emission testing required in section (C) above.

(F6) 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 from sources subject to 40 CFR 60 Subpart OOO, methods specified in §60.675 shall be used.
 - (iii) For other particulate emissions, Methods 1-4 and 5 shall be used.
 - (iv) 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

(F7) PARTICULATE AND VISIBLE EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(1); Ch 7, Sec 3(c)(ii); Ch 6, Sec 2 Permits/Waivers AP-7703, wv-9997, wv-10000 and MD-12068]

- (a) The permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix A of this permit, for visible and particulate emissions from the following sources: crushers (ES1), old mill Dracco (ES3), old warehouse packer (ES4), truck warehouse packer tank vent (ES5), truck warehouse packers (ES6, ES6b), fines silo vent (ES7), Williams mill middle (ES8), Williams mill east (ES9), Williams mill west (ES10), Supreme tank (ES12), Halliburton tank (ES13), new warehouse packer (ES14), granular packer (ES15), old warehouse Dracco (ES16), KLP production (ES17), KLP granular loadout (ES18), KLP aspirator (ES19), west gel tank (ES20), dryer #2 (ES21), C&D/crude hopper (ES23), dryer #1 (ES30), Raymond mills 1 through 3, (ES31-ES33), and the truck warehouse Raymond mill tank vent filter (ES34); and shall conduct monitoring as follows during active operation of each emission source:
 - (i) The permittee shall conduct, at minimum once daily, Method 22-like observations of each unit listed above, in accordance with the CAM plan, to determine the presence of visible emissions. 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.

- (ii) The permittee shall conduct any other monitoring specified in the attached CAM plan.
- (iii) Observation of any visible emissions from any of these units, or any other excursion from the indicator ranges specified in the CAM plan, shall prompt immediate inspection and, if necessary, corrective actions.
- (iv) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.
- (v) Additionally, the baghouses for the truck warehouse packer (ES6/ES6b), dryer #1 (ES30), and the three Raymond mills (ES31-33), shall be tested at least once every five years following completion of the initial performance test or the last periodic test, as outlined below:
 - (A) A test protocol shall be submitted for review and approval prior to testing, and notification of the test date shall be provided to the Division at least 15 days prior to the test date. Test results shall be submitted to the Division within 45 days after completion of the test.
 - (B) For PM₁₀ emissions from source ES6b: Testing shall consist of three 1-hour tests following EPA Reference Methods 1-5 and the requirements of Subpart OOO of 40 CFR part 60.
 - (C) For PM₁₀ emissions from sources ES30-33, testing shall consist of three 1-hour tests following EPA Reference Methods 1-5.
 - (D) For opacity from each unit (ES6b and ES30-33), testing shall follow the requirements of Ch 5, Sec 2(i) of the WAQSR.
 - (E) For the testing under this paragraph, the Division shall be notified within 24-hours of receipt by the permittee of any test report indicating that an emission unit operated outside the permitted emission limits. Within seven (7) calendar days of such notification, the permittee shall notify the Division of plans to repair/correct operations to return to compliance.
- (b) For visible and particulate emissions from the loadout spouts filter modules (ES35 and ES36), daily observations shall be conducted as described in paragraph (a)(i) of this condition.
- (c) The permittee shall perform testing and monitoring for fugitive emissions as indicated by 40 CFR 60 Subpart OOO, to assess compliance with condition F1(d) and (e).

(F8) OPERATING HOURS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I)]

The permittee shall monitor operation of the Old Warehouse Packer (ES4), the Truck Warehouse Packer Tank (ES5), and the Truck Warehouse Packer (ES6b) to determine hours of operation per calendar year for each unit.

Recordkeeping Requirements

(F9) TESTING AND MONITORING RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]

- (a) For any testing or monitoring required under conditions F5, F6 and F7(a) and (b), other than Method 9 observations, the permittee shall record, as applicable, the following:
 - (i) The date, place, and time of observations, sampling or measurements;
 - (ii) The company or entity that performed the observations or analyses;
 - (iii) The analytical techniques or methods used;
 - (iv) The results of such observations or analyses;
 - (v) The operating conditions at the time of observation, sampling or measurement; and
 - (vi) Any corrective actions taken, including corrective actions taken upon observing visible emissions or detecting noncompliance with opacity limitations.
- (b) For any Method 9 observations required by the Division under conditions F5 or F6, the permittee shall keep field records in accordance with Section 2.2 of Method 9 and record any corrective actions taken upon detecting noncompliance with opacity limits.
- (c) For the fugitive emissions monitoring indicated by condition F7(c), the permittee shall maintain records as required by 40 CFR 60 Subpart OOO.
- (d) The permittee shall maintain a record of the operating hours per calendar year of the Old Warehouse Packer (ES4), the Truck Warehouse Packer Tank (ES5), and the Truck Warehouse Packer (ES6b).

- (e) The permittee shall retain on-site at the facility the records kept in accordance with this condition for a period of at least five years from the date such records are generated, and make them available upon request.
- (F10) **ADDITIONAL COMPLIANCE ASSURANCE MONITORING RECORDS** [WAQSR Ch 7, Sec 3 (i)(ii)]
For the CAM required under condition F7(a), the permittee shall also maintain records of any written quality improvement plan (QIP) required pursuant to WAQSR Chapter 7, Section 3(h), any activities undertaken to implement a QIP, and other supporting information required to be maintained under WAQSR Ch 7, Sec 3. The permittee shall retain these records on-site at the facility for a period of at least five years from the date such records are generated, and make them available upon request.
- (F11) reserved

Reporting Requirements

- (F12) **NOTIFICATION, TESTING, START-UP AND SHUTDOWN REPORTS** [WAQSR Ch 6, Sec 2 Permits/Waivers AP-1445, AP-7703, AP-8642, wv-9997, MD-12068; Division letter 3/19/09]
- (a) For testing required by condition F5 and F7(a)(v), the permittee shall provide the Division at least 15 days prior notice of the test date.
 - (b)
 - (i) Results of testing under F5(a) shall be submitted to the Division within 30 days of completion. The reports shall include the applicable information indicated in condition F9.
 - (ii) Results of testing under F5(b) and F7(a)(v) shall be submitted within 45 days of completion. The reports shall include the applicable information indicated in condition F9.
 - (c) Start-up notification shall be submitted to the Division, within 15 days of start-up, of the bulk storage silo (ES20) and rail loadout spouts (ES35 and ES36).
 - (d) For the new packer system permitted under MD-12068:
 - (i) The date of commencement of construction of the new system shall be reported to the Administrator within 30 days of commencement.
 - (ii) The permittee shall provide written notification of the anticipated date of initial start-up of the new packer system, not more than 60 days or less than 30 days prior to such date.
 - (iii) Notification of the actual date of start-up is required within 15 days after start-up.
 - (e) For the hole plug bagging operation associated with waiver AP-8642, shut-down notification shall be submitted to the Division within 15 days of the shut-down.
 - (f) The reports shall reference this permit condition (F12) and be submitted in accordance with condition G4 of this permit.
- (F13) **MONITORING REPORTS** [WAQSR Ch 6, Sec 3(h)(i)(C)(III) and Ch 7, Sec 3(i)]
- (a) The following shall be reported to the Division by January 31 and July 31 each year:
 - (i) The results of the visible emissions monitoring required under condition F7(a)(i) and F7(b). Any monitoring during which visible emissions are observed shall be included in the report with summary information on the number, duration, and cause of excursions, and any corrective actions taken. If no visible emissions are observed during the reporting period, this shall be stated in the report.
 - (ii) Additionally, as applicable, the results of CAM required under condition F7(a) shall include a summary of any additional monitoring conducted as specified in the CAM plan, and 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.
 - (iii) The calendar year to date operating hours of the Old Warehouse Packer (ES4), the Truck Warehouse Packer Tank (ES5), and the Truck Warehouse Packer (ES6b).
 - (b) For sources subject to 40 CFR 60 Subpart OOO, the permittee shall submit any reports required by Subpart OOO.
 - (c) All instances of deviations from the conditions of this permit must be clearly identified in each report.
 - (d) The reports shall reference this permit condition (F13) and shall be submitted in accordance with condition G4 of this permit.

- (F14) GREENHOUSE GAS REPORTS [W.S. 35-11-110]
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
- (F15) 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.

Additional Requirements

- (F16) CONSTRUCTION PERMIT AND CAM REVISIONS [WAQSR Ch 6, Sec 3(h)(i)(C)(I); Ch 7, Sec 3(c)]
- (a) The permittee shall submit an application to the Division's new source review program to revise/amend WAQSR Ch 6, Sec 2 permit MD-12068 to be consistent with conditions F5(b)(ii)(F) and F7(a)(v)(E) of this permit. This application shall be submitted prior to the date 30 days after issuance of this permit 3-2-124.
 - (b) The permittee shall submit a revised CAM plan to incorporate findings of the QIP described in M-I Greybull's Semiannual Report for January-June 2013. The revised CAM plan, with a request to administratively amend this permit to incorporate the revised CAM, shall be submitted to the Division's operating permit program prior to the date 30 days after issuance of this permit 3-2-124.

**WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND
40 CFR 60 SUBPART OOO REQUIREMENTS FOR NONMETALLIC MINERAL PROCESSING PLANTS**

SUBPART OOO REQUIREMENTS [40 CFR 60 Subparts A and OOO; WAQSR Ch 5, Sec 2; Ch 6, Sec 2 Permits/
Waivers MD-658, wv-1971, wv-10000 and MD-12068]

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 defined under §60.670, including sources ES1, 3, 6b, 7, 15-21, 23, 24, 25, 34, P1 and P2, and fugitive emissions associated with the new packer system.

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

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

WAQSR Ch 7, Sec 3 is available at <http://deq.state.wy.us/aqd/standards.asp>, or from the Division upon request.

- (CAM-1) **COMPLIANCE ASSURANCE MONITORING REQUIREMENTS [WAQSR Ch 7, Sec 3(b) and (c)]**
The permittee shall follow the CAM plan attached as Appendix A of this permit and meet all CAM requirements of WAQSR Chapter 7, Section 3 as they apply to particulate emissions from the controlled equipment (ES1-10, 12-21, 23 and 30-34). Compliance with the source specific monitoring, recordkeeping, and reporting requirements of this permit meets the monitoring, recordkeeping, and reporting requirements of WAQSR Chapter 7, Section 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.

COMPLIANCE CERTIFICATION AND SCHEDULE

Compliance Certification [WAQSR Ch 6, Sec 3(h)(iii)(E)]

- (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, the permittee shall assess compliance with conditions F1(a), (b), (c), (f), and (g), and F3 of this permit by conducting the monitoring and testing required by conditions F5 and F7(a) and (b).
- (ii) For fugitive emissions, the permittee shall assess compliance with condition F1(d) and (e) by conducting any monitoring required by 40 CFR 60 Subpart OOO.
- (iii) For the new packer system, the permittee shall verify notifications were submitted in accordance with condition F4.
- (iv) For operating hour limitations, the permittee shall assess compliance with condition F4 by conducting the monitoring required by condition F8.
- (v) For greenhouse gas reporting, the permittee shall assess compliance with condition F14 by verifying that reports were submitted in accordance with condition F14(b).
- (vi) 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.
- (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) Unless otherwise noted elsewhere in this permit, 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 firefighting 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 SO₂ 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” is 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 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

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	98 th percentile 24-hr average concentration	
Nitrogen dioxide	53 parts per billion	annual average concentration	3
	100 parts per billion	three-year average of the annual 98 th percentile of the daily maximum 1-hr average concentration	
	0.053 parts per million	annual arithmetic mean	
Sulfur dioxide	75 parts per billion	three-year average of the annual (99 th 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#: ES1, 3, 7, 15, 16-21, 23, 34, 35 & 36 Source Description: Crushers, Old Mill Dracco, Fines Silo Vent, Granular Packer, Old Warehouse Dracco, KLP Production, KLP Granular Loadout, KLP Aspirator, West Gel Tank, Dryer #2, C&D Hopper, Truck Warehouse Raymond Mill Tank Vent, West Gel Truck and Rail Loadouts

Pollutant	Emissions Limit/ Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	ES21: no visible emissions; all others 7% gr/dscf and lb/hr per Table I [F3]	WAQSR Ch 6, Sec 2 Permits/Waivers MD-658, AP-1445, wv-1971, AP-7703, AP-8642, wv-10000, MD-12068	ES20, 23, 34, 35 & 36: initial testing [F5] Additional testing if required [F6]	Compliance Assurance Monitoring (CAM): daily visible emissions. ES35 and ES36 will also perform daily visible observations. [F7]	Record CAM and test results [F9] Additional CAM records [F10]	Notifications and test results [F12] Semiannual: CAM results and operating hours [F13] Report excess emissions and permit deviations [F15]
WAQSR Ch 5, Sec 2 and 40 CFR 60 Subparts A and OOO						

Source ID#: ES4, 5 Source Description: Old Warehouse Packer, Truck Warehouse Packer Tank Vent

Pollutant	Emissions Limit/ Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F1] gr/dscf and lb/hr per Table I [F3] Annual operating limits of 2,200 hours for ES4 and 6,240 hours for ES5 [F4]	WAQSR Ch 6, Sec 2 Permits/Waivers MD-658, AP-7703, wv-9997, MD-12068, MD-14198	ES5: initial testing [F5] Additional testing if required [F6]	Compliance Assurance Monitoring (CAM): daily visible emissions [F7] Monitor hours of operation [F8]	Record CAM, test results, and operating hours [F9] Additional CAM records [F10]	Notifications and test results [F12] Semiannual: CAM results [F13] Report excess emissions and permit deviations [F15]

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#: ES6, 8, 9, 10, 12, 13, and 14 Source Description: ES6 Truck Warehouse Packer, (3) Williams Mills- Middle, East & West, Supreme Tank, Halliburton Tank, New Warehouse Packer(baghouses)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F1] gr/dscf and lb/hr per Table I [F3]	WAQSR Ch 6, Sec 2 Permits/Waivers MD-658, AP-2629, AP-7703, wv-9997	ES6: test every 5 years [F7] Additional testing if required [F6]	Compliance Assurance Monitoring (CAM): daily visible emissions [F7]	Record CAM and test results [F9] Additional CAM records [F10]	Notifications and test results [F12] Semiannual: CAM results [F13] Report excess emissions and permit deviations [F15]

Source ID#: ES6b Source Description: ES6b Truck Warehouse Packer

Pollutant	Emissions Limit/Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	No visible emissions [F1] 0.0075 gr/dscf and 2.6 lb/hr [F3] 6,240 hours operation per year [F4]	WAQSR Ch 6, Sec 2 Permits MD-12068, MD-14198	Initial testing [F5] Test every 5 years [F7] Additional testing if required [F6]	Compliance Assurance Monitoring (CAM): daily visible emissions [F7] Monitor hours of operation [F8]	Record CAM, test results, and operating hours [F9] Additional CAM records [F10]	Notifications and test results [F12] Semiannual: CAM results and operating hours [F13] Report excess emissions and permit deviations [F15]
WAQSR Ch 5, Sec 2 and 40 CFR 60 Subparts A and OOO						

Source ID#: ES30, 31, 32, and 33 Source Description: Dryer #1 and Raymond Mills 1 – 3 (baghouses)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F1] gr/dscf and lb/hr per Table I [F3]	WAQSR Ch 6, Sec 2 Permit MD-12068	Test every 5 years [F7] Additional testing if required [F6]	Compliance Assurance Monitoring (CAM): daily visible emissions, test every 5 years [F7]	Record CAM and test results [F9] Additional CAM records [F10]	Notifications and test results [F12] Semiannual: CAM results [F13] Report excess emissions and permit deviations [F15]

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

ACFM	Actual cubic feet per minute
AQD	Air Quality Division
BACT	Best available control technology (see Definitions)
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
C.F.R.	Code of Federal Regulations
CO	Carbon monoxide
°F	Degrees Fahrenheit
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 ₂ S	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
OPP	Operating Permit Program
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
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 _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.*

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent data collection procedures and the use of advanced analytical techniques to derive meaningful insights from the data.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and processing, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that the data remains reliable and secure throughout its lifecycle.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It stresses the importance of ongoing monitoring and evaluation to ensure that the data management processes remain effective and aligned with the organization's goals.

APPENDIX A
Compliance Assurance Monitoring (CAM) Plan
(amended June 3, 2014)



COMPLIANCE ASSUANCE MONITORING (CAM) PLAN

Approved By:	Joseph Cheatham Plant Manager	Written By:	General Service's Supervisor
Authorized By:	Joseph Cheatham M-I SWACO NAM	Revised By:	Terry Cauffman
Issue Date:	August 20, 2013	Revision Date:	August 20, 2013
Revision Level:	A	Next Review Date:	August 20, 2014

1.0 Purpose/Scope

Compliance Assurance Monitoring (CAM) Plan

Baghouse For PM Control

MI-LLC Greybull Bentonite Processing Plant

Note: There is currently no environmental measuring or monitoring equipment in use that would require calibration or maintenance.

Responsible Offices include:

REGIONAL/DISTRICT/AREA OFFICES WAREHOUSE/FACILITY LOCATIONS

2.0 Key Documents/Tools/References

- Manager Plus
- Title V Permit
- Local Work Instructions
- Site HSE Inspections, (Facility Monthly Condition Assessments,

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3.0 Definitions

3.1 Background

- Emissions Unit Description: Various Bentonite Process/Packaging Operations

Source ID Nos: ES#1, ES#3 through ES#10, ES#12 through ES#21,

ES#23, ES#30-ES#34

Facility: MI-LLC Bentonite Processing Plant, Greybull, WY

- Applicable Regulations, Emission Limit, and Pre-CAM Monitoring Requirements

No.: WAQS&R Chap. 6, Sec 2 Permits MD-658, MD-12068, Permit Waivers AP-2629, AP-1445, AP-10000, AP-1971, AP-7703; WAQS&R Chap. 5, Sec. 2, Subpart OOO for ES#1, ES#3, ES#6b, ES#7, ES#15 through ES#21, ES#23, ES#34, WAQS&R Chapter 7 Section 3.

Emission Limit: 0.0075 to 0.02 gr/dscf

Particulate Matter (Opacity): 20% for ES#4, ES#5, ES#6, ES#8, ES#9, ES#10, ES#12, ES#13, ES#14, ES#30, ES#31, ES#32, ES#33

7% for ES#1, ES#3, ES#7, ES#15, ES#16, ES#17, ES#18, ES#19, ES#20, ES#23, ES#34

No Visible Emission 60.674(c) – ES#21, ES#6b

4.0 Procedure

4.1 Monitoring and Measurement Requirements

Monitoring Requirements: Visible emissions, periodic monitoring (M22)

- Control Technology
- Capture System
- PTE

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- Baghouse operated under negative pressure.

4.1.2 Monitoring Approach

The key elements of the monitoring approach are presented below.

4.1.3 Indicator

Visible emissions will be used as an indicator.

4.1.4 Measurement Approach

Visible emissions from the baghouse exhaust will be monitored daily using EPA Reference Method 22-like procedures.

4.1.5 Indicator Range

The indicator level is no visible emissions.

4.2 QIP (Quality Improvement Plan) Threshold

The QIP threshold is five excursions in a six month reporting period. If a QIP is initiated Dye testing will be done on a monthly basis

4.3 Performance Criteria

- Data Representativeness: Measurements are being made at the emission point. Verification of Operational Status: Not applicable
- QA/QC Practices and Criteria: The observer will be a Method 22 trained observer and follow Method 22-like procedures.
- Monitoring Frequency and Data Collection Procedure: A one-minute Method 22-like observation will be performed daily.
- Dye Testing: To be performed on an interval determined by maintenance records. Currently dye testing has been set at a quarterly interval, but not limited to, for the following sources: ES 1(Crusher Baghouse), ES 3(Old Mill Dracco baghouse), ES 4(Old Warehouse Packer Baghouse), ES 6b(Truck Warehouse Packer Baghouse), ES 8 (Williams Mill Middle Baghouse), ES 9(Williams Mill East Baghouse), ES 10(Williams Mill West Baghouse), ES 14(New Warehouse Packer Baghouse), ES 16(Old Warehouse Dracco Baghouse), ES 17(KLP Production Baghouse), ES 18(KLP Granular Loadout baghouse), ES 19(KLP Aspirator

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Baghouse), ES 21(#2 Dryer Baghouse), ES 30(#1 Dryer Baghouse), ES 31(Raymond Mill #1 Baghouse), ES 32(Raymond Mill #1 Baghouse), ES 33(Raymond Mill #3 Baghouse),

5.0 Justification

5.1 Background

This facility processes raw bentonite into various products ready for shipment. Pollutant-specific emission units are various raw bentonite transfer, bentonite processing and bentonite product storage operations. These operations are controlled by various baghouses under negative pressure that have been shown to achieve an outlet grain loading of 0.0075 to 0.02 gr/dscf.

5.2 Rationale for Selection of Performance Indicator

Visible emissions was selected as the performance indicator because it is indicative of operation of each baghouse in a manner necessary to comply with the particulate emission standard. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Any increase in visible emissions indicates reduced performance of a particulate control device, therefore, the presence of visible emissions is used as a performance indicator.

5.3 Rationale for Selection of Indicator Level

The selected indicator range is no visible emissions. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of no visible was selected because: (1) an increase in visible emissions is indicative of an increase in particulate emissions; and (2) a monitoring technique which does not require a Method 9 certified observer is desired. Although RM 22 applies to fugitive sources, the visible/no visible emissions observation technique of RM-22 can be applied to ducted emissions; i.e., Method 22-like observations.

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The selected QIP threshold for baghouse visible emissions is 5 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

The current operating permit already requires visible emission observation during each foreman's shift or a minimum of one set of observations during each 24-hour period. Thus, current periodic monitoring activities and applicable permit conditions already satisfy a significant portion of the routine field operations that would be required by this CAM plan.

6.0 Records

The following document control records are considered as Quality Records:

- Facility's "Significant Aspects List with Objectives and Targets and Relevant EMP"
- Site HSE Inspections.
- Internal Compliance Assessments
- Daily Observations
- Manager Plus (Maintenance records relating to dye testing)

Revision/Review Log

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