



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Curt Fransen, Director

October 1, 2012

Kelly Packard, PE, Facility Manager
Ash Grove Cement Company
230 Cement Road
Inkom, ID 83245

RE: Facility ID No. 005-00004, Ash Grove Cement Company, Inkom
Final Permit Letter

Dear Mr. Packard:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2012.0032 Project 61067 to Ash Grove Cement Company to modify the PTC for a project to install and operate a cement unloading facility and to remove the kilns from the permit for the Inkom facility. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received June 11, 2012.

This permit is effective immediately and replaces PTC No. P-020326 issued December 23, 2010. This permit does not release Ash Grove Cement Company from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

In addition DEQ recognizes, as requested in the PTC application, that the Ash Grove Cement Company Inkom facility is no longer a Tier I source, and the requirements under the Title V permitting program and IDAPA 58.01.01.300-397 no longer apply. Therefore, Tier I operating permit No. T1-2007.0035, as issued on December 17, 2002 and last modified/amended on May 25, 2007, is terminated and no longer effective. The requirements of this Tier I permit no longer apply.

Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Pocatello Regional Office at 444 Hospital Way #300, Pocatello, ID 83201, Fax (208) 736-6168.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Rick Elkins, Air Quality Analyst, at (208) 736-6160 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Ash Grove Cement Company, Inkom
Page 2 of 2

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Ken Hanna at (208) 373-0283 or kenneth.hanna@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink that reads "Bill Rogers". The signature is written in a cursive, slightly slanted style.

Mike Simon
Stationary Source Program Manager
Air Quality Division

MSKH

Permit No. P-2012.0032 PROJ 61067

Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee Ash Grove Cement Company
Permit Number P-2012.0032
Project ID 61067
Facility ID 005-00004
Facility Location 230 Cement Road
Inkom, Idaho 83245-1543

Permit Authority

This permit (a) is issued according to the *Rules for the Control of Air Pollution in Idaho (Rules)*, IDAPA 58.01.01.200-228; (b) pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with its application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (g) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200-228.

Date Issued October 1, 2012



Ken Hanna, Permit Writer



Mike Simon, Stationary Source Manager

Table of Contents

1.	PERMIT TO CONSTRUCT SCOPE	3
2.	FACILITY-WIDE CONDITIONS.....	4
3.	RAW MATERIALS RECEIVING, CRUSHING, CONVEYING, AND STORAGE	9
4.	CLINKER UNLOADING SYSTEM	12
5.	CLINKER RECLAIM, FINISH GRINDING, CEMENT HANDLING, AND LOADOUT	14
6.	PERMIT TO CONSTRUCT GENERAL PROVISIONS	17
7.	APPENDIX A.....	20
8.	APPENDIX B.....	23
9.	APPENDIX C.....	25
10.	APPENDIX D.....	26
11.	APPENDIX E.....	27

1. PERMIT TO CONSTRUCT SCOPE

Purpose

- 1.1 The purpose of this Permit to Construct (PTC) revision is to establish requirements for new cement unloading equipment and to remove requirements for the two kilns that have been permanently shut down. As a result of closure of the kilns, this facility will no longer be a major facility under either the Title V program or the PSD program.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right hand margin.
- 1.3 This PTC replaces PTC No. P-020326 issued December 23, 2010. Also, Tier I operating permit No. T1-2007.0035 is terminated upon issuance of this permit.

Regulated Sources

- 1.4 Table 1.1 lists all sources of regulated emissions in this permit.

TABLE 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
3	Raw materials receiving, crushing, conveying, and storage which includes the following processes:	Fugitive Dust Control Plan
3	- Drilling, Blasting, and Dozing	Partially controlled, drill includes a cyclone
3	- Quarried raw materials receiving, crushing, and storage	Enclosure or water spray
3	- Gypsum receiving, crushing, and storage	Enclosure or water spray
3	- Storage piles	Fugitive Dust Control Plan
4	Clinker unloading system	Enclosure and baghouses
5	Clinker reclaim, finish grinding, cement handling, and loadout	Enclosure and baghouses

2. FACILITY-WIDE CONDITIONS

2.1 Facility-wide conditions are shown below.

Fugitive Dust Emissions

2.2 All reasonable precautions shall be taken to prevent PM from becoming airborne as required in IDAPA 58.01.01.651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. To establish reasonable precautions, the Permittee shall maintain and implement a Fugitive Dust Control Plan for facility operations which identifies potential sources of fugitive dust and which establishes good operating practices for limiting the formation and dispersion of dust from those sources. The approved Fugitive Dust Control Plan is part of the terms and conditions of the permit.

[December 23, 2010]

2.3 The Fugitive Dust Control Plan (Plan) shall contain, at a minimum, the following information and requirements:

1. A general description of the potential sources of fugitive dust at the facility.
2. Application of water from a water truck, or a suitable dust suppressant (e.g., magnesium chloride), for control of dust on haul roads and loading areas. The Plan must establish criteria to determine when water and/or dust suppressant must be applied. Water does not need to be applied when the surface is wet (i.e. during/following rainy conditions) or when reduced ambient temperatures may cause the water to freeze. The applicant may choose to use surface improvements to existing roads, such as paving, in lieu of water application where appropriate to control fugitive dust.
3. Procedures for installing and using hoods, fans, fabric filters, or equivalent systems, where practical, to enclose/capture and vent the handling of dusty materials.
4. Procedures for covering open-bodied trucks transporting materials likely to give rise to airborne dusts, paving roadways, and maintaining them in a clean condition, where practical.
5. Procedures to prevent track-out and spillage of particulate matter on paved public roadways, where practical.
6. Procedures to minimize dust formation during conveying operations such as installing sides/covers on conveyors and transfer points, and minimizing material drop heights.
7. Procedures to minimize dust formation from material storage piles such as applying water or dust suppressant, installing wind barriers, minimizing disturbances, etc. where practical.
8. Training/orientation of employees about the Fugitive Dust Control Plan procedures.
9. The initial Plan shall be submitted to DEQ for review and approval no later than 90 days after the issuance date of this permit. After approval of the initial plan, the permittee may update the plan at any time by submitting the proposed changes to DEQ for review and approval. The updated plan shall not become effective until approved by DEQ.
10. When in operation, the permittee shall comply with the provisions in the approved Fugitive Dust Control Plan at all times. Whenever an operating parameter is outside the operating range specified by the plan, the permittee shall take corrective action as expeditiously as practicable to bring the operating parameter back within the operating range.
11. A copy of the Fugitive Dust Control Plan shall remain onsite at all times.

[December 23, 2010]

2.4 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions. For specific areas of the plant that are controlled using water, the daily log sheet, attached as Appendix C, or any other DEQ-approved form, shall be used to record the hours of operation of the water sprays. The permittee shall maintain the records onsite and may maintain the records in electronic format.

[December 23, 2010]

2.5 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

2.6 The permittee shall conduct a weekly inspection of potential sources of fugitive emissions listed in Appendix D, or a DEQ-approved alternative list, during daylight hours and under normal operating conditions, to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

[December 23, 2010]

Visible Emissions

2.7 No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas are the only reason(s) for the failure of the emissions to comply with the requirements of this section.

2.8 The permittee shall conduct a weekly facility-wide inspection of potential sources of visible emissions listed in Appendix E during daylight hours and under normal operating conditions. Sources that are monitored using a continuous emissions monitoring system (COMS) are not required to comply with this permit condition. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emissions, the permittee shall either:

a) take appropriate corrective action as expeditiously as practicable to eliminate the visible emissions. Within 24 hours of the initial see/no see evaluation and after the corrective action, the permittee shall conduct a see/no see evaluation of the emissions point in question. If the visible emissions are not eliminated, the permittee shall comply with b).

or

b) perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20%, as measured using Method 9, for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136.

The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the

time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

[December 23, 2010]

2.9 Baghouse Requirements

- 2.9.1** The permittee shall perform a one-minute daily visible emissions inspection using EPA Method 22 (contained in 40 CFR Part 60) on each baghouse that is in operation at the facility. Each daily visible emissions inspection shall be performed to determine whether visible emissions are present either at the baghouse stack outlet or the baghouse structure itself. If visible emissions are observed at the baghouse stack outlet, Ash Grove shall then perform a six-minute visible emissions observation using the test methods and procedures specified in IDAPA 58.01.01.625.04.
- 2.9.2** The permittee shall perform corrective maintenance within 48 hours of observing any visible emissions from any baghouse stack or baghouse structure.
- 2.9.3** The permittee shall use a DEQ-approved daily log sheet to record visible emissions observation information for each of the baghouses operating at the facility. The daily log for each of the baghouses shall include the following:
- 2.9.3.1** The results of the daily visible emissions inspections, observations, and an attached six-minute visible emissions observation form for any visible emissions observations performed pursuant to Permit Condition 2.9.1.
- 2.9.3.2** The time and date when any maintenance was performed in response to a visible emissions inspection or observation.
- 2.9.3.3** A description of any specific problems that caused any visible emissions.
- 2.9.3.4** A description of any specific maintenance that was performed on the baghouse to sufficiently reduce or eliminate the visible emissions, or an explanation of why no maintenance was necessary.
- 2.9.3.5** If corrective maintenance was performed more than 48 hours after detection of visible emissions from a baghouse, the log shall include a description of the specific reason the maintenance was not performed sooner.

Dust Collector Maintenance Plan

- 2.9.4** The permittee shall inspect, operate and maintain the baghouses at the facility in accordance with the Dust Collector Maintenance Plan. The plan is provided in Appendix E. The plan shall, at a minimum, specify the following:
- Procedures for measuring the pressure drop across each baghouse;
 - A list containing the allowable pressure drop range for each baghouse. If an alternative pressure drop range is approved by DEQ, documentation of this change, including the approval by DEQ must be attached to the Plan; and
 - Procedures for conducting physical inspections of each baghouse to verify that it is operating and maintained in a manner that is consistent with the manufacturers design.

The plan is a condition of operation of the facility. The content of the plan may only be modified with written approval of DEQ. Modifications of the plan shall not require modification of this permit and any approved modification of the plan shall become a condition of this permit as though fully incorporated therein. Noncompliance with the pressure drop ranges set forth in the plan shall be deemed

a violation of this permit. Ash Grove shall, at all times, maintain documentation showing compliance with the pressure drop ranges set forth in the plan and shall make such documentation available to DEQ upon request.

[December 23, 2010]

NSPS 40 CFR 60 Subpart F for Portland Cement Plants - Opacity Limit for Raw Mill System, Finish Mill System, Raw Mill Storage, Clinker Storage, Finished Product Storage, Conveyor Transfer Points, Bagging and Bulk Loading And Unloading System

2.10 In accordance with 40 CFR 60.62(c), the permittee shall not cause to be discharged into the atmosphere from any affected facility other than a kiln or clinker cooler any gases which exhibit 10% opacity, or greater. Compliance with the particulate matter/opacity standard in 40 CFR 60.62 shall be determined using EPA Method 9 and the procedures in 40 CFR 60.11 to determine opacity per 40 CFR 60.64(b)(4). Affected facilities that are subject to 40 CFR 60 Subpart F include those sources that commenced construction or modification after August 17, 1971, and this includes but is not limited to the following sources:

- Conveyor transfer points: clinker silo No. 2 elevator controlled by baghouse no. 2; stacker belt controlled by baghouse no. 3; reclaim tunnel controlled by baghouse no. 4; feed bins and no. 3 elevator controlled by baghouse no. 6; reclaim belt to elevator no. 3 (source code F77); no. 3 elevator to bins no. 1 and no. 2; no. 3 elevator to bin belt; bin belt to bin no. 3 (source code F81); and no. 2 clinker elevator to stacker belt (source code F53).
- Raw Materials Receiving, Crushing, Conveying and Storage sources: Silo 25 tripper belt C trip chute.
- Clinker unloading system; the clinker hopper to clinker conveyor belt; the clinker conveyor belt to no. 2 elevator; no. 2 elevator to no. 6 drag; no. 6 drag to stacker belt; stacker belt to stacking pipe; no. 2 elevator to no. 5 drag to silos no. 1, 2, and 3; no. 2 elevator to silo no. 1.
- Cement Unloading sources: two boot lift enclosures (these movable enclosures attach tightly to the bottom of rail cars); two screw conveyors; bin vent; and pneumatic pump to storage silos (pneumatic air flow from this process exits through baghouse #9).

[October 1, 2012]

2.11 At such times as may be required by the Administrator under section 114 of the Act, the permittee shall conduct an opacity performance test on an affected facility, as listed in Permit Condition 2.10, in accordance with 40 CFR 60 Subpart F, 40 CFR 60.8 and 60.64(b)(4).

NSPS 40 CFR 60 Subpart A - General Provisions

2.12 The permittee shall comply with the General Provisions of the New Source Performance Standards (NSPS), as set forth under 40 CFR 60 Subpart A for all of the affected facilities designated under 40 CFR 60.60. Affected facilities that are subject to this requirement include, but are not limited to, the sources listed in Permit Condition 2.10. The Administrator in 40 CFR 60 Subpart F is DEQ, unless otherwise stated. Generally applicable requirements of Subpart A of the NSPS are summarized in the table in Appendix B. These summaries are provided to aid the permittee in understanding the general requirements and to highlight the notification and record keeping requirements of 40 CFR 60 for affected facilities. These summaries do not relieve the permittee from the responsibility to comply with all applicable requirements of the CFR, and are not intended to be a comprehensive listing of all requirements that may apply. Should there be a conflict between these summaries and the NSPS, the NSPS shall govern.

[October 1, 2012]

Incorporation of Federal Requirements by Reference

- 2.13** Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:
- Applicable requirements of Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60
 - Applicable requirements of National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), 40 CFR Part 63, if determined that Part 63 still applies to the facility after the kilns were shut down.

For permit conditions referencing or cited in accordance with any federal regulation incorporated by reference (including permit conditions identified as NSPS or NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the federal regulation, the requirements of the federal regulation shall govern, including any amendments to that regulation.

[October 1, 2012]

Compliance with Emission Limits

- 2.14** In absence of any other creditable evidence, compliance with emission limits is assured by complying with this permit's operating, monitoring and record keeping requirements.

[December 23, 2010]

MACT 40 CFR 63 Subpart LLL

- 2.15** If it is determined that 40 CFR 63 Subpart LLL still applies to this facility that does not operate kilns, then the Permittee shall comply with the applicable requirements under 40 CFR 63 Subpart LLL and the applicable requirements under 40 CFR 63 Subpart A.

[October 1, 2012]

3. RAW MATERIALS RECEIVING, CRUSHING, CONVEYING, AND STORAGE

Summary Description

The following is a narrative description of the raw materials receiving, crushing, conveying and storage operations, and other miscellaneous fugitive dust sources, regulated in this permit. Emissions from the fugitive dust sources are controlled according to the site-specific Fugitive Dust Control Plan (FDCP) and as described below. This description is for informational purposes only.

Drilling, Blasting, and Dozing: Holes are drilled into limestone for the placement of explosives. The explosives are detonated, and the blast loosens the rock so that a dozer can move the blasted material. Emissions associated with the drilling, blasting, and dozing of limestone are controlled according to the Fugitive Dust Control Plan.

Quarried Raw Materials (clay, shale, and limestone): The quarried raw materials are reduced in size by crushing and screening. Quarried clay, shale, and limestone are fed onto a feed pad that transfers the material to a jaw crusher for size reduction. The crushed raw material is transferred to the No.1 screen by inclined belts. Raw material that does not pass through the screen is reintroduced to the system by transferring it to a hammer mill for crushing and reconveying it to the screen. Material passing through the screen is transferred to a cross country belt that either: a) recycles the stockpiled rock through the entire crushing and screening process by reintroducing the material at the jaw crusher, or b) transfers it to belts which place the material in the raw silos from which it is conveyed to the raw mill.

Control Description: Emissions associated with the transport of limestone, clay, and shale from the front-end loader to the feed pad are controlled by a building open at one end and by a water spray. Emissions associated with the transport of the raw materials from the No.1 inclined belt to the No.2 inclined belt are controlled by a shed covering the transfer point. All transfer points after the jaw crusher are controlled by water spray or by moisture retained by the raw materials from the water spray or residual moisture inherent in the rock. Emissions associated with the following transfer points are controlled by an enclosure: Feed pad to Jaw Crusher, Jaw Crusher to Inclined Belt, Screen No. 2 Inclined Belt to Screen No. 1, Screen No. 1 to Cross Country Belt, Screen No. 1 to Hammer mill, Hammer mill to No. 1 Inclined Belt, and Belt C to Silos.

Gypsum: Gypsum from an outside source is belly/end dumped and stockpiled in the quarry. A front-end loader transfers the stockpiled gypsum onto the feed pad for transfer to a jaw crusher. The gypsum is crushed and conveyed to the No. 2 screen. Gypsum that cannot be screened is recycled through the system by transferring it to a cone crusher for crushing, and reconveying it to the No. 2 screen. The screened gypsum is then conveyed by a cross-country belt to a gypsum belt that transfers it to a gypsum bin for storage.

Control Description: Emissions associated with the transport of gypsum from the front-end loader to the feeder are controlled by a building open at one end. Emissions associated with the transport of gypsum from the No.1 inclined belt to the No. 2 inclined belt are controlled by a shed covering the transfer point. All transfer points after the jaw crusher are controlled by water spray or by moisture retained by the gypsum. Emissions associated with the following transfer points are controlled by an enclosure: Feed pad to Jaw Crusher, Jaw Crusher to No. 1 Inclined Belt, No. 1 Inclined Belt to No. 2 Inclined Belt, No. 2 Inclined Belt to Screen No. 1, Screen No. 1 to Cross Country Belt, Screen No. 1 to Hammer mill, Hammer mill to No. 1 Inclined Belt, and Belt C to Silos.

Storage Piles: Limestone (High and Low), gypsum, and cement kiln dust (CKD) are stored in the quarry in piles. Table 3.1 below shows the footprint size of each pile that was used as the basis for demonstrating compliance in the permitting analysis. It is noted that fugitive emissions from the CKD pile should only occur from the "active area" of the pile. The closed or inactive areas of the CKD pile will develop a crust layer from the cementitious properties of CKD that will prevent fugitive emissions. Emissions from the

limestone (High and Low), gypsum, and CKD storage piles are controlled according to the Fugitive Dust Control Plan.

Unpaved Roads: Routine vehicular traffic on unpaved plant roads. Fugitive dust from unpaved roadways is controlled according to the Fugitive Dust Control Plan, including but not limited to the use of water spraying on a regular basis.

Paved Roads: Routine vehicular traffic on paved plant roads. Fugitive dust from paved roadways in the plant are controlled according to the Fugitive Dust Control Plan, including but not limited to cleaning by a street sweeper on a regular basis.

Table 3.1 describes the methods and devices used to control emissions from these processes.

TABLE 3.1 EMISSIONS UNITS AND EMISSIONS CONTROL METHOD DESCRIPTION

Source Code	Emissions Units / Processes	Emissions Control Method
---	Drilling, Blasting and Dozing	---
F1	Drilling	Partially controlled, drill includes a cyclone
F2	Blasting	Fugitive Dust Control Plan
F3	Dozing	Fugitive Dust Control Plan
---	Quarried Raw Materials	---
F4	Loader to feed pad	Partial Enclosure
F5	Feed pad to jaw crusher	Enclosure and water spray
F6	Jaw crusher to inclined belt	Enclosure and water spray
F7	No. 1 incline belt to No. 2 incline belt	Partial Enclosure
F8	No. 2 incline belt to No. 3 incline belt	Water spray or residual moisture
F9	No. 3 incline belt to screen No. 2	Water spray or residual moisture
F10	Screen No. 2 to cross country belt	Water spray or residual moisture
F11	Screen No. 2 to cone crusher	Water spray or residual moisture
F12	Cone crusher to No. 4 incline belt	Water spray or residual moisture
F13	No. 4 incline belt to No. 2 incline belt	Water spray or residual moisture
F14	No. 2 incline belt to screen No. 1	Enclosure
F15	Screen No. 1 to cross country belt	Enclosure
F16	Screen No. 1 to hammer mill	Enclosure
F17	Hammer Mill to No. 1 incline belt	Enclosure
---	Gypsum	---
F4	Loader to feed pad	Partial enclosure and water spray
F5	Feed pad to jaw crusher	Enclosure and water spray
F6	Jaw crusher to No. 1 inclined belt	Enclosure
F7	No. 1 inclined belt to No. 2 inclined belt	Partial enclosure
F14	No. 2 inclined belt to screen No. 1	Enclosure
F15	Screen No. 1 to cross country belt	Enclosure
F16	Screen No. 1 to hammer mill	Enclosure
F17	Hammer mill to No. 1 inclined belt	Enclosure
F21	Cross country belt to gypsum belt	Water spray or residual moisture inherent in the rock
F22	Gypsum belt to chute	Water spray or residual moisture inherent in the rock
F23	Chute to gypsum bin	Water spray or residual moisture inherent in the rock
---	Storage Piles	---
1	Limestone high pile, 2 acres	Fugitive Dust Control Plan
2	Limestone low pile, 2 acres	Fugitive Dust Control Plan
3	Gypsum pile, 1 acre	Fugitive Dust Control Plan
7	CKD active storage pile, 2 acres	Fugitive Dust Control Plan
---	Unpaved Roads	---
	Unpaved Roads	Fugitive Dust Control Plan, including water spraying on a regular basis
---	Paved Roads	---
	Paved roads	Cleaned by a street sweeper on a regular basis

[October 1, 2012]

Emissions Limits

3.1 Fugitive Dust Emissions

All reasonable precautions shall be taken to prevent PM from becoming airborne as required in IDAPA 58.01.01.651.

[December 23, 2010]

3.2 Opacity - NSPS

For the affected facilities described in Permit Condition 2.10, the permittee shall comply with the 10% opacity limit in accordance with 40 CFR 60.62(c) and Permit Condition 2.10.

3.3 No person shall emit to the atmosphere from any process or process equipment commencing operation prior to October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emissions from the entire source in pounds per hour, and PW is the process weight in pounds per hour, in accordance with IDAPA 58.01.01.702.

- a. If PW is less than 17,000 lb/hr,
$$E = 0.045(PW)^{0.60}$$
- b. If PW is equal to or greater than 17,000 lb/hr,
$$E = 1.12(PW)^{0.27}$$

This requirement applies to the following processes and processes: Quarried raw materials receiving, crushing and storage and gypsum receiving, crushing and storage.

Operating Monitoring and Recordkeeping Requirements

3.4 Fugitive Dust Control

To meet the requirements of IDAPA 58.01.01.651 for the prevention of fugitive dust, the permittee shall comply with the fugitive dust control requirements as set forth in Permit Conditions 2.2 through 2.6 of this permit.

[December 23, 2010]

3.5 Opacity Performance Test, Silo 25 Trip Chute for Tripper Belt C - NSPS

At such times as may be required by the Administrator under section 114 of the Act, the permittee shall conduct an opacity performance test on an affected facility in accordance with Permit Condition 2.11, 40 CFR 60.64 and 40 CFR 60.8.

3.6 NSPS 40 CFR 60, Subpart A – General Provisions

For the affected facilities described in Permit Condition 2.10, the permittee shall comply with the NSPS General Provisions in accordance with Permit Condition 2.12.

4. CLINKER UNLOADING SYSTEM

Summary Description

The following is a narrative description of the clinker unloading system regulated in this permit. This description is for informational purposes only.

Clinker Unloading: Clinker is imported from other plants by truck and railcar to the facility and belly-dumped into an enclosed below-grade hopper. A vibratory feeder moves the clinker from the hopper to a covered conveyor belt. The conveyor belt carries the clinker to a clinker elevator. Clinker discharged from the elevator can be diverted to either the no. 5 drag conveyor, no. 6 drag, or directly to clinker silo no. 1. Clinker diverted to the no. 5 drag conveyor is discharged to one of three storage silos. Clinker diverted to the no. 6 drag conveyor is transferred to the clinker stacker belt followed by the clinker stacker. The clinker stacker deposits material into the clinker shed which is an outdoor pile that is mostly enclosed with the exception of a portion of the north end. Emissions are controlled as shown in Table 4.1 below.

Table 4.1 describes the methods and devices used to control emissions from these processes.

TABLE 4.1 EMISSIONS UNITS AND EMISSIONS CONTROL DESCRIPTION

Source Code	Emissions Unit	Emissions Control
---	Clinker Unloading	---
F49d	Unloading transfer of imported clinker from truck/railcar to underground hopper	Hopper pit (below grade)
F49e	Hopper to conveyor	Cover over conveyor, partial cover at transfer point, partial control by Baghouse No. 2
F49f	Conveyor to No. 2 elevator	Baghouse No. 2
---	No. 2 elevator to no. 5 drag to storage silos	Baghouse No. 2
---	No. 2 elevator to no. 6 drag	Baghouse No. 2
---	No. 6 drag to stacker belt	Baghouse No. 2
---	Stacker belt to Stacker	Partial enclosure and baghouse No. 3
---	Stacker to Clinker Pile	Partial enclosure and baghouse No. 3

[October 1, 2012]

Emissions Limits

4.1 Baghouses BH2 and BH3

The PM and PM₁₀ emissions from baghouses identified as BH2 and BH3 shall not exceed the emissions limits in Table 4.2.

TABLE 4.2 BAGHOUSE EMISSION LIMITS

Emissions Unit	PM		PM ₁₀	
	lb/hr	T/yr ^a	lb/hr	T/yr
Baghouse 2 (BH2)	1.44	0.32	1.22	0.27
Baghouse 3 (BH3)	0.51	2.14	0.44	1.82

^a T/yr is tons per consecutive 12-month period.

4.2 NSPS 40 CFR 60, Subpart F – Opacity for Affected Facilities Other Than Kilns or Clinker Coolers

For the affected facilities described in Permit Condition 2.10, the permittee shall comply with the 10% opacity limit in accordance with 40 CFR 60.62(c) and Permit Condition 2.10.

- 4.3 No person shall emit into the atmosphere from any process or process equipment commencing operation prior to October 1, 1979, PM in excess of the amount shown by the following equations in accordance with IDAPA 58.01.01.702. E is the allowable emissions from the entire source in pounds per hour, and PW is the process weight in pounds per hour.
- a. If PW is less than 17,000 lb/hr,
 $E = 0.045(PW)^{0.6}$
 - b. If PW is equal to or greater than 17,000 lb/hr,
 $E = 1.12(PW)^{0.27}$

Operating, Monitoring and Recordkeeping Requirements

4.4 Baghouses BH2 and BH3

The permittee shall assure compliance with the permit emission limits for BH2 and BH3 by complying with the operating, monitoring and recordkeeping requirements specified in Permit Condition 2.9.

[December 23, 2010]

4.5 NSPS 40 CFR 60, Subpart F – Opacity Performance Test

At such times as may be required by the Administrator under section 114 of the Act, the permittee shall conduct an opacity performance test on an affected facility in accordance with Permit Condition 2.11, 40 CFR 60.64 and 40 CFR 60.8.

4.6 NSPS 40 CFR 60, Subpart A – General Provisions

For the affected facilities described in Permit Condition 2.10, the permittee shall comply with the NSPS General Provisions in accordance with Permit Condition 2.12.

5. CLINKER RECLAIM, FINISH GRINDING, CEMENT HANDLING, AND LOADOUT

Summary Description

Following is a narrative description of the clinker reclaim, cement production, finish grinding, handling, and loadout sources regulated in this permit. This description is for informational purposes only.

Clinker Reclaim: The clinker reclaim process transfers clinker from the clinker storage area and clinker storage silos to the No. 1, No. 2, and No. 3 clinker feed bins.

Control Description: Emissions associated with the transfer points from the clinker storage area and the clinker silos (No. 1, No. 2, and No. 3) to the No. 3 clinker reclaim belt, including transfers to and from the No. 1 and No. 2 clinker reclaim belts, are controlled by an enclosure and a baghouse (BH4). Emissions associated with all clinker transfer points from the No. 3 reclaim belt to the No. 1, No. 2, and No. 3 clinker feed bins, including transfers to and from the No. 3 clinker elevator and the clinker drag chain, are controlled by baghouse BH6.

Finish Grinding and Associated Cement Handling: The finish grinding mills No. 1, No. 2, and No. 3 process clinker, gypsum and limestone into cement. The mills receive material from the clinker bins and the gypsum bin by conveyor. The materials are ground and conveyed by the elevator to the separator. (The No. 1 and No. 2 mills go to the No. 1 separator, and the No. 3 mill uses the No. 2 separator). The separator removes oversized particles and reintroduces them to the mill, and transfers the cement of appropriate size to the cement cooler. The No. 1 and No. 2 mills utilize two cement coolers in series (No. 1 and No. 2) the No. 3 mill has its own cement cooler (No. 3). Cement is transferred from the cement cooler by FK pump to one of 8 storage silos.

Control Description: Emissions associated with the transfer of material to and from the following: Mill No. 1 and mill No. 2, No. 1 cement elevator, No. 1 separator, and No. 1 and No. 2 cement coolers (in series). Emissions from these sources are controlled by Baghouse 7 (BH7) and through enclosure in a building. Emissions associated with the transfer of gypsum are controlled only by an enclosure.

Emissions associated with the transfer of material to and from the following: Mill No. 3, No. 2 cement elevator, No. 2 separator, and (No. 3) cement cooler. Emissions from these sources are controlled by Baghouse 8 (BH8) and through enclosure in a building. Emissions associated with the transfer of cement to cement silos No. 1 through No. 14 are controlled by Baghouse 9 (BH9).

Cement Unloading (i.e., cement that is received from other facilities and then unloaded and stored): Equipment will be installed to allow for the importing of cement from offsite. Cement imported from other plants by railcar will be dropped to a below-grade hopper using two boot-lift enclosures. These boot-lifts are designed to tightly connect to the bottom of railcars to establish fully enclosed transfer points. Cement will pass through the boot lifts and into two new screw conveyors. The screw conveyors will carry the cement to a pneumatic pump. A level indicator will be installed to regulate cement flow to the pump. Conveyance air used by the pump will be delivered by two air compressors. Cement unloaded from railcars will be conveyed to 6 cement storage silos (No. 9-14). The conveyance air will be ventilated through baghouse #9.

Control Description: Emissions will be controlled by enclosing transfer points, enclosed screw conveyors, and venting conveyance air to baghouse #9. All transfer points are located below ground level and are surrounded by existing structures that provide additional protection from wind.

Cement Loadout: Cement is transferred from storage silos to railcar or truck by a combination of screw conveyors, airslides, and elevators. Emissions are controlled as shown in Table 5.1 below. Table 5.1 describes the methods and devices used to control emissions from these processes.

TABLE 5.1 EMISSIONS UNITS AND EMISSIONS CONTROL DESCRIPTION

Source Code	Emissions Unit	Emissions Control
---	Clinker Reclaim	---
F65A, F65, F66, F67, F68, F69, F70, F71, F72, F73, F74, F75, F76	Transfer points from the clinker storage area, and from the clinker silos (No. 1, No. 2, and No. 3), to the No. 3 clinker reclaim belt, including transfers to and from the No. 1 and No. 2 clinker reclaim belts	Baghouse No. 4
F77, F78, F79, F80, F81	Transfer points from the No. 3 reclaim belt, the No. 3 clinker elevator, and the No. 1, No. 2, and No. 3 clinker feed bins	Baghouse No. 6
---	Finish Grinding and Associated Cement Handling Including Cement Unloading	---
F110-F114 F115-F119 F120-F129	Mill No. 1 and mill No. 2, No. 1 cement elevator, No. 1 separator, and No. 1 and No. 2 cement coolers (in series)	Baghouse No. 7
F112, F112a F117, F117a F134, F134a	Transfer of gypsum	Enclosure
F130-F136 F137-F144	Mill No. 3, No. 2 cement elevator, No. 2 separator, and (No. 3) cement cooler	Baghouse No. 8
F145-F158	Transfer of cement to cement silos No. 1 through No. 8	Baghouse No. 9
---	Transfer points from the cement railcar hoppers, the screw conveyors, and the pneumatic pump	Enclosure and pump bin vent
---	Transfer of cement from the pneumatic pump to the cement silos (No. 9-14)	Baghouse No. 9
---	Cement Loadout	---
F196-F238	Emissions associated with truck loadouts and truck loading tanks A, B, and C/D, and the transfer points within those parameters	Baghouse 10
F173-F195	All other cement activity between the FK pumps and truck loading tanks	Baghouse 9 and enclosure

[October 1, 2012

Emissions Limits

5.1 Baghouses BH4, BH6, BH7, BH8, BH9, and BH10

The PM and PM₁₀ emissions from baghouses BH4, BH6, BH7, BH8, BH9, and BH10 shall not exceed the emissions limits in Table 5.2.

TABLE 5.2 BAGHOUSE EMISSION LIMITS

Emissions Unit	PM		PM ₁₀	
	lb/hr	T/yr	lb/hr	T/yr
Baghouse 4 (BH4)	0.32	0.61	0.27	0.52
Baghouse 6 (BH6)	0.63	2.78	0.54	2.36
Baghouse 7 (BH7)	1.59	5.21	1.35	4.43
Baghouse 8 (BH8)	2.09	6.86	1.78	5.83
Baghouse 9 (BH9)	0.31	0.67	0.26	0.57
Baghouse 10 (BH10)	2.82	9.26	2.40	7.87

^a T/yr is tons per consecutive 12-month period.

5.2 NSPS 40 CFR 60, Subpart F – Opacity for Affected Facilities Other Than Kilns or Clinker Coolers

For the affected facilities described in Permit Condition 2.10, the permittee shall comply with the 10% opacity limit in accordance with 40 CFR 60.62(c) and Permit Condition 2.10.

- 5.3 No person shall emit into the atmosphere from any process or process equipment commencing operation prior to October 1, 1979, PM in excess of the amount shown by the following equations in accordance with IDAPA 58.01.01.702. E is the allowable emissions from the entire source in pounds per hour, and PW is the process weight in pounds per hour.
- a. If PW is less than 17,000 lb/hr,
 $E = 0.045(PW)^{0.6}$
 - b. If PW is equal to or greater than 17,000 lb/hr,
 $E = 1.12(PW)^{0.27}$

Operating Requirements

5.4 Finish Mill Production Rate Limits

Each of the three finish grinding mills shall produce no more than:

- 80 tons per hour of cement on a monthly average basis, and
- 394,106 tons of cement per any consecutive 12-month period.

[December 23, 2010]

Monitoring and Recordkeeping Requirements

5.5 Baghouses BH4, and BH6 through BH10

The permittee shall assure compliance with the permit emission limits for BH4, and BH6 through BH10 by complying with the operating, monitoring and recordkeeping requirements specified in Permit Condition 2.9.

[December 23, 2010]

5.6 Finish Mill Production Rate

To demonstrate compliance with Permit Condition 5.4, the production rate of each finish grinding mill shall be recorded as follows on a monthly basis:

- Production rate in units of tons of cement produced per hour on a monthly average basis. The rate is determined by dividing the total cement production, in tons, during the month by the total hours that the grinding mills operated that month; and
- Production rate in units of total tons of cement produced during the month, and total tons of cement produced during the most recent consecutive 12-month period.

[December 23, 2010]

5.7 NSPS 40 CFR 60, Subpart F – Opacity Performance Test

At such times as may be required by the Administrator under section 114 of the Act, the permittee shall conduct an opacity performance test on an affected facility in accordance with Permit Condition 2.11, 40 CFR 60.64 and 40 CFR 60.8. For each new Cement Unloading source listed in Permit Condition 2.10, an initial performance test shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but not later than 180 days after initial startup of the source.

5.8 NSPS 40 CFR 60, Subpart A – General Provisions

For the affected facilities described in Permit Condition 2.10, the permittee shall comply with the NSPS General Provisions in accordance with Permit Condition 2.12.

6. PERMIT TO CONSTRUCT GENERAL PROVISIONS

General Compliance

- 6.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq. [Idaho Code §39-101, et seq.]
- 6.2 The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution. [IDAPA 58.01.01.211, 5/1/94]
- 6.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations. [IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

- 6.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
- a. Enter upon the permittee's premises where an emission source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that are 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; and
 - d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.
- [Idaho Code §39-108]

Construction and Operation Notification

- 6.5 The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:
- a. A notification of the date of initiation of construction, within five working days after occurrence;
 - b. A notification of the date of any suspension of construction, if such suspension lasts for one year or more;
 - c. A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
 - d. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and

- e. A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211, 5/1/94]

Performance Testing

- 6.6 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

- 6.7 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

The permittee is not required to conduct the monitoring and associated recordkeeping for any emission unit if the emissions unit did not operate at any time between required monitoring events, provided the following conditions are met:

- The permittee makes a contemporaneous record in the log or file maintained on site of the date and time that the emission unit ceased operation, and the reason why the emission unit did not operate.
- The permittee makes a contemporaneous record in a log or file maintained on site of the date and time that the emission unit resumed operation.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

- 6.8 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

Certification

- 6.9 All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

- 6.10 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

- 6.11 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

- 6.12 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

- 6.13 The provisions of this permit are severable, and if 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.

[IDAPA 58.01.01.211 and 322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]

7. APPENDIX A

40 CFR 60 Subpart A Requirements

NSPS Subpart A (40 CFR 60.1) Summary of General Provisions for Affected Facilities

Section	Section Title	Summary of Section
60.4	Address	<p>All notifications and reports shall be submitted to:</p> <p>Pocatello Regional Office Department of Environmental Quality 444 Hospital Way #300 Pocatello, Idaho 83201 Fax: (208) 236-6168</p>
60.7(b),(c)(d) and (f)	Notification and Record Keeping	<ul style="list-style-type: none"> • Notification of construction commencement postmarked no later than 30 days of such date. • Notification of startup postmarked within 15 days of such date. • Notification of physical or operational change that may increase emissions postmarked 60 days before the change is made. • Maintain records of the occurrence and duration of any: startup, shutdown or malfunction of the affected source; malfunction of air pollution control device; and any period when a continuous monitoring system or monitoring device is inoperative. • For affected units with continuous monitoring device (e.g., COMS) requirements report excess emissions and monitoring system performance semiannually, postmarked by January 30th and July 30th (in the format required by NSPS). • Maintain in a permanent form records suitable for inspection all measurements, system testing, performance measurements, calibration checks, adjustments and maintenance performed. Shall be maintained for a period of two years from the date the record is required to be generated by the applicable regulation. • Continuous monitoring system record keeping requirements.
60.8	Performance Tests	<ul style="list-style-type: none"> • When testing is required, 60.8 specifies requirements as follows: Testing and report submittal timing; test methods; representative operating conditions during tests; notifications; providing performance testing facilities such as test ports and platforms; and a minimum of three "runs" per test.
60.11(a),(b),(c), (d) and (g)	Compliance with Standards and Maintenance Requirements	<ul style="list-style-type: none"> • Other than opacity standards, where performance tests are required compliance with standards is determined by methods and procedures established by 40 CFR 60.8. • Compliance with opacity standards shall be determined by Method 9 of Appendix A. The owner or operator may elect to use COM measurements in lieu of Method 9 provided notification is made at least 30 days before the performance test. • At all times, including periods of startup, shutdown, and malfunction to the extent practicable, the operator shall maintain and operate any affected facility and air pollution control equipment consistent with good air pollution control practices. • For the purposes of determining compliance with standards any credible evidence may be used if the appropriate performance or compliance test procedure has been performed.
60.12	Circumvention	<p>No owner or operator shall build, erect, install or use any article or method, including dilution, to conceal an emission which would otherwise constitute a violation.</p>
60.13	Monitoring Requirements	<p>All COMS shall conform to the reporting, calibration and data reduction requirements specified in detail by this section. Reporting requirements include submitting performance evaluations reports within 60 days of the evaluations required by this section, and submitting results of the performance evaluations for the COMS within 10 days before a performance test if using COMS to determine compliance with opacity during a performance test.</p>
60.14	Modification	<ul style="list-style-type: none"> • With certain exceptions, a modification is any physical or operational change to an existing facility which results in an

Section	Section Title	Summary of Section
		<ul style="list-style-type: none"> • Upon modification, an existing facility shall become an “affected facility” for each pollutant to which a standard applies. • Emission rate shall be expressed as kg/hr (lb/hr) of the pollutant for which a standard is applicable, and it is determined per 60.14. • Within 180 of completion of the physical/operational change, compliance with applicable standards must be achieved.
60.15	Reconstruction	<ul style="list-style-type: none"> • An existing facility becomes an “affected facility”, irrespective of any change in emission rate. • In general, “reconstruction” means the replacement of components of an existing facility to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost required to construct a comparable entirely new facility. • Notification of the proposed replacements postmarked 60 days before commencing construction.

8. APPENDIX B

Water Spray/Dust Suppressant Log

Ash Grove - Inkom Plant		DAILY ENVIRONMENTAL REPORT			
		Date			
Quarry			Drilling, Blasting and Dozing		
Crushing to Storage			Dozers		
	Tons Crushed	Operating Hrs	Water Spray (hrs)	Operating Hrs	
Limestone				Tons Blasted	
Silica					
Iron Ore					
Gypsum					
Clay					
Shale					
Raw Mill			Receiving		
	Daily Amount in Tons	Hours	Silica		
Limestone			Iron Ore		
Silica			Clay		
Iron Ore					
			Kiln Feed		
			Dry Rock	Hours	Clinker Prod.
			#1 Kiln		
			#2 Kiln		
			Dust Suppressant		
			0		
TYPES AND AMOUNTS OF FUELS					
	Tons/Hour	Gas # 1	mmBTU/Ton of Clinker Produced	Gallons/Day	Tons/Day
Coal # 1		Gas # 2	Used Oil # 1		Tires # 1
Coal # 2			Used Oil # 2		Tires # 2
Cement Production			Cement Loadout		
	Amount Produced in Tons	Hours	Amount in Tons		
#1 Mill			Hours		
#2 Mill			Truck		
#3 Mill			Rail		
			Bags		
			CKD		
			Tons		

9. APPENDIX C

Weekly Fugitive Emissions Inspection List

Weekly Fugitive Emissions Inspection List

Permit Table	Emissions Units/Processes	Source Codes to be inspected
3.1	Gypsum	Inclusive
3.1	Storage Piles	Inclusive
3.1	Unpaved Roads and Paved Roads	Inclusive
4.1	Clinker Unloading	F43, F44, F47, F48
5.1	Clinker Reclaim	None
5.1	Finish Grinding and Associated Handling	Inclusive
5.1	Cement Loadout	Inclusive
5.1	Cement Unloading	Inclusive

[September 28, 2012]

10. APPENDIX D

Weekly Visible Emissions Inspection List

Appendix D, Weekly Visible Emissions Inspection List

Permit Table	Emissions Units/Processes	Source Codes to be inspected
3.1	Drilling, Blasting and Dozing	None
3.1	Quarried Raw Materials (shale, clay, limestone)	None
3.1	Gypsum	None
3.1	Storage Piles	None
3.1	Unpaved Roads and Paved Roads	None
4.1	Clinker Unloading	F45, F49, F50, F51, F52, F56, F57, F58, F59, F60, F62, F63, F64, F65, F65a
5.1	Clinker Reclaim	F66-F81
5.1	Finish Grinding and Associated Handling	None
5.1	Cement Loadout	None
5.1	Cement Unloading	None
---	---	Baghouses (2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14) – Monitor in accordance with Dust Collector Maintenance Plan

[September 28, 2012]

11. APPENDIX E

Dust Collector Maintenance Plan

RECEIVED

MAY 31 2002

DEPARTMENT OF
ENVIRONMENTAL QUALITY
POCATELLO

ASH GROVE CEMENT COMPANY

INKOM, IDAHO PLANT

**DUST COLLECTOR
MAINTENANCE PLAN**

Dust Collector's
BH1, BH2, BH3, BH4, BH5, BH6, BH9, BH10, and BH11

May 30, 2002

DUST COLLECTION MAINTENANCE PLAN
ASH GROVE CEMENT, INKOM, IDAHO PLANT

PURPOSE

This program is designed to document current and on going dust collection equipment maintenance at the Inkom plant. The program is broken into nine sections as follows:

1. Daily shift inspections by production personnel.
2. Daily routine-scheduled inspections by a dust collector specialist.
3. Monthly scheduled inspections by a dust collector specialist.
4. Annual scheduled inspections by a dust collector specialist.
5. Bag replacement and determination of new differential pressure operating ranges
6. Documentation of program activities.
7. QA/QC Activities.
8. Corrective Action
9. General

SECTION 1: DAILY SHIFT INSPECTIONS BY PRODUCTION PERSONNEL

Production utility personnel tour the plant twice per shift. During each tour of the plant, utility personnel observe each exhaust duct from each dust collector for visible emissions. If any visible emissions are noted from any particular dust collector, the dust collector is removed from service and the appropriate repair actions are taken. Usually, the entire system in which the dust collector is included must be shut down. When bag problems are identified, bags are either replaced or otherwise isolated. Corrective actions are documented on a bag replacement form (Appendix D) that is maintained in the planner's office for the purpose of tracking bag and dust collector performance. Time spent repairing a given dust collector is noted on the appropriate employee's time sheet via work order. This enables maintenance personnel to monitor and track maintenance activities on each dust collector.

SECTION 2: DAILY SCHEDULED INSPECTIONS BY THE DUST COLLECTOR SPECIALIST

On a daily basis, the dust collector specialist performs a detailed inspection and mechanical walkthrough of each dust collector. A one-minute Method 22 observation shall be performed on each stack outlet and baghouse structure. In addition, the transfer point serviced by the dust collector will be observed for visible emissions. If the observations result in any visible emissions corrective actions will be taken by the dust collector specialist, a person certified in visible emissions monitoring will evaluate the emissions by performing a six-minute Method 9 test. When necessary, the maintenance department shall be notified to perform any maintenance work on the dust collector. Other items checked during this daily inspection include the magnehelic gauges (if applicable), overall visual inspection of the dust collector, hopper level indicators, manifold pressures, and door seals. The dust collector specialist is responsible for maintaining a daily log of problem areas noted during the walkthrough inspection. The log is maintained in the planner's office. In addition to these duties, the dust collector specialist records the pressure drop across each dust collector once a week. If the dust collector is down on the day of the reading, the dust collector specialist will record the pressure drop on the next day that the unit is operating. Since each dust collector's pressure drop can be affected by process specific variables, the manufacturer's recommended operating range may not be indicative of the dust collector's performance. The list below shows the recommended pressure drop ranges based on actual Method 22 evaluations of the dust collectors under their existing process operating conditions. A further discussion of the methodology used to determine the ranges can be found in Appendix A. It should be noted that these are recommended operating ranges for the dust collectors and are considered only one of many ways to monitor dust collector performance. Pressure drop across a dust collector is one indication of the collector's operation but gives no indication of the collector's emissions. Since these differential pressure operating ranges are only recommended ranges, Ash Grove acknowledges that they cannot always be met and makes no claim that they will be met on a continuous basis. Differential pressure can increase or decrease for a number of dust collector specific and / or process related reasons such as loss of system airflow to the collector or loss of airflow to the cleaning devices.

Ash Grove's Dust Collector Pressure Drop Ranges

BH1 2.8" – 8.2"

BH2 1.0" – 5.0"

BH3 3.0" – 6.0"

BH4 3.0" – 8.0"

BH5 Not In Service

BH6 1.0" - 6.4"

BH7 2.4" - 6.0"

BH8 3.0" - 7.4"

BH9 3.0" - 7.4"

(2.0) BH10 (2.8) - 5.0"

BH11 1.8" - 7.0"

SECTION 3: MONTHLY SCHEDULED INSPECTIONS BY THE DUST COLLECTOR SPECIALIST

Using the Maintenance Management System, the Maintenance Planner schedules a monthly work order to perform a formal inspection of all dust collectors. This monthly inspection usually occurs while the dust collector is in service and does not typically require the system being controlled by the dust collector to be taken out of service. Included in this inspection is a check of the pulse air system and controls for proper operation, air receiver tank(s), pulse air diaphragm(s), fan(s), drive(s), airlock(s), exterior condition (holes), door seal(s), partition wall(s), and duct(s). The checklist is attached as Appendix C. If, during the inspection, the dust collector specialist notes additional problems, the Maintenance Planner generates a work order to document these problems. Usually the repairs are mechanical in nature, but at times electrical repairs are also required. Both mechanical and electrical repairs are completed as soon as possible, but may need to be scheduled for later dates because of the complex nature of the job or the availability of spare parts.

The Maintenance department does the monthly inspection and the records are filed in the Maintenance Planner's Office, as well as documented in the Maintenance Management System.

SECTION 4: ANNUAL SCHEDULED INSPECTIONS BY THE DUST COLLECTOR SPECIALIST

Annual inspection schedules are maintained by the Maintenance Management System and administered by the Maintenance Planner. These annual inspections occur on a staggered frequency throughout the year and occur at times when the dust collector or particular system served by that dust collector is removed from service. In no case will a dust collector not be inspected annually. In addition to the items inspected during the scheduled monthly inspections, the more comprehensive annual inspection includes a detailed examination of the internal components of the dust collector. Typically, this inspection is performed concurrent with system maintenance tasks. Inspections are documented and maintained in the same manner as the monthly inspections. Please see Appendix C for an example of the annual inspection checklist.

Ash Grove reserves the right to change the frequencies of the scheduled maintenance depending upon production schedules and the wear rates of the consumable parts in each dust collector.

SECTION 5: BAG REPLACEMENT AND DETERMINATION OF NEW DIFFERENTIAL PRESSURE OPERATING RANGES

In the life cycle of a dust collector the filter bags will periodically need to be replaced. This section addresses the maintenance department's methodology to replace bags in dust collectors. Visible emissions can occur when one or more dust collector bags have become damaged. If upon noting visible emissions out the dust collector stack and upon subsequent inspection, the dust collector specialist identifies that a bag needs to be replaced he will do so immediately. Upon successfully replacing the bag(s) and after putting the dust collector back in operation he will perform a Method 22-like observation of each exhaust port and transfer point serviced by the dust collector to note any visible emissions. He will also observe and record the differential pressure of the dust collector. If the dust collector is operating within the differential pressure operating range referenced by this dust collector maintenance plan, then no further corrective action is required. If the dust collector is operating outside the differential pressure operating ranges referenced in this plan then the test methodology referenced in Appendix A will be utilized to determine new differential pressure operating ranges for the dust collector. The new range will be incorporated into Section 2 of the dust collector maintenance plan and the entire plan will be forwarded to the IDEQ for approval.

SECTION 6: DOCUMENTATION OF PROGRAM ACTIVITIES

MAINTENANCE PLANNER'S RECORD KEEPING RESPONSIBILITIES:

The Maintenance Planner maintains all records of dust collector bag changes, both on a scheduled and emergency basis, in the Maintenance Management System. The bag replacement form shown in Appendix D is used for this purpose.

The Production and Maintenance Supervisor's will also be certain that all labor spent working on the dust collection equipment is noted on the employees' daily time slips, so that these hours can be tallied in the plant's maintenance/payroll computer system. The Maintenance Planner will also monitor the proper charge out of stores inventory in order to maintain an accurate accounting of all materials used on this equipment.

The records of generated work orders concerning the plant's dust collection equipment, work done during the routine and annual inspections, and all other work requests on the plant's dust collection equipment, will be maintained by the Maintenance Planner. The Maintenance Planner will maintain a file of work performed during monthly scheduled dust collector inspections. The work order system will also be updated as to work performed during the monthly scheduled dust collector inspections. The Maintenance Planner will also file all other dust collection work order documentation generated during the annual equipment inspections.

The Electrical Supervisor will be certain that all electrical labor hours spent on the dust collection equipment are documented on the electric shop employees' time slips, so that proper accounting of

the time and labor costs can be accomplished. The Electrical Supervisor will monitor the proper charge out of stores inventory in order to maintain an accurate accounting of all materials used on this equipment.

The Maintenance Planner will maintain the scheduled inspection documentation. He/she will keep the checklists shown in Appendix B & C to use when inspecting the dust collection equipment. All documentation of mechanical and electrical work orders made will be maintained in the Maintenance Management System.

DUST COLLECTOR SPECIALIST RECORD KEEPING RESPONSIBILITIES:

The Dust Collector Specialist shall prepare and utilize a daily log form. The daily log for each of the dust collectors shall include the following:

- A. The results of the daily visible emissions inspections, observations, and an attached six-minute visible emissions observation form for any visible emissions observations performed.
- B. The time and date when any maintenance was performed in response to a visible emissions inspection or observation.
- C. A description of any specific problems that caused any visible emissions.
- D. A description of any specific maintenance that was performed on the dust collector to sufficiently reduce or eliminate the visible emissions, or an explanation of why no maintenance was necessary.
- E. If corrective maintenance was performed more than 48 hours after detection of visible emissions from a dust collector, the log shall include a description of the specific reason the maintenance was not performed sooner.

The form shall be approved by the Idaho Department of Environmental Quality. A copy of the current form is attached to the Plan at Appendix B.

SECTION 7: QA / QC ACTIVITIES

The Environmental and Safety Manager, or his designee, will administer QA/QC activities for this program. The Environmental and Safety Manager, or his designee, will audit the inspection records identified in Sections 1 through 6 of this plan to ensure that all records of all inspections are properly completed and maintained, and that repairs are carried to completion in a timely manner that helps ensure compliance with the applicable requirements.

In addition, documentation will be maintained that an individual qualified in Method 22-like emission observation trains the Dust Collector Specialist and other personnel responsible for the daily and periodic inspections.

SECTION 8: CORRECTIVE ACTION

Ash Grove shall perform corrective maintenance within 48 hours of observing any visible emissions from any dust collector stack or dust collector structure.

SECTION 9: GENERAL

The content of the Plan may only be modified with written approval of the Department. Modifications of the Plan shall not require modifications of the Consent Order and any subsequently issued Tier I or Tier II operating permits. Any approved modification of the Plan shall become a condition of the Consent Order and any subsequently issued Tier I or Tier II operating permits. Noncompliance with the pressure drop ranges set forth in the Plan shall be deemed a violation. Ash Grove shall, at all times, maintain documentation showing compliance with the pressure drop ranges set forth in the Plan and shall make such documentation available to the Department upon request.

CONCLUSION

With this program, Ash Grove is able to track the repair history of each dust collector and provide accurate accounting for all costs associated with maintaining the equipment in a manner consistent with compliance requirements and good engineering practice to minimize emissions. This program has built into it the capability of identifying recurring repair patterns that could indicate inadequate design, operation, or maintenance of its dust collectors.

This program may be modified to accommodate the commissioning or decommissioning of equipment, the replacement or modification of the Maintenance Management System used by the Maintenance Planner, or in the event that the plant work order computer system is changed. Modifications of the type mentioned above are administrative in nature and will not change the basic operation of the maintenance system and the corresponding monitoring and record keeping of dust collector inspections.

Appendix A

May 29, 2001

Rick Elkins
Air Quality Science Officer
Idaho Division of Environmental Quality
224 South Arthur
Pocatello, ID 83204-3202

Dear Mr. Elkins,

Attached you will find Ash Grove's recommended operating differential pressure ranges for each dust collector located at the plant. The supporting documentation is also included for review. The method used to determine the operating differential pressures was one in which the cleaning air supply to the dust collector was turned off. The unit was allowed to operate as normal and its differential pressure reading recorded over time. Each dust collector's cleaning cycle was typically off for up to three hours to perform the evaluation. At each differential pressure reading a visual assessment was made of the vent point(s) controlled by the dust collector as well as the dust collectors fan discharge to atmosphere for any visible emissions. The concept for this methodology was discussed at the December 12, 2000 meeting between representatives of AGC and the Department and I ask that you approve these operating ranges as submitted. Once approved, they will be incorporated into our Dust Collector O/M plan. In addition, we request that approval of these operating ranges be addressed in the consent order currently being negotiated.

In most cases formal EPA Method 9 evaluations were not done since we were not trying to quantify the percentage of visible emissions, but instead were trying to identify any visible emission. If any visible emission was observed out the dust collectors vent point(s) or fan discharge to atmosphere then the unit was determined to be operating outside its ability to prevent visible emissions. The differential pressure was noted when this occurred and became the dust collectors upper differential pressure limit. On several units, the evaluation was discontinued when the differential pressure stopped climbing even though no visible emissions were observed. For these dust collectors, the upper limit was determined to be the point when the differential pressure stopped climbing or the manufactures recommended upper operating limit, whichever was greater.

The lower differential pressure limit for each dust collector was determined to be either the differential pressure value on the dust collector at the start of the evaluation or the manufactures recommended lower limit, whichever was less. Since all of our dust collector units are currently configured to operate in a "continuous cleaning mode", the starting point was typically the lowest achievable value. However in some cases, the starting differential pressure was above the manufactures recommended lower differential pressure limit and for these collectors the manufactures recommended lower limit was utilized rather than the starting differential pressure. Should the maintenance conditions of these dust collectors (installation of new bags for example) result in a observed differential pressure of less then the manufacture's recommended lower differential pressure limit, then a visible emission evaluation will be done at this lower differential pressure reading and the information submitted to IDEQ to justify changing the lower differential pressure operating limit.

Sincerely,
Ash Grove Cement Company

Craig A. Puljan
Plant Manager

cc: Darrel Early
Tim Trumbull

Appendix B

Daily Inspection Sheet

DATE: _____
 Inspector Signature: _____

ITEM	BH 1	BH 2	BH 3	BH 4	BH 5	BH 6	BH 7	BH 8	BH 9	BH 10	BH 11
(check N/K/O) #1 clinker elevator	clinker	top of rock	clinker	rock	clinker	clinker	clinker	clinker	clinker	clinker	clinker
(X if not) Exhaust Fan emissions	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO
Pressure Gauge Reading (in H ₂ O)	2.8 - 4.2	1.0 - 5.0	3.0 - 6.0	3.0 - 6.0	1.0 - 4.4	2.4 - 6.0	3.0 - 7.4	3.0 - 7.4	2.8 - 5.0	1.8 - 7.0	
Operational Pressure Drop Range (in H ₂ O)											
Rotary Valve Operation											
Leak/Drop Seal											
Air Pulses											
Flaring Hoses											
Method 28 on Structure	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO
Method 9 (attach Formula Method 9 form if required)	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO
Comments/Explanation											
Visible Emission Results											
Time & Date of any maintenance performed as a result of visible emissions											
Description of specific problems that caused the visible emissions											
Description of maintenance performed that sufficiently reduced or eliminated the visible emissions											
If no maintenance was performed, explanation of why no maintenance was necessary											
If corrective maintenance was performed (more than 48 hours after observing visible emissions), describe why the maintenance was not performed sooner.											

Clinker Route (✓ one)

Stacking Belt	
#7 Drag chain	
Silos	
Chute to craneway	

Appendix C

FIGURE 3

**ASH GROVE CEMENT
INKOM PLANT DUST COLLECTOR MAINTENANCE CHECKLIST**
 COLLECTOR: _____
 INSPECTED BY: _____
 DATE: _____

	OK	REPAIRS REQUIRED	REPAIRS COMPLETED	W.O. #	W.O. # COMPLT
COLLECTOR ITEMS					
CONDITION OF EXTERIOR SHELL: DOORS, INCLUDING DOOR SEAL HOPPER IS THERE ANY MAJOR RUST? INSULATION					
PARTITION WALL CONDITION TUBE SHEET CONDITION					
DUCTING INTO COLLECTOR					
DUCTING TO FAN FROM COLLECTOR					
AIR PULSE SYSTEM					
LEAKS					
AIR PRESSURE GAUGES					
AIR PULSE DIAPHRAGMS					
FAN ITEMS					
FAN WHEEL					
BEARING LUBRICATION					
FAN SHAFT					
FAN HOUSING					
DRIVE SHEAVE incl. hub or taperlock					
DRIVEN SHEAVE incl. hub or taperlock					
DRIVE BELTS					
AIRLOCK ITEMS					
ROTARY FEEDER ROTOR CONDITION					
MOTOR BEARINGS					
OTHER					

IF ADDITIONAL SPACE IS NEEDED, PLEASE USE THE BACK OF THIS FORM.

Appendix D

FIGURE 1

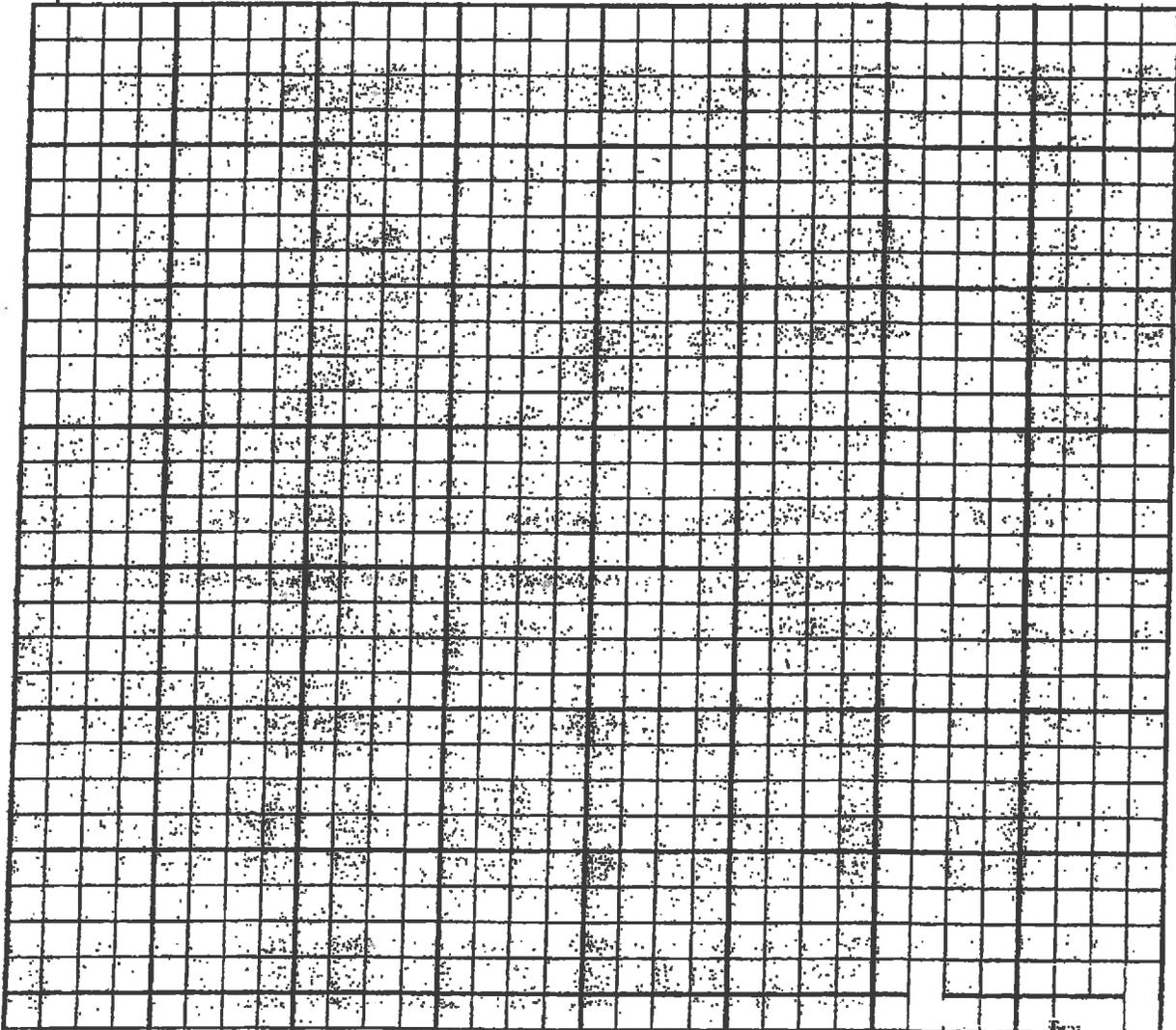
FIGURE 1



230 Cement Road
INKOM, Idaho 83245
Plant Office: (208) 775-3354
Fax: (208) 775-3509
DATE: _____

ASH GROVE CEMENT - INKOM PLANT
DUST COLLECTOR BAG REPLACEMENT SHEET

NAME: _____
DEPT: _____
JOB: _____



NOTE 1: PLEASE DRAW AN OUTLINE FOR THE COMPARTMENTS AND IDENTIFY.

FIGURE 1

ASH GROVE CEMENT Inkom Plant
DUST COLLECTOR BAG REPLACEMENT SHEET

COLLECTOR: _____

DATE BAGS CHANGED:

COMP. 1

COMP. 2

COMP. 3

COMP. 4

- NOTE 1: PLEASE MAKE AN "X" IN THE BOX WHICH REPRESENTS THE BAG WHICH WAS CHANGED. IF ALL BAGS IN THE COMPARTMENT WERE CHANGED MAKE 1 LARGE "X" ON THE COMPARTMENT.
- NOTE 1: COMPARTMENT #1 IS THE LEFT ONE AS YOU ARE FACING THE COLLECTOR WHILE STANDING ON THE ACCESS LADDER.
- NOTE 1: THIS FORM IS FOR ALL COLLECTORS IN THE PLANT, IGNORE THE MULTIPLE COMPARTMENTS ON UNITS WITH ONLY ONE.