

Enclosure 1

This enclosure requests information about the cement production facility, facility equipment and processes regulated under 40 CFR part 63 subpart LLL, facility processing rates and air pollution control devices used, and information on control device performance.

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

General Instructions

1. Please complete one copy of this workbook for each portland cement manufacturing plant owned or operated by your company.
2. If any of the data requested is considered confidential business information (CBI), please prepare an additional version of this work book containing only non-confidential information.
3. Please direct any questions to Brian Storey at (919) 541-1103 or storey.brian@epa.gov

This survey contains the following tabs after the cover sheet:

Instructions (this tab). Instructions for completing this survey.

Terms. Definitions and acronyms of certain technical terms that are mentioned throughout this survey.

Part A (01-14). Facility Information

Part B (01). Facility Equipment Regulated under Subpart LLL

Part C (01-04). Processing Rates and Controls Used for Kilns Regulated under Subpart LLL

Part D (01-03). Detailed Control Device and Emission Release Information for Sources Regulated under Subpart LLL

To submit your survey, the following instructions are referenced from the Section 114 transmittal letter.

All required non-confidential business information (non-CBI) must be sent electronically to:

Brian Storey
Office of Air Quality Planning and Standards
Sector Policies and Programs Division
Research Triangle Park, NC 27711
storey.brian@epa.gov

For confidential business information (CBI), remove those portions from your response and submit them separately to the appropriate email address below. For any confidential information, the CBI may be sent in either of the following two manners:

1. **Preferred method to receive CBI:** transmitted to OAQPS CBI Office electronically using email attachments, File Transfer Protocol (FTP), or other online file sharing services (e.g., Dropbox, OneDrive, Google Drive) using the email address, oaqpscibi@epa.gov, and should include clear CBI markings. If assistance is needed with submitting large electronic files, please email oaqpscibi@epa.gov to request a file transfer link.
2. Sent to the OAQPS Document Control Officer through a postal service (U.S. Mail, United Parcel Service (UPS), Federal Express (FedEx)). CBI material should be double wrapped and clearly marked. CBI markings should not show through the outer envelope.

Please use the street address below for U.S. Postal Service Express Mail, registered mail, or private courier for submitting your CBI:

Ms. Tiffany Purifoy, OAQPS DCO
ATTN: Portland Cement NESHAP
U.S. Environmental Protection Agency
Mail Code C404-02
109 T.W. Alexander Drive
Research Triangle Park, NC 27711

Please use the street address below for commercial package carriers, such as FedEx and UPS for submitting your CBI:

Ms. Tiffany Purifoy, OAQPS DCO
ATTN: Portland Cement NESHAP
U.S. Environmental Protection Agency
Mail Code C404-02
109 T.W. Alexander Drive

Research Triangle Park, NC 27711

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Definitions	
Term	Definition
Alkali bypass	A duct between the feed end of the kiln and the preheater tower through which a portion of the kiln exit gas stream is withdrawn and quickly cooled by air or water to avoid excessive buildup of alkali, chloride and/or sulfur on the raw feed. This may also be referred to as the "kiln exhaust gas bypass".
Bypass stack	The stack that vents exhaust gases to the atmosphere from the bypass control device.
Clinker cooler	Equipment into which clinker product leaving the kiln is placed to be cooled by air supplied by a forced draft or natural draft supply system.
Conveyor transfer point	A point where any material including but not limited to feed material, fuel, clinker or product, is transferred to or from a conveying system, or between separate parts of a conveying system.
Finish mill	A roll crusher, ball and tube mill, or other size reduction equipment used to grind clinker to a fine powder. Gypsum and other materials may be added to and blended with clinker in a finish mill. The finish mill also includes the air separator associated with the finish mill.
In-line coal mills	A coal mill using kiln exhaust gases in their process. A coal mill with a heat source other than the kiln or a coal mill using exhaust gases from the clinker cooler is not an in-line coal mill.
Kiln	A device, including any associated preheater or precalciner devices, inline raw mills, inline coal mills or alkali bypasses that produces clinker by heating limestone and other materials for subsequent production of portland cement. Because the inline raw mill and inline coal mill are considered an integral part of the kiln, for purposes of determining the appropriate emissions limit, the term kiln also applies to the exhaust of the inline raw mill and the inline coal mill.
Monovent	An exhaust configuration of a building or emission control device (e.g., positive-pressure fabric filter) that extends the length of the structure and has a width very small in relation to its length (i.e., length to width ratio is typically greater than 5:1). The exhaust may be an open vent with or without a roof, louvered vents, or a combination of such features.
Open clinker pile	A clinker storage pile on the ground for more than three days that is not completely enclosed in a building or structure.
Raw material dryer	An impact dryer, drum dryer, paddle-equipped rapid dryer, air separator, or other equipment used to reduce the moisture content of feed or other materials.
Raw mill	A ball and tube mill, vertical roller mill or other size reduction equipment, that is not part of an inline kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.
Sorbent	Activated carbon, lime, or any other type of material injected into kiln exhaust for the purposes of capturing and removing any hazardous air pollutant.

Acronyms	
Acronym	Term
APCD	add-on air pollution control device
CBI	Confidential Business Information
ID	identifier
NAICS	North American Industrial Classification System
OPC	ordinary portland cement
PLC	portland-limestone cement
SCFM	standard cubic feet per minute

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part A. Facility Information

A-01. Name and address of legal OWNER of the facility (if more than one owner, provide the name, address, and percent ownership for each owner using the additional columns to right):

Name	Ash Grove Cement Company		
Address	11011 Cody Street, Suite 300		
City	Overland Park		
State	KS		
Zip	66210		
Percent Ownership	100%		

A-02. Name and address of legal OPERATOR of the facility, if different than the legal OWNER:

Name	
Address	
City	
State	
Zip	

A-03. Name and complete street address of facility (physical location):

Facility Name	Ash Grove Cement Company Durkee
Address	33060 Shirttail Creek Road
City	Durkee
State	Oregon
Zip	97905-0287
County	Baker

A-04. Provide mailing address of the facility if different than physical location:

Address	
City	
State	
Zip	
County	

A-05. Facility contact able to answer technical questions about the completed survey:

Name (first name, last name)	Norma Job
Title	Environmental Manager
Telephone number and extension	(541) 877 2640
E-mail	norma.job@ashgrove.com

A-06. What is the facility size classification for hazardous air pollutant (HAP) emissions? *(Enter "Yes" or "No")*

EPA Major Source of Hazardous Air Pollutants (HAP)	No
EPA Area source (based on potential to emit) of HAP	Yes
EPA Area source (Synthetic Minor) of HAP	No

A-07. Facility NAICS codes. *Note: The primary NAICS code represents the line of business that generates the most income for the facility.*

Primary NAICS code	327310
Other facility NAICS codes	212312

A-08. Company Size *(Enter "Yes" for all that apply) Note: Approximate number of all employees (worldwide) of the business enterprise that owns this facility, including where applicable, the parent company and all subsidiaries, branches, and unrelated establishments owned by the parent company.*

< 1,000 employees	
≥ 1,000 employees	Yes

A-09 Parent Company Annual Revenue

Please provide the estimated annual revenue (\$) generated by the parent company (identified in A-01) in FY2021.

FY2021 Annual Revenue of Parent Company	N/A
---	-----

A-10. Federal and State rule/permit coverage. *(Enter "Yes" for all that apply to this facility).*

Subpart LLL (Portland Cement Manufacturing)	Yes	40 CFR 63 Subpart LLL, Title 129, Chapter 28, Section 001.40
Other NESHAP <i>(SPECIFY rule name and subpart)</i>	Yes	
Other <i>(SPECIFY rule name and subpart)</i>	Yes	
New Source Performance Standards (NSPS):		40 CFR 63 Subpart ZZZZ RICE MACT
40 CFR 60 subpart F (Portland Cement Plants)	Yes	
Other NSPS <i>(SPECIFY rule name and subpart)</i>	Yes	
Other NSPS <i>(SPECIFY rule name and subpart)</i>	Yes	40 CFR 63 Subpart CCCCCC Gasoline Distribution MACT
Other NSPS <i>(SPECIFY rule name and subpart)</i>	No	
Title V:		
<i>(SPECIFY rule that led to title V permit requirement)</i>	Yes	40 CFR 60 Subpart Y - Coal Preparation Plants
State Air Toxics:		
<i>(SPECIFY rule name and subpart)</i>	Yes	
<i>(SPECIFY rule name and subpart)</i>		40 CFR 60 Subpart OOO Non Metallic Mineral Processing Plants
Other: <i>(SPECIFY emission unit and rule)</i>		
Other: <i>(SPECIFY emission unit and rule)</i>		

A-11. Normal Facility Production Hours

Hours/day:	24
Shifts/day:	3
Days/week:	7
Weeks/year:	52

A-12. Clinker Production. Amount of clinker produced the most recent year of normal operation. Total capacity of clinker production.

Tons of clinker produced in last normal operating year:	
Maximum tons of clinker able to be produced in one year (plant capacity):	1,100,000

CY2021 DPR
Oregon Title V Operating Permit Review Report

A-13. Please provide a copy of a schematic or process flow diagram of the plant portland cement manufacturing operations. Include identifying labels for equipment to be used for the remainder of this questionnaire.

Schematic or Process Flow Diagram File Name*	Exhibit A
--	-----------

*Please include Unit ID No., APCD ID No., Controlled Emissions Point ID No., and Un-controlled Emissions Point ID No. where applicable in the Schematic or Process Flow Diagram (PFD). It is assumed the PFD will be submitted electronically, as a separate file.

A-14. Please provide all of the pertinent information listed below. Please provide electronic copies, if available, and indicate items provided below. (Enter "Yes" for all that apply).

Title V Permit or State Air Operating Permit*	Yes
---	-----

Exhibit B

*If the permit is available online, please provide the URL for the file location.
<https://www.deq.state.or.us/msd/profilerreports/traacs.asp?id=01-0029-TV-01>

Part C. Processing Rates and Controls Used for Kilns Regulated under Subpart LLL

Please provide information below for all kilns/clinker coolers at your facility; provide information for 2021 if available, or other year (please specify):

Calendar Year (CY) 2021

Please insert Rows as needed.

Please use the Notes/Comments column for any additional clarification, or APCDs if sufficient columns are not available. Additionally, Tab E provides space for additional comments.

C-01. For Kiln/Clinker Cooler With Common Exhaust

Unit ID No. (Use Same ID as Provided in Section 8-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Actual Unit Operating Hours (Should be no more than 8,760) (hr/yr)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-01.1 Common Exhaust Kilns: Additional Fuels List

Unit ID No. (from C-01)					
Additional Fuels					

C-02. For Each Kiln With Separate Exhaust

Unit ID No. (Use Same ID as Provided in Section 8-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Actual Unit Operating Hours (Should be no more than 8,760) (hr/yr)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments
OA	1,100,000			Natural Gas	Coal, fuel oil, used oil, tires	N/A	Baghouse	431.BF1	Coal Mill Baghouse	476.BF3	Powdered Activated Carbon Injection and Hg Baghouse	432.BF1	SNCR	SNCR	OA, Main Kiln Stack		

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-02.1 Separate Exhaust Kilns: Additional Fuels List

Unit ID No. (from C-02)					
Additional Fuels					

C-03. For Each Idled Kiln, Not in Operation

Unit ID No. (Use Same ID as Provided in Section 8-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Current Idle Period (days/months/years)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments
					Use the space in C-03.1 to list any additional fuels, permitted or otherwise, burned by the Unit identified in this table.												

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-03.1 Idled Kilns: Additional Fuels List

Unit ID No. (from C-03)					
Additional Fuels					

C-04. For Each Clinker Cooler with Separate Exhaust

Unit ID No. <small>(Use Same ID as Provided in Section B-01, Column A)</small>	Maximum Capacity of Unit <small>(tons/yr)</small>	Actual Production of Unit <small>(tons/yr)</small>	Actual Unit Operating Hours <small>(Should be no more than 8,760) <small>(hr/yr)</small></small>	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 <small>(where applicable)</small>	APCD Control Device ID No. 2 <small>(where applicable)</small>	APCD Control Device Type No. 3 <small>(where applicable)</small>	APCD Control Device ID No. 3 <small>(where applicable)</small>	APCD Control Device Type No. 4 <small>(where applicable)</small>	APCD Control Device ID No. 4 <small>(where applicable)</small>	Controlled Emissions Point ID No. <small>(Details provided in Section D)</small>	Un-controlled Emissions Point ID No. <small>(Details provided in Section D)</small>	Additional Notes/Comments
CC	1,100,000	0	0	Baghouse	471.BF1							CC		

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part D. Detailed Control Device and Emission Release Information for Sources Regulated under Subpart LLL

Please provide information below for all air pollution control devices at your facility; provide information for 2021 if available, or other year (please specify):

CY 2021

Please insert Rows as needed.

D-01. Add-on air pollution control devices (APCD)

APCD ID No. (This should match the ID's provided in Section C)	Device Type*	Pollutant Controlled (separate pollutants with comma)	Capture Efficiency, if known (percent)	Control Device Efficiency, if known (percent)	Methods Used for Determining Capture & Control Efficiencies**	What process units are vented through this point? Unit ID No. (Use Same IDs as Provided in Section B-01 (column A), and Section C) (separate IDs with comma)
431.BF1	Main Baghouse	PM-FIL, PM10-FIL, PM2.5-FIL	100		b	OA (Kiln, Raw Mill)
476.BF3	Coal Mill Baghouse	PM-FIL, PM10-FIL, PM2.5-FIL	100		b	OA (Kiln, Coal Mill)
432.BF1	Powdered Activated Carbon Injection and Hg Baghouse	Hg	100		b	OA (Kiln, Raw Mill)
441.CS1 and 441.CS2 (control skids for the ammonia injection)	SNCR	NOx				OA (Kiln, Raw Mill)
471.BF1	Baghouse	PM-FIL, PM10-FIL, PM2.5-FIL	100		b	CC (Clinker Cooler)

* For example, fabric filter, wet scrubber etc.

** Control & Capture Efficiency; a = Testing (specify method); b = Manufacturer's Specifications; c = Engineering Estimate

Please provide any additional information concerning the Control Devices identified in D-01, as needed, using the Part E tab of this workbook.

D-02. For each exhaust point/stack with a control device, please provide the following information, if known.

Controlled Emissions Point ID No. (This should match the ID's provided in Section C)	What control devices are vented at this point? (APCD ID No. from Section D-01)	Latitude*	Longitude*	Flow Rate (SCFM)	
OA	Kiln	44.541956	-117.421097	238000	5/10/2021 Stack Test
CC	Cooler	44.542492	-117.421897	13000	4/2022 Stack test, dscfm

* Longitude and Latitude should be specified to 6 decimal places. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

D-03. For each exhaust point/stack not associated with a control device, please provide the following information, if known.

Un-controlled Emissions Point ID No. (This should match the ID's provided in Section C)	What process units are vented though this point? Unit ID No. (Use Same IDs as Provided in Section B-01 (column A), and Section C) (separate IDs with comma)	Latitude*	Longitude*	Flow Rate, if known (SCFM)

* Longitude and Latitude should be specified to 6 decimal places. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

Part E. Additional Information

E-01. Provide any additional information in the space below as needed. Please identify the associated part of the workbook (e.g., C-01), as applicable.

Identify Questionnaire Part Associated with the Information Provided (e.g., C-01)	Identify Information Being Requested (e.g., "Process Modification")	Additional Information

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)
Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Validation
This sheets provides the names and values that should be used when filling out the sheet.

POLLUTANT CODE	POLLUTANT CODE DESC	HAP CATEGORY NAME1
Particulate Matter		
PM10-FIL	Primary PM10, Filterable Portion Only	
PM10-PRI	Primary PM10 (Includes Filterables + Condensibles)	
PM25-FIL	Primary PM2.5, Filterable Portion Only	
PM25-PRI	Primary PM2.5 (Includes Filterables + Condensibles)	
PM-CON	Primary PM Condensible Portion Only (All Less Than 1 Micron)	
PM-FIL	Primary PM, Filterable Portion Only	
PM-PRI	Primary PM (Includes Filterables + Condensibles)	
Criteria Air Pollutants and VOC		
CO	Carbon Monoxide	
195	Lead & Compounds	Lead Compounds
NOX	Nitrogen Oxides	
SO2	Sulfur Dioxide	
VOC	Volatile Organic Compounds	
HAP Metals		
7440360	Antimony	Antimony Compounds
7440382	Arsenic	Arsenic Compounds
7440417	Beryllium	Beryllium Compounds
7440439	Cadmium	Cadmium Compounds
7440473	Chromium (Total)	Chromium Compounds
16065	Chromium (III)	Chromium Compounds
18540	Chromium (VI)	Chromium Compounds
7440484	Cobalt	Cobalt Compounds
7439921	Lead	Lead Compounds
7439965	Manganese	Manganese Compounds
7440020	Nickel	Nickel Compounds
7782492	Selenium	Selenium Compounds
7439976	Mercury (Total)	Mercury Compounds
200	Elemental Gaseous Mercury	Mercury Compounds
201	Gaseous Divalent Mercury	Mercury Compounds
202	Particulate Divalent Mercury	Mercury Compounds
Dioxin Furan		
600	2,3,7,8-TCDD TEQ (Total)	Dioxins/Furans as 2,3,7,8-TCDD TEQs
67562394	1,2,3,4,6,7,8-Heptachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
35822469	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	Dioxins/Furans as 2,3,7,8-TCDD TEQs
55673897	1,2,3,4,7,8,9-Heptachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
70648269	1,2,3,4,7,8-Hexachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
39227286	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	Dioxins/Furans as 2,3,7,8-TCDD TEQs
57117449	1,2,3,6,7,8-Hexachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
57653857	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	Dioxins/Furans as 2,3,7,8-TCDD TEQs
72918219	1,2,3,7,8,9-Hexachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
19408743	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	Dioxins/Furans as 2,3,7,8-TCDD TEQs
57117416	1,2,3,7,8-Pentachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
40321764	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	Dioxins/Furans as 2,3,7,8-TCDD TEQs
60851345	2,3,4,6,7,8-Hexachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
57117314	2,3,4,7,8-Pentachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
51207319	2,3,7,8-Tetrachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
1746016	2,3,7,8-Tetrachlorodibenzo-p-Dioxin	Dioxins/Furans as 2,3,7,8-TCDD TEQs
39001020	Octachlorodibenzofuran	Dioxins/Furans as 2,3,7,8-TCDD TEQs
3268879	Octachlorodibenzo-p-Dioxin	Dioxins/Furans as 2,3,7,8-TCDD TEQs
Organic HAP and Acid Gasses.		
6189419	(25,35)-2,3-Epoxybutane	
79345	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane
79005	1,1,2-Trichloroethane	1,1,2-Trichloroethane
57147	1,1-Dimethyl Hydrazine	1,1-Dimethylhydrazine
5124301	1,1-Methylene bis(4-isocyanatocyclohexane)	
26447405	1,1'-Methylenediphenyl Diisocyanate	
58899	1,2,3,4,5,6-Hexachlorocyclyhexane	1,2,3,4,5,6-Hexachlorocyclyhexane (All Stereo Isomers,
120821	1,2,4-Trichlorobenzene	1,2,4-Trichlorobenzene
95636	1,2,4-Trimethylbenzene	
590192	1,2-Butadiene	
96128	1,2-Dibromo-3-Chloropropane	1,2-Dibromo-3-Chloropropane
540498	1,2-Dibromethylene	
540590	1,2-Dichloroethylene	
110714	1,2-Dimethoxyethane	Glycol Ethers
122667	1,2-Diphenylhydrazine	1,2-Diphenylhydrazine
106887	1,2-Epoxybutane	1,2-Epoxybutane
75558	1,2-Propylenimine	1,2-Propylenimine (2-Methylaziridine)
646060	1,3 Dioxolane	Glycol Ethers
108678	1,3,5 Trimethylbenzene	
106990	1,3-Butadiene	1,3-Butadiene
542756	1,3-Dichloropropene	1,3-Dichloropropene
102067	1,3-Diphenylguanidine	
2004708	1,3-Pentadiene, (3E)-	
1574410	1,3-Pentadiene, (3Z)-	
108452	1,3-Phenylenediamine	
1120714	1,3-Propanesultone	1,3-Propane Sultone
106467	1,4-Dichlorobenzene	1,4-Dichlorobenzene
591935	1,4-Pentadiene	
42397648	1,6-Dinitropyrene	Polycyclic Organic Matter
42397659	1,8-Dinitropyrene	Polycyclic Organic Matter
2422799	12-Methylbenz(a)Anthracene	Polycyclic Organic Matter
71363	1-Butanol	
106989	1-Butene	
106898	1-Chloro-2,3-Epoxypropane	Epichlorohydrin (1-Chloro-2,3-Epoxypropane)
98566	1-Chloro-4-(Trifluoromethyl)-Benzene	
23436193	1-Isobutoxy-2-Propanol	Glycol Ethers
90120	1-Methylnaphthalene	Polycyclic Organic Matter
832699	1-Methylphenanthrene	Polycyclic Organic Matter
2381217	1-Methylpyrene	Polycyclic Organic Matter

SCC Code	Units	SCC Level One	SCC Level Two	SCC Level Three	SCC Level Four	Description	Short Name	Category	Fuel	EI Sector	Last Inventory Year Valid	Map To	Usage Notes
30500606	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Kilns	CEMENT	Cement			Industrial			
30500607	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Raw Material Unloading	CEMENT	Cement			Industrial			
30500608	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Raw Material Piles	CEMENT	Cement			Industrial			
30500609	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Primary Crushing	CEMENT	Cement			Industrial			
30500610	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Secondary Crushing	CEMENT	Cement			Industrial			
30500611	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Screening	MINERAL	Cement			Industrial			
30500612	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Raw Material Transfer	CEMENT	Cement			Industrial			
30500613	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Raw Material Grinding and Drying	MINERAL	Cement			Industrial			
30500614	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Clinker Cooler	MINERAL	Cement			Industrial			
30500615	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Clinker Piles	MINERAL	Cement			Industrial			
30500616	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Clinker Transfer	MINERAL	Cement			Industrial			
30500617	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Clinker Grinding	MINERAL	Cement			Industrial			
30500618	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Cement Silos	MINERAL	Cement			Industrial			
30500619	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Cement Load Out	CEMENT	Cement			Industrial			
30500620	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Predryer	Cement	Cement			Industrial			
30500621	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Pulverized Coal Kiln Feed Units	Cement	Cement			Industrial			
30500622	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Preheater Kiln	Cement	Cement			Industrial			
30500623	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Preheater/Precalciner Kiln	Cement	Cement			Industrial			
30500624	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Raw Mill Feed Belt	Cement	Cement			Industrial			
30500625	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Raw Mill Weigh Hopper	Cement	Cement			Industrial			
30500626	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Raw Mill Air Separator	Cement	Cement			Industrial			
30500627	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Finish Grinding Mill Feed Belt	Cement	Cement			Industrial			
30500628	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Finish Grinding Mill Weigh Hopper	Cement	Cement			Industrial			
30500629	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Finish Grinding Mill Air Separator	Cement	Cement			Industrial			
30500699	TON	Industrial	Mineral	Cement Manufacturing (Dry Process)	Other Not Classified	MINERAL	Cement			Industrial			
30500706	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Kilns	CEMENT MFG-	Cement			Industrial			
30500707	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Raw Material Unloading	CEMENT MFG-	Cement			Industrial			
30500708	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Raw Material Piles	CEMENT MFG-	Cement			Industrial			
30500709	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Primary Crushing	CEMENT MFG-	Cement			Industrial			
30500710	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Secondary Crushing	CEMENT MFG-	Cement			Industrial			
30500711	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Screening	MINERAL	Cement			Industrial			
30500712	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Raw Material Transfer	CEMENT MFG-	Cement			Industrial			
30500714	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Clinker Cooler	MINERAL	Cement			Industrial			
30500715	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Clinker Piles	MINERAL	Cement			Industrial			
30500716	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Clinker Transfer	MINERAL	Cement			Industrial			
30500717	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Clinker Grinding	MINERAL	Cement			Industrial			
30500718	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Cement Silos	MINERAL	Cement			Industrial			
30500719	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Cement Load Out	CEMENT MFG-	Cement			Industrial			
30500727	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Finish Grinding Mill Feed Belt	Cement	Cement			Industrial			
30500728	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Finish Grinding Mill Weigh Hopper	Cement	Cement			Industrial			
30500729	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Finish Grinding Mill Air Separator	Cement	Cement			Industrial			
30500799	TON	Industrial	Mineral	Cement Manufacturing (Wet Process)	Other Not Classified	MINERAL	Cement			Industrial			

	Equipment Type (40 CFR 63.1340 (b))	
New	Kiln (incl. alkali bypass and inline coal mill)	Yes
Existing	Clinker Cooler	No
Reconstructed	Raw Mill	
	Finish Mill	
	Raw Material Dryer	
	Raw Material Storage Bin	
	Clinker Storage Bin	
	Finished Product Storage Bin	
	Conveyor Transfer Point	
	Bagging/Bulk Loading	
	Open Clinker Pile	
	Other (specify in notes/comments column)	

5522430	1-Nitropyrene	Polycyclic Organic Matter
124118	1-Nonene	
71238	1-Propanol	
1569013	1-Propoxy-2-propanol	
27310210	2-(2,4-Hexadienyloxy)Ethanol	Glycol Ethers
112254	2-(Hexyloxy)Ethanol	Glycol Ethers
540841	2,2,4-Trimethylpentane	2,2,4-Trimethylpentane
75832	2,2-Dimethylbutane	
39635319	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB-189)	Polychlorinated Biphenyls (Aroclors)
38380084	2,3,3',4,4',5/2,3,3',4,4',5-Hexachlorobiphenyl (PCBs156/157)	Polychlorinated Biphenyls (Aroclors)
32598144	2,3,3',4,4'-Pentachlorobiphenyl (PCB-105)	Polychlorinated Biphenyls (Aroclors)
52663726	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB-167)	Polychlorinated Biphenyls (Aroclors)
74472370	2,3,4,4',5-Pentachlorobiphenyl (PCB-114)	Polychlorinated Biphenyls (Aroclors)
31508006	2,3',4,4',5-Pentachlorobiphenyl (PCB118)	Polychlorinated Biphenyls (Aroclors)
65510443	2,3',4,4',5'-Pentachlorobiphenyl (PCB-123)	Polychlorinated Biphenyls (Aroclors)
79298	2,3-Dimethylbutane	
591968	2,3-Pentadiene	
7012375	2,4,4'-Trichlorobiphenyl (PCB-28)	Polychlorinated Biphenyls (Aroclors)
95954	2,4,5-Trichlorophenol	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol	2,4,6-Trichlorophenol
90722	2,4,6-Tris(Dimethylaminomethyl)Phenol	
120832	2,4-Dichlorophenol	
94757	2,4-Dichlorophenoxy Acetic Acid	2,4-D (2,4-Dichlorophenoxyacetic Acid)(Including Salts
108087	2,4-Dimethylpentane	
105679	2,4-Dimethylphenol	
51285	2,4-Dinitrophenol	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene	2,4-Dinitrotoluene
584849	2,4-Toluene Diisocyanate	2,4-Toluene Diisocyanate
5779942	2,5-Dimethyl Benzaldehyde	
638028	2,5-Dimethyl Thiophene	
53963	2-Acetylaminofluorene	2-Acetylaminofluorene
78922	2-Butanol	
107017	2-Butene	
112072	2-Butoxyethyl Acetate	Glycol Ethers
532274	2-Chloroacetophenone	2-Chloroacetophenone
2051607	2-Chlorobiphenyl (PCB-1)	Polychlorinated Biphenyls (Aroclors)
91587	2-Chloronaphthalene	Polycyclic Organic Matter
872559	2-Ethyl Thiophene	
1241947	2-Ethylhexyl Diphenyl Phosphate	
75854	2-Methyl-2-Butanol	
78784	2-Methylbutane	
592278	2-Methylheptane	
591764	2-Methylhexane	
91576	2-Methylnaphthalene	Polycyclic Organic Matter
78820	2-Methyl-Propanenitrile	Cyanide Compounds
607578	2-Nitrofluorene	Polycyclic Organic Matter
88755	2-Nitrophenol	
79469	2-Nitropropane	2-Nitropropane
107879	2-Pentanone	
20706256	2-Propoxyethyl Acetate	Glycol Ethers
10343552	3-[(1-(Anilinoacarbonyl)-2-oxopropyl)azo]-2-hydroxy-5-nitrobenzene-1-	Chromium Compounds
2530838	3-(Trimethoxysilyl)Propyl Glycidyl Ether	
32774166	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB-169)	Polychlorinated Biphenyls (Aroclors)
57465288	3,3',4,4',5-Pentachlorobiphenyl (PCB-126)	Polychlorinated Biphenyls (Aroclors)
32598133	3,3',4,4'-Tetrachlorobiphenyl (PCB-77)	Polychlorinated Biphenyls (Aroclors)
54827177	3,3',5,5'-Tetramethylbenzidine	
91941	3,3'-Dichlorobenzidene	3,3'-Dichlorobenzidene
119904	3,3'-Dimethoxybenzidine	3,3'-Dimethoxybenzidine
119937	3,3'-Dimethylbenzidine	3,3'-Dimethylbenzidine
70362504	3,4,4',5-Tetrachlorobiphenyl 3,4,4',5-TCB (PCB-81)	Polychlorinated Biphenyls (Aroclors)
10215335	3-Butoxy-1-Propanol	Glycol Ethers
13466789	3-Carene	
1589497	3-Methoxy-1-Propanol	Glycol Ethers
5332730	3-Methoxypropylamine	
56495	3-Methylcholanthrene	Polycyclic Organic Matter
589344	3-Methylhexane	
96140	3-Methylpentane	
5026744	4-(Diglycidylamino)phenyl Glycidyl Ether	
2050682	4,4'-Dichlorobiphenyl (PCB-15)	Polychlorinated Biphenyls (Aroclors)
13680358	4,4'-Methylenebis(2,6-Diethylbenzenamine)	
101144	4,4'-Methylenebis(2-Chloraniline)	4,4'-Methylenebis(2-Chloroaniline)
16298387	4,4'-Methylenebis(2-Methyl-6-{1-Methylethyl}-Benzenamine)	
1761713	4,4'-Methylenebis(Cyclohexylamine)	
101779	4,4'-Methylenedianiline	4,4'-Methylenedianiline
101688	4,4'-Methylenediphenyl Diisocyanate	4,4'-Methylenediphenyl Diisocyanate (MDI)
534521	4,6-Dinitro-o-Cresol	4,6-Dinitro-o-Cresol (Including Salts)
92671	4-Aminobiphenyl	4-Aminobiphenyl
60117	4-Dimethylaminoazobenzene	4-Dimethylaminoazobenzene
123422	4-Hydroxy-4-Methyl-2-Pentanone	
70553	4-Methyl-Benzenesulfonamide	
92933	4-Nitrobiphenyl	4-Nitrobiphenyl
100027	4-Nitrophenol	4-Nitrophenol
3697243	5-Methylchrysene	Polycyclic Organic Matter
7496028	6-Nitrochrysene	Polycyclic Organic Matter
57976	7,12-Dimethylbenz[a]Anthracene	Polycyclic Organic Matter
779022	9-Methyl Anthracene	Polycyclic Organic Matter
2381160	9-Methylbenz[a]Anthracene	Polycyclic Organic Matter
83329	Acenaphthene	Polycyclic Organic Matter
208968	Acenaphthylene	Polycyclic Organic Matter
75070	Acetaldehyde	Acetaldehyde
60355	Acetamide	Acetamide
64197	Acetic Acid	
67641	Acetone	
75058	Acetonitrile	Acetonitrile
98862	Acetophenone	Acetophenone
74862	Acetylene	
107028	Acrolein	Acrolein
79061	Acrylamide	Acrylamide
79107	Acrylic Acid	Acrylic Acid
107131	Acrylonitrile	Acrylonitrile
AMINEAL	Aliphatic Amine	

88	Alkylated Lead	Lead Compounds
107051	Allyl Chloride	Allyl Chloride
28470782	Allyl Chloride Formaldehyde Phenol Polymer	
CELLULOSE	Alpha Cellulose Filler	
80568	Alpha-Pinene	
98555	Alpha-Terpineol	
7429905	Aluminum	
1344281	Aluminum Oxide	
NH3	Ammonia	
1341497	Ammonium Bifluoride	
7788989	Ammonium Chromate	Chromium Compounds
7789095	Ammonium Dichromate	Chromium Compounds
1336216	Ammonium Hydroxide	
624544	Amyl Propionate	
62533	Aniline	Aniline
120127	Anthracene	Polycyclic Organic Matter
92	Antimony & Compounds	Antimony Compounds
1327339	Antimony Oxide	Antimony Compounds
7783702	Antimony Pentafluoride	Antimony Compounds
1314609	Antimony Pentoxide	Antimony Compounds
10025919	Antimony Trichloride	Antimony Compounds
1309644	Antimony Trioxide	Antimony Compounds
15874483	Antimony tris[O,O-dipropyl] tris(dithiophosphate)	Antimony Compounds
1345046	Antimony Trisulfide	Antimony Compounds
ANTISTAT	Anti-Static Agent Cal Stat 600	
93	Arsenic & Compounds (Inorganic Including Arsine)	Arsenic Compounds
7778394	Arsenic Acid	Arsenic Compounds
1303282	Arsenic Pentoxide	Arsenic Compounds
1327533	Arsenic Trioxide	Arsenic Compounds
3141126	Arsenous Acid	Arsenic Compounds
7784421	Arsine	Arsenic Compounds
1332214	Asbestos	Asbestos
144348878	Asphaltenes (gilsonite)	
205823	B[[j]Fluoranthen	Polycyclic Organic Matter
7440393	Barium	
10294403	Barium Chromate	Chromium Compounds
7727437	Barium Sulfate	
103	Benz[a]Anthracene/Chrysene	Polycyclic Organic Matter
56553	Benz[a]Anthracene	Polycyclic Organic Matter
100527	Benzaldehyde	
71432	Benzene	Benzene (Including Benzene From Gasoline)
141	Benzene Soluble Organics (BSO)	Coke Oven Emissions
92875	Benzidine	Benzidine
203338	Benzo[a]fluoranthene	Polycyclic Organic Matter
195197	Benzo[c]phenanthrene	Polycyclic Organic Matter
203123	Benzo[g,h,i]Fluoranthene	Polycyclic Organic Matter
50328	Benzo[a]Pyrene	Polycyclic Organic Matter
205992	Benzo[b]Fluoranthene	Polycyclic Organic Matter
102	Benzo[b+k]Fluoranthene	Polycyclic Organic Matter
192972	Benzo[e]Pyrene	Polycyclic Organic Matter
191242	Benzo[g,h,i,j]Perylene	Polycyclic Organic Matter
207089	Benzo[k]Fluoranthene	Polycyclic Organic Matter
56832736	Benzo[fluoranthenes	Polycyclic Organic Matter
65850	Benzoic Acid	
98077	Benzotrichloride	Benzotrichloride
94360	Benzoyl Peroxide	
16883833	Benzyl 2,2-Dimethyl-1-isopropyl-3-(2-Methyl-1-Oxopropoxy)Propyl	
100516	Benzyl Alcohol	
100447	Benzyl Chloride	Benzyl Chloride
140294	Benzyl Cyanide	Cyanide Compounds
109	Beryllium & Compounds	Beryllium Compounds
7787475	Beryllium Chloride	Beryllium Compounds
7787497	Beryllium Fluoride	Beryllium Compounds
13597994	Beryllium Nitrate	Beryllium Compounds
1304569	Beryllium Oxide	Beryllium Compounds
13510491	Beryllium Sulfate	Beryllium Compounds
127913	Beta-Pinene	
57578	Beta-Propiolactone	Beta-Propiolactone
92524	Biphenyl	Biphenyl
108601	Bis(2-chloro-1-methylethyl) ether	
117817	Bis(2-Ethylhexyl)Phthalate	Bis(2-Ethylhexyl)Phthalate (Dehp)
542881	Bis(Chloromethyl)Ether	Bis(Chloromethyl) Ether
7440699	Bismuth	
80057	BisPhenol A	
1675543	Bisphenol A Diglycidyl Ether	
25068386	Bisphenol A Epichlorohydrin Polymer	
37312337	Bisphenol A Epichlorohydrin Polymer with Toluene Diisocyanate	
2095036	Bisphenol F Diglycidyl Ether	
7440428	Boron	
75274	Bromodichloromethane	
75252	Bromoform	Bromoform
106978	Butane	
816682	Butanedioic Acid, Hydroxy-Lead (2+) Salt	Lead Compounds
35296721	Butanol	
85687	Butyl Benzyl Phthalate	
124174	Butyl Carbitol Acetate	Glycol Ethers
142961	Butyl Ether	
123728	Butyraldehyde	
68186914	C.I. Pigment Black 28	Chromium Compounds
71631157	C.I. Pigment Black 30	Chromium Compounds
147148	C.I. Pigment Blue 15	
1103384	C.I. Pigment Red 49, Barium Salt (2:1)	
125	Cadmium & Compounds	Cadmium Compounds
543908	Cadmium Acetate	Cadmium Compounds
7789426	Cadmium Bromide	Cadmium Compounds
10108642	Cadmium Chloride	Cadmium Compounds
34330648	Cadmium Chloride Monohydrate	Cadmium Compounds
14486192	Cadmium Fluoroborate	Cadmium Compounds
7790809	Cadmium Iodide	Cadmium Compounds
10325947	Cadmium Nitrate	Cadmium Compounds
1306190	Cadmium Oxide	Cadmium Compounds

1306247	Cadmium Selenide	Cadmium Compounds
12626367	Cadmium Selenide Sulfide	Cadmium Compounds
2223930	Cadmium Stearate	Cadmium Compounds
10124364	Cadmium Sulfate	Cadmium Compounds
1306236	Cadmium Sulfide	Cadmium Compounds
7440702	Calcium	
13765190	Calcium Chromate	Chromium Compounds
156627	Calcium Cyanamide	Calcium Cyanamide
1305620	Calcium Hydroxide	
79925	Camphene	
76222	Camphor	
105602	Caprolactam	
133062	Captan	Captan
63252	Carbaryl	Carbaryl
86748	Carbazole	Polycyclic Organic Matter
112152	Carbitol Acetate	Glycol Ethers
CO2	Carbon Dioxide	
75150	Carbon Disulfide	Carbon Disulfide
CO	Carbon Monoxide	
56235	Carbon Tetrachloride	Carbon Tetrachloride
463796	Carbonic Acid	
463581	Carbonyl Sulfide	Carbonyl Sulfide
120809	Catechol	Catechol
111159	Cellosolve Acetate	Glycol Ethers
110805	Cellosolve Solvent	Glycol Ethers
9004346	Cellulose	
608	Ceramic Fibers (Man-Made)	Fine Mineral Fibers
133904	Chloramben	Chloramben
57749	Chlordane	Chlordane
16887006	Chloride	
7782505	Chlorine	Chlorine
10049044	Chlorine Dioxide	
107200	Chloroacetaldehyde	
79118	Chloroacetic Acid	Chloroacetic Acid
108907	Chlorobenzene	Chlorobenzene
510156	Chlorobenzoate	Chlorobenzoate
124481	Chlorodibromomethane	
CFC	Chlorofluorocarbons	
67663	Chloroform	Chloroform
107302	Chloromethyl Methyl Ether	Chloromethyl Methyl Ether
126998	Chloroprene	Chloroprene
68186903	Chrome Antimony Titanium Buff	Chromium Compounds
14307336	Chromic Acid (H2Cr2O7), Calcium Salt (1:1)	Chromium Compounds
7789120	Chromic Acid (H2Cr2O7), Disodium Salt, Dyhydrate	Chromium Compounds
14018952	Chromic Acid (H2Cr2O7), Zinc Salt (1:1)	Chromium Compounds
7738945	Chromic Acid (VI)	Chromium Compounds
24613896	Chromic Acid Chromium (+3) Salt	Chromium Compounds
1308389	Chromic Oxide	Chromium Compounds
10101538	Chromic Sulfate	Chromium Compounds
13530682	Chromic Sulfuric Acid	Chromium Compounds
7440473	Chromium	Chromium Compounds
136	Chromium & Compounds	Chromium Compounds
12012350	Chromium (2) Carbide	Chromium Compounds
10025737	Chromium (III) Chloride	Chromium Compounds
10060125	Chromium Chloride, Hexahydrate	Chromium Compounds
12018018	Chromium Dioxide	Chromium Compounds
1308141	Chromium Hydroxide	Chromium Compounds
1333820	Chromium Trioxide	Chromium Compounds
12018198	Chromium Zinc Oxide	Chromium Compounds
21679312	Chromium(III) acetylacetonate	Chromium Compounds
14977618	Chromyl Chloride	Chromium Compounds
7788967	Chromyl Fluoride	Chromium Compounds
218019	Chrysene	Polycyclic Organic Matter
8007452	Coal Tar	Polycyclic Organic Matter
139	Cobalt & Compounds	Cobalt Compounds
1345160	Cobalt Aluminate	Cobalt Compounds
68186867	Cobalt Aluminate Spinel (C.I. Pigment Blue 28)	Cobalt Compounds
7542098	Cobalt Carbonate	Cobalt Compounds
68187495	Cobalt Chromite Green Spinel	Chromium Compounds
16842038	Cobalt Hydrocarbonyl	Cobalt Compounds
61789513	Cobalt Naphthenate	Cobalt Compounds
27253312	Cobalt Neodecanoate	Cobalt Compounds
10026229	Cobalt Nitrate Hexahydrate	Cobalt Compounds
1307966	Cobalt Oxide	Cobalt Compounds
1308061	Cobalt Oxide (II,III)	Cobalt Compounds
10124433	Cobalt Sulfate	Cobalt Compounds
1317426	Cobalt Sulfide	Cobalt Compounds
68186856	Cobalt Titanate Green Spinel	Nickel Compounds
10141056	Cobalt(II) Nitrate	Cobalt Compounds
10294505	Cobalt(II) Phosphate Octahydrate	Cobalt Compounds
140	Coke Oven Emissions	Coke Oven Emissions
7440508	Copper	
544923	Copper Cyanide	Cyanide Compounds
191071	Coronene	Polycyclic Organic Matter
1319773	Cresol	Cresol/Cresylic Acid (Mixed Isomers)
14464461	Cristobalite	
98828	Cumene	Cumene
80159	Cumene Hydroperoxide	
57125	Cyanide	Cyanide Compounds
144	Cyanide & Compounds	Cyanide Compounds
108918	Cyclohexanamine	
110827	Cyclohexane	
53880050	Cyclohexane, 5-Isocyanato-1-(Isocyanatomethyl)-1,3,3-Trimethyl-,	
108941	Cyclohexanone	
542927	Cyclopentadiene	
287923	Cyclopentane	
72559	Dde (1,1-Dichloro-2,2-Bis(p-Chlorophenyl) Ethylene)	Dde (1,1-Dichloro-2,2-Bis(p- Chlorophenyl) Ethylene)
2051243	Decachlorobiphenyl (PCB-209)	Polychlorinated Biphenyls (Aroclors)
16672392	Di[Ethylene Glycol Monobutyl Ether] Phthalate	Glycol Ethers
68855549	Diatomaceous Earth, Flux-Calcined	
334883	Diazomethane	Diazomethane

95481622	Dibasic Esters	
15845520	Dibasic Lead Phosphate	Lead Compounds
192654	Dibenzo[a,e]Pyrene	Polycyclic Organic Matter
53703	Dibenzo[a,h]Anthracene	Polycyclic Organic Matter
189640	Dibenzo[a,h]Pyrene	Polycyclic Organic Matter
189559	Dibenzo[a,j]Pyrene	Polycyclic Organic Matter
224420	Dibenzo[a,j]Acridine	Polycyclic Organic Matter
191300	Dibenzo[a,j]Pyrene	Polycyclic Organic Matter
132649	Dibenzofuran	Dibenzofuran
84742	Dibutyl Phthalate	Dibutyl Phthalate
111444	Dichloroethyl Ether	Dichloroethyl Ether (Bis[2-Chloroethyl]Ether)
62737	Dichlorvos	Dichlorvos
77736	Dicyclopentadiene	
111422	Diethanolamine	Diethanolamine
110816	Diethyl Disulfide	
84662	Diethyl Phthalate	
64675	Diethyl Sulfate	Diethyl Sulfate
352932	Diethyl Sulfide	
111466	Diethylene Glycol	
4246519	Diethylene Glycol Diamino Propyl Ether	Glycol Ethers
120558	Diethylene Glycol Dibenzoate	Glycol Ethers
112367	Diethylene Glycol Diethyl ether	Glycol Ethers
4206615	Diethylene Glycol Diglycidyl Ether	Glycol Ethers
111966	Diethylene Glycol Dimethyl Ether	Glycol Ethers
693210	Diethylene Glycol Dinitrate	Glycol Ethers
764998	Diethylene Glycol Divinyl Ether	Glycol Ethers
1002671	Diethylene Glycol Ethyl Methyl Ether	Glycol Ethers
10143530	Diethylene Glycol Ethylvinyl Ether	Glycol Ethers
10143541	Diethylene Glycol Mono-2-Cyanoethyl Ether	Glycol Ethers
112345	Diethylene Glycol Monobutyl Ether	Glycol Ethers
111900	Diethylene Glycol Monoethyl Ether	Glycol Ethers
18912806	Diethylene Glycol Monoisobutyl Ether	Glycol Ethers
111773	Diethylene Glycol Monomethyl Ether	Glycol Ethers
929373	Diethylene Glycol Monovinyl Ether	Glycol Ethers
10143563	Diethyleneglycol-Mono-2-Methyl-Pentyl Ether	Glycol Ethers
DIISOCYAN	Diisocyanates	
624920	Dimethyl Disulfide	
115106	Dimethyl Ether	
131113	Dimethyl Phthalate	Dimethyl Phthalate
77781	Dimethyl Sulfate	Dimethyl Sulfate
75183	Dimethyl Sulfide	
79447	Dimethylcarbamoyl Chloride	Dimethylcarbamoyl Chloride
117840	Di-n-octyl phthalate	
29911282	Dipropylene Glycol Butyl Ether	
34590948	Dipropylene Glycol Methyl Ether	
64742525	Distillates (petroleum), Hydrotreated Heavy Naphthenic	
64742478	Distillates (petroleum), Hydrotreated Light	
5989275	d-Limonene	
27176870	Dodecylbenzenesulfonic Acid	
EPOXYRES	Epoxy Resins	
74840	Ethane	
64175	Ethanol	
141435	Ethanolamine	
112505	Ethoxytriglycol	Glycol Ethers
7085850	Ethyl 2-Cyanoacrylate	
141786	Ethyl Acetate	
140885	Ethyl Acrylate	Ethyl Acrylate
100414	Ethyl Benzene	Ethylbenzene
51796	Ethyl Carbamate Chloride	Ethyl Carbamate (Urethane) Chloride (Chloroethane)
75003	Ethyl Chloride	Ethyl Chloride
75081	Ethyl Mercaptan	
624895	Ethyl Methyl Sulfide	
74851	Ethylene	
106934	Ethylene Dibromide	Ethylene Dibromide (Dibromoethane)
107062	Ethylene Dichloride	Ethylene Dichloride (1,2-Dichloroethane)
107211	Ethylene Glycol	Ethylene Glycol
1559359	Ethylene Glycol 2-Ethylhexyl Ether	Glycol Ethers
3775857	Ethylene Glycol Bis(2,3-Epoxy-2-Methylpropyl) Ether	Glycol Ethers
7529273	Ethylene Glycol Diallyl Ether	Glycol Ethers
629141	Ethylene Glycol Diethyl Ether	Glycol Ethers
109864	Ethylene Glycol Methyl Ether	Glycol Ethers
622082	Ethylene Glycol Monobenzyl Ether	Glycol Ethers
111762	Ethylene Glycol Monobutyl Ether	
110496	Ethylene Glycol Monomethyl Ether Acetate	Glycol Ethers
7795917	Ethylene Glycol Mono-Sec-Butyl Ether	Glycol Ethers
764487	Ethylene Glycol Monovinyl Ether	Glycol Ethers
75218	Ethylene Oxide	Ethylene Oxide
96457	Ethylene Thiourea	Ethylene Thiourea
67425	Ethylenebis(Oxyethylenenitrilo)) Tetraacetic Acid	Glycol Ethers
10137969	Ethyleneglycol Mono-2-Methylpentyl Ether	Glycol Ethers
23495127	Ethyleneglycol Monophenyl Ether Propionate	Glycol Ethers
10137981	Ethyleneglycolmono-2,6,8-Trimethyl-4-Nonyl Ether	Glycol Ethers
151564	Ethyleneimine	Ethyleneimine (Aziridine)
75343	Ethylidene Dichloride (1,1-Dichloroethane)	Ethylidene Dichloride (1,1-Dichloroethane)
68409814	Fatty acids, C6-C19, branched, cobalt (2+) salts	Cobalt Compounds
13408623	Ferricyanide	Cyanide Compounds
1308312	Ferrochromite III	Chromium Compounds
383	Fine Mineral Fibers	Fine Mineral Fibers
16872110	Fluoboric acid	
206440	Fluoranthene	Polycyclic Organic Matter
86737	Fluorene	Polycyclic Organic Matter
7782414	Fluorine	
50000	Formaldehyde	Formaldehyde
110009	Furan	
99854	gamma-Terpinene	
65997173	Glass, Oxide	
613	Glasswool (Man-Made Fibers)	Fine Mineral Fibers
171	Glycol Ethers	Glycol Ethers
13967505	Gold (I) Potassium Cyanide	Cyanide Compounds
37187647	Gold Cyanide	Cyanide Compounds
64742945	Heavy Aromatic Solvent Naphtha (Petroleum)	

76448	Heptachlor	Heptachlor
28655712	Heptachlorobiphenyl	Polychlorinated Biphenyls (Aroclors)
142825	Heptane	
118741	Hexachlorobenzene	Hexachlorobenzene
26601649	Hexachlorobiphenyl	Polychlorinated Biphenyls (Aroclors)
87683	Hexachlorobutadiene	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene	Hexachlorocyclopentadiene
67721	Hexachloroethane	Hexachloroethane
66251	Hexaldehyde	
822060	Hexamethylene Diisocyanate	Hexamethylene Diisocyanate
28182812	Hexamethylene Diisocyanate Homopolymer	
680319	Hexamethylphosphoramide	Hexamethylphosphoramide
110543	Hexane	Hexane
107835	Hexane Isomers (except n-Hexane)	
13586828	Hexanoic acid, 2-ethyl-, cobalt salt	Cobalt Compounds
136527	Hexanoic acid, 2-ethyl-, cobalt(2+) salt	Cobalt Compounds
302012	Hydrazine	Hydrazine
HC	Hydrocarbons	
7647010	Hydrochloric Acid	Hydrochloric Acid (Hydrogen Chloride (Gas Only))
7664393	Hydrogen Fluoride	Hydrogen Fluoride (Hydrofluoric Acid)
HFC	Hydrofluorocarbons	
12021953	Hydrofluozirconic Acid	
74908	Hydrogen Cyanide	Cyanide Compounds
7783075	Hydrogen Selenide	Selenium Compounds
7783064	Hydrogen Sulfide	
61788327	Hydrogenated Terphenyl	
123319	Hydroquinone	Hydroquinone
95136	Indene	Polycyclic Organic Matter
193395	Indeno[1,2,3-c,d]Pyrene	Polycyclic Organic Matter
10043660	Iodine 131	Radionuclides (Including Radon)
7439896	Iron	
68187097	Iron Chromite Brown Spinel (C.I. Pigment Brown 35)	Chromium Compounds
12645497	Iron Manganese Zinc Oxide	Manganese Compounds
14038438	Iron(iii) Ferrocyanide	Cyanide Compounds
75285	Isobutane	
78831	Isobutanol	
115117	Isobutene	
110190	Isobutyl Acetate	
4439241	Isobutyl Cellosolve	Glycol Ethers
513440	Isobutyl Mercaptan	
78842	Isobutyraldehyde	
ISOCYAN	Isocyanates	
78591	Isophorone	Isophorone
4098719	Isophorone Diisocyanate	
78795	Isoprene	
67630	Isopropanol	
75332	Isopropyl Mercaptan	
590863	Isovaleraldehyde	
8008206	Kerosene	
1302767	Kyanite	
1317368	Lead (II) Oxide	Lead Compounds
1314416	Lead (II, IV) Oxide	Lead Compounds
301042	Lead Acetate	Lead Compounds
7784409	Lead Arsenate	Lead Compounds
10031137	Lead Arsenite	Lead Compounds
65997184	Lead Bisilicate (Frits)	Lead Compounds
598630	Lead Carbonate	Lead Compounds
7758976	Lead Chromate	Lead Compounds
12656858	Lead Chromate Molybdate Sulfate (C.I. Pigment Red 104)	Lead Compounds
18454121	Lead Chromate Oxide	Lead Compounds
602	Lead Compounds (Inorganic)	Lead Compounds
603	Lead Compounds (Other Than Inorganic)	Lead Compounds
1309600	Lead Dioxide	Lead Compounds
13814965	Lead Fluoroborate	Lead Compounds
61790145	Lead Naphthenate	Lead Compounds
27253287	Lead Neodecanoate	Lead Compounds
10099748	Lead Nitrate	Lead Compounds
1335257	Lead Oxide	Lead Compounds
12141207	Lead Oxide Phosphonate	Lead Compounds
7446277	Lead Phosphate	Lead Compounds
7428480	Lead Stearate	Lead Compounds
1335326	Lead Subacetate	Lead Compounds
7446142	Lead Sulfate	Lead Compounds
12060003	Lead Titanate	Lead Compounds
12626812	Lead Titanate Zircon	Lead Compounds
64742898	Light Aliphatic Solvent Naphtha (Petroleum)	
7439932	Lithium	
14307358	Lithium Chromate	Chromium Compounds
1334787	m,p-Tolualdehyde	
7439954	Magnesium	
13423615	Magnesium Chromate	Chromium Compounds
14104859	Magnesium Dichromate	Chromium Compounds
1335268	Magnesium Peroxide	
108316	Maleic Anhydride	Maleic Anhydride
198	Manganese & Compounds	Manganese Compounds
598629	Manganese Carbonate	Manganese Compounds
1313139	Manganese Dioxide	Manganese Compounds
68186947	Manganese Ferrite Black Spinel (C.I. Pigment Black 26)	Manganese Compounds
1336932	Manganese Napthenate	Manganese Compounds
10377669	Manganese Nitrate	Manganese Compounds
7785877	Manganese Sulfate	Manganese Compounds
8030704	Manganese Tallate	Manganese Compounds
1317357	Manganese Tetroxide	Manganese Compounds
1317346	Manganese Trioxide	Manganese Compounds
7783166	Manganese(II) Hypophosphite Monohydrate	Manganese Compounds
12079651	Manganese, Tricarbonyl (.eta.5-2,4-cyclopentadien-1-yl)-	Manganese Compounds
108394	m-Cresol	Cresol/Cresylic Acid (Mixed isomers)
64742887	Medium Aliphatic Solvent Naphtha (Petroleum)	
149304	Mercaptobenzothiazole	
7487947	Mercuric Chloride	Mercury Compounds
21908532	Mercuric Oxide	Mercury Compounds

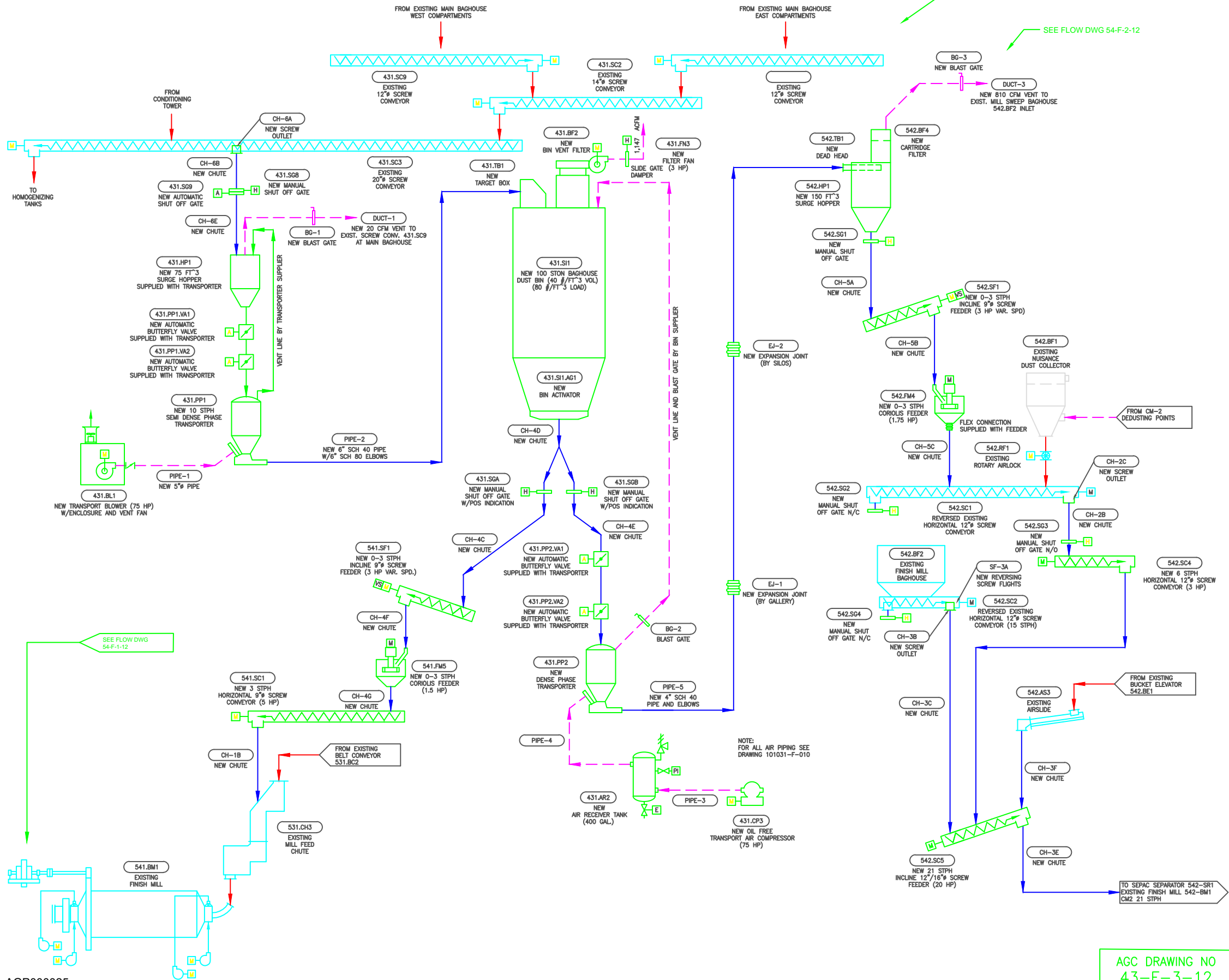
199	Mercury & Compounds	Mercury Compounds
22967926	Mercury (Organic)	Mercury Compounds
62384	Mercury Acetato Phen	Mercury Compounds
CH4	Methane	
75718	Methane, Dichlorodifluoro-	
67561	Methanol	Methanol
72435	Methoxychlor	Methoxychlor
111104	Methoxyethyl Oleate	Glycol Ethers
112356	Methoxytriglycol	Glycol Ethers
137053	Methyl 2-Cyanoacrylate	
110430	Methyl Amyl Ketone	
74839	Methyl Bromide	Methyl Bromide (Bromomethane)
140056	Methyl Cellosolve Acetylricinoleate	Glycol Ethers
3121617	Methyl Cellosolve Acrylate	Glycol Ethers
74873	Methyl Chloride	Methyl Chloride (Chloromethane)
71556	Methyl Chloroform	Methyl Chloroform (1,1,1-Trichloroethane)
78933	Methyl Ethyl Ketone	
74884	Methyl Iodide	Methyl Iodide (Iodomethane)
108101	Methyl Isobutyl Ketone	Methyl Isobutyl Ketone (Hexone)
624839	Methyl Isocyanate	Methyl Isocyanate
593759	Methyl Isocyanide	Cyanide Compounds
74931	Methyl Mercaptan	
593748	Methyl Mercury	Mercury Compounds
80626	Methyl Methacrylate	Methyl Methacrylate
1634044	Methyl Tert-Butyl Ether	Methyl Tert-Butyl Ether
616444	Methyl Thiophene	
26914181	Methylantracene	Polycyclic Organic Matter
65357699	Methylbenzopyrene	Polycyclic Organic Matter
41637905	Methylchrysene	Polycyclic Organic Matter
108872	Methylcyclohexane	
96377	Methylcyclopentane	
74953	Methylene Bromide	
75092	Methylene Chloride	Methylene Chloride (Dichloromethane)
142	Methylene Chloride Soluble Organics (MCSO)	Coke Oven Emissions
60344	Methylhydrazine	Methylhydrazine
7439987	Molybdenum	
1313275	Molybdenum Oxide	
27323188	Monochlorobiphenyl	
MONO	Monoterpenes	
108383	m-Xylene	Xylenes (Mixed Isomers)
121697	N,N-Dimethylaniline	N,N-Dimethylaniline
68122	N,N-Dimethylformamide	N,N-Dimethylformamide
8030306	Naphtha	
91203	Naphthalene	Napthalene
123864	n-Butyl Acetate	
2426086	n-Butyl Glycidyl Ether	
109795	n-Butyl Mercaptan	
37244965	Nepheline Syenite	
2201152	N-Ethyl-1-Phenyl-Cyclohexanamine	
112594	N-Hexyl Carbitol	Glycol Ethers
226	Nickel & Compounds	Nickel Compounds
10101970	Nickel (II) Sulfate Hexahydrate	Nickel Compounds
14336700	Nickel 59	Nickel Compounds
373024	Nickel Acetate	Nickel Compounds
8007189	Nickel Antimony Titanium Oxide (C.I. Pigment Yellow 53)	Nickel Compounds
13462889	Nickel Bromide	Nickel Compounds
12710360	Nickel Carbide	Nickel Compounds
3333673	Nickel Carbonate	Nickel Compounds
13463393	Nickel Carbonyl	Nickel Compounds
7718549	Nickel Chloride	Nickel Compounds
6018899	Nickel Diacetate TET	Nickel Compounds
12054487	Nickel Hydroxide	Nickel Compounds
13138459	Nickel Nitrate	Nickel Compounds
604	Nickel Refinery Dust	Nickel Compounds
12035722	Nickel Subulfide	Nickel Compounds
13770893	Nickel Sulfamate	Nickel Compounds
7786814	Nickel Sulfate	Nickel Compounds
15751005	Nickel(2+), hexakis[1H-imidazole- κ N3]-, dichloride, (OC-6-11)-	Nickel Compounds
1313991	Nickel(II) Oxide	Nickel Compounds
1314063	Nickel(III) Oxide	Nickel Compounds
1271289	Nickelocene	Nickel Compounds
Nitrate	Nitrate Compounds	
7697372	Nitric Acid	
98953	Nitrobenzene	Nitrobenzene
10102440	Nitrogen Dioxide	
NOX	Nitrogen Oxides	
N2O	Nitrous Oxide	
872504	N-Methyl-2-Pyrrolidone	
62759	N-Nitrosodimethylamine	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine	N-Nitrosomorpholine
684935	N-Nitroso-N-Methylurea	N-Nitroso-N-Methylurea
53742077	Nonachlorobiphenyl	Polychlorinated Biphenyls (Aroclors)
111842	Nonane	
106945	n-Propyl Bromide	
107039	n-Propyl Mercaptan	
103651	n-Propylbenzene	
90040	o-Anisidine	o-Anisidine
95578	o-Chlorophenol	
95487	o-Cresol	Cresol/Cresylic Acid (Mixed Isomers)
55722264	Octachlorobiphenyl	Polychlorinated Biphenyls (Aroclors)
111659	Octane	
112801	Oleic Acid	
529204	o-Tolualdehyde	
95534	o-Toluidine	o-Toluidine
2768323	Oxiranemethanamine, N,N'-(methylenedi-4,1-phenylene)bis[N-	
95476	o-Xylene	Xylenes (Mixed Isomers)
130498292	PAH, total	Polycyclic Organic Matter
56382	Parathion	Parathion
106445	p-Cresol	Cresol/Cresylic Acid (Mixed Isomers)
99876	p-Cymene	
105055	p-Diethylbenzene	

123911	p-Dioxane	p-Dioxane
25429292	Pentachlorobiphenyl	Polychlorinated Biphenyls (Aroclors)
82688	Pentachloronitrobenzene	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol	Pentachlorophenol
109660	Pentane	
590352	Pentane, 2,2-dimethyl-	
562492	Pentane, 3,3-dimethyl-	
PFC	Perfluorocarbons	
10101505	Permanganic acid	Manganese Compounds
198550	Perylene	Polycyclic Organic Matter
85018	Phenanthrene	Polycyclic Organic Matter
108952	Phenol	Phenol
PFHEXARESIN	Phenol Formaldehyde Resin with Hexamethylenetetramine	
28064144	Phenol, Polymer with Formaldehyde, Glycidyl Ether	
122996	Phenyl Cellosolve	Glycol Ethers
103719	Phenyl Isocyanate	
75445	Phosgene	Phosgene
7803512	Phosphine	Phosphine
7789040	Phosphoric Acid Chromium (+3) Salt	Chromium Compounds
13455362	Phosphoric acid, cobalt(2+) salt (2:3)	Cobalt Compounds
13011546	Phosphoric acid, monoammonium monosodium salt	
92203026	Phosphoric Acid, Reaction Products with Aluminum Hydroxide and	Chromium Compounds
7723140	Phosphorus	Phosphorus
398	Phosphorus & Compounds	
85449	Phthalic Anhydride	Phthalic Anhydride
1336363	Polychlorinated Biphenyls	Polychlorinated Biphenyls (Aroclors)
246	Polycyclic Organic Matter	Polycyclic Organic Matter
RESINCURAG	PolyEpoxy Resin AminophenylFluorene Curing Agent	
27252875	Polyethylene Glycol Allyl Ether Acetate	
25852475	Polyglycol Dimethylacrylates	
ISOCYANP	Polyisocyanates	
9016879	Polymeric Diphenylmethane Diisocyanate	
9003081	Polymerized Melamine Molding Compound	
7440097	Potassium	
7789006	Potassium Chromate	Chromium Compounds
151508	Potassium Cyanide	Cyanide Compounds
7778509	Potassium Dichromate	Chromium Compounds
13746662	Potassium Ferricyanide	Cyanide Compounds
13943583	Potassium Ferrocyanide	Cyanide Compounds
1310583	Potassium Hydroxide	
14220178	Potassium Nickel Cyanide	Nickel Compounds
7722647	Potassium permanganate	Manganese Compounds
506616	Potassium Silver Cyanide	Cyanide Compounds
106503	p-Phenylenediamine	p-Phenylenediamine
463490	Propadiene	
74986	Propane	
123386	Propionaldehyde	Propionaldehyde
114261	Propoxur	Propoxur (Baygon)
2807309	Propyl Cellosolve	Glycol Ethers
115071	Propylene	
78875	Propylene Dichloride	Propylene Dichloride (1,2-Dichloropropane)
107982	Propylene Glycol 1-Methyl Ether	
108656	Propylene Glycol Monomethyl Ether Acetate (1-Methoxy-2-Propyl	
5131668	Propylene Glycol n-Butyl Ether	
57018527	Propylene Glycol Tert-Butyl Ether	
75569	Propylene Oxide	Propylene Oxide
106423	p-Xylene	Xylenes (Mixed Isomers)
129000	Pyrene	Polycyclic Organic Matter
110861	Pyridine	
14808607	Quartz	
91225	Quinoline	Quinoline
106514	Quinone	Quinone (p-Benzoquinone)
605	Radionuclides	Radionuclides (Including Radon)
400	Radionuclides (Including Radon)	Radionuclides (Including Radon)
606	Radon And Its Decay Products	Radionuclides (Including Radon)
142844006	Refractory Ceramic Fiber	
483658	Retene	Polycyclic Organic Matter
1314289	Rhenium Oxide	
617	Rockwool (Man-Made Fibers)	Fine Mineral Fibers
81072	Saccharin	
253	Selenium & Compounds	Selenium Compounds
7446084	Selenium Dioxide	Selenium Compounds
7488564	Selenium Disulfide	Selenium Compounds
7783791	Selenium Hexafluoride	Selenium Compounds
7446346	Selenium Monosulfide	Selenium Compounds
12640890	Selenium Oxide	Selenium Compounds
7783008	Selenous Acid	Selenium Compounds
7631869	Silica	
7440213	Silicon	
112945525	Silicon Dioxide	
7440224	Silver	
506649	Silver Cyanide	Cyanide Compounds
616	Slagwool (Man-Made Fibers)	Fine Mineral Fibers
7440235	Sodium	
1333831	Sodium Bifluoride	
7775113	Sodium Chromate	Chromium Compounds
10034829	Sodium Chromate(VI)	Chromium Compounds
143339	Sodium Cyanide	Cyanide Compounds
10588019	Sodium Dichromate	Chromium Compounds
16925250	Sodium Hexafluoroantimonate	Antimony Compounds
1310732	Sodium Hydroxide	
7631994	Sodium Nitrate	
STLITE	Staurolite	
8052413	Stoddard Solvent	
7440246	Strontium	
7789062	Strontium Chromate	Chromium Compounds
100425	Styrene	Styrene
96093	Styrene Oxide	Styrene Oxide
14808798	Sulfate	
18496258	Sulfide	
7704349	Sulfur	

SO2	Sulfur Dioxide	
SF6	Sulfur Hexafluoride	
7664939	Sulfuric Acid	
26140603	Terphenyl	
994058	tert-Amyl Methyl Ether	
75650	tert-Butanol (2-Propanol, 2-Methyl-)	
540885	tert-Butyl Acetate	
75661	tert-Butyl Mercaptan	
26914330	Tetrachlorobiphenyl	Polychlorinated Biphenyls (Aroclors)
127184	Tetrachloroethylene	Tetrachloroethylene (Perchloroethylene)
78002	Tetraethyl Lead	Lead Compounds
110010	Tetrahydrothiophene	
7440280	Thallium	Radionuclides (Including Radon)
110021	Thiophene	
7440291	Thorium-232	Radionuclides (Including Radon)
7440315	Tin	
7440326	Titanium	
13463677	Titanium Dioxide	
7550450	Titanium Tetrachloride	Titanium Tetrachloride
108883	Toluene	Toluene
26471625	Toluene Diisocyanates (mixture)	
95807	Toluene-2,4-Diamine	Toluene-2,4-Diamine
TF	Total Fluorides	
TRS	Total Reduced Sulfur	
TRS (H2S)	Total Reduced Sulfur (as H2S)	
TRS as S	Total Reduced Sulfur (as S)	
8001352	Toxaphene	Toxaphene (Chlorinated Camphene)
123739	trans-Crotonaldehyde	
37680685	Trichlorobiphenyl	Polychlorinated Biphenyls (Aroclors)
79016	Trichloroethylene	Trichloroethylene
75694	Trichlorofluoromethane	
121448	Triethylamine	Triethylamine
112276	Triethylene glycol	Glycol Ethers
112492	Triethylene Glycol Dimethyl Ether	Glycol Ethers
1582098	Trifluralin	Trifluralin
143226	Triglycol Monobutyl Ether	Glycol Ethers
7756947	Triisobutylene	
25551137	Trimethylbenzene	
15625895	Trimethylolpropane Triacrylate	
7440611	Uranium	Radionuclides (Including Radon)
1344576	Uranium Dioxide	Radionuclides (Including Radon)
7783815	Uranium Hexafluoride	Radionuclides (Including Radon)
1344598	Uranium Oxide	Radionuclides (Including Radon)
541093	Uranyl Acetate	Radionuclides (Including Radon)
110623	Valeraldehyde	
7440622	Vanadium	
108054	Vinyl Acetate	Vinyl Acetate
593602	Vinyl Bromide	Vinyl Bromide
75014	Vinyl Chloride	Vinyl Chloride
75354	Vinylidene Chloride	Vinylidene Chloride (1,1-Dichloroethylene)
VOC	Volatile Organic Compounds	
1330207	Xylenes (Mixture of o, m, and p Isomers)	Xylenes (Mixed Isomers)
7440655	Yttrium	
7440666	Zinc	
13530659	Zinc Chromate	Chromium Compounds
50922297	Zinc Chromite	Chromium Compounds
557211	Zinc Cyanide	Cyanide Compounds
68186889	Zinc Iron Chromite Brown Spinel (C.I. Pigment Brown 33)	Chromium Compounds
7779900	Zinc Phosphate	
37224570	Zinc Potassium Chromate	Chromium Compounds
11103869	Zinc Potassium Chromate Hydroxide	Chromium Compounds
14940682	Zircon	

CO2	Carbon Dioxide
CH4	Methane
N2O	Nitrous Oxide

Exhibit A



LEGEND	
EQPMT-NO DESCRIPTION	EQUIPMENT NUMBER WITH DESCRIPTION
QUANTITY	EXPECTED OPERATING QUANTITY
CAPACITY	EQUIPMENT DESIGN CAPACITY
A	PNEUMATIC OPERATOR
E	ELECTRIC OPERATOR
F	HYDRAULIC OPERATOR
G	GRAVITY OPERATOR
H	MANUAL OPERATOR
C	COMBUSTION ENGINE
M	ELECTRIC MOTOR
VS	VARIABLE SPEED
LINE STYLES	LINE DEFINITIONS
---	EXISTING & FUTURE EQUIPMENT
---	NEW EQUIPMENT
---	EXISTING FLOW
---	NEW FLOW
---	FUGITIVE DUST COLLECTION

DEFINITIONS OF UNITS		
AP	AMBIENT PRESSURE	in WG
AT	AMBIENT TEMPERATURE	°F
DP	DEW POINT	°F
F	FLUID FLOW RATE	gpm
FD	FLUID DENSITY	lb/ft3
FM	FLUID MASS FLOW RATE	lb/min
FP	FLUID PRESSURE	psi
GA	ACTUAL GAS FLOW RATE	acfm
GD	GAS DENSITY	lb/ft3
GH	GAS MOISTURE (VOLUME)	%
GM	GAS MASS FLOW RATE	lb/min
GN	STANDARD GAS FLOW RATE (70°F)	scfm
GP	GAS STATIC PRESSURE	in WG
GP1	GAS STATIC PRESSURE	psi
GV	GAS VELOCITY	ft/min
LA	DUST LOADING	gr/acf
LN	DUST LOADING	gr/scf
M	MATERIAL FLOW RATE (DRY)	mtph
M1	MATERIAL FLOW RATE (WET)	stph
MD	MATERIAL BULK DENSITY	lb/ft3
MH	MATERIAL MOISTURE (MASS)	%
MP	MOTOR POWER RATING	hp
Q	DRY LHV HEAT FLOW RATE	Btu/hr
Q1	DRY LHV HEAT FLOW RATE	10 ⁶ Btu/hr
QS	DRY LHV SPECIFIC HEAT CONSUMPTION	10 ⁶ Btu/ton
R	EQUIPMENT ROTATIONAL SPEED	rpm
SB	SPECIFIC SURFACE (BLAINE)	cm2/g
S1	MAXIMUM SIZE	inch
S2	RETAINED - 50 MESH	%
S3	RETAINED - 170 MESH	%
S4	RETAINED - 200 MESH	%
S5	RETAINED - 325 MESH	%
S6	RETAINED - 400 MESH	%
S7	80% PASSING XX SIZE	um
T	TEMPERATURE	°F

REFERENCE DRAWINGS:
M-100 MECHANICAL GENERAL ARRANGEMENT - PLOT PLAN & ELEVATION

**ISSUED FOR
CONSTRUCTION**
DATE: 27APR11 BY: JANSEN

1 3-8-12 431.SG4,SG8 TO MANUAL, UPDATE DWG#S CTB BLC
0 27APR11 ISSUED FOR CONSTRUCTION RUN BLC AMJ

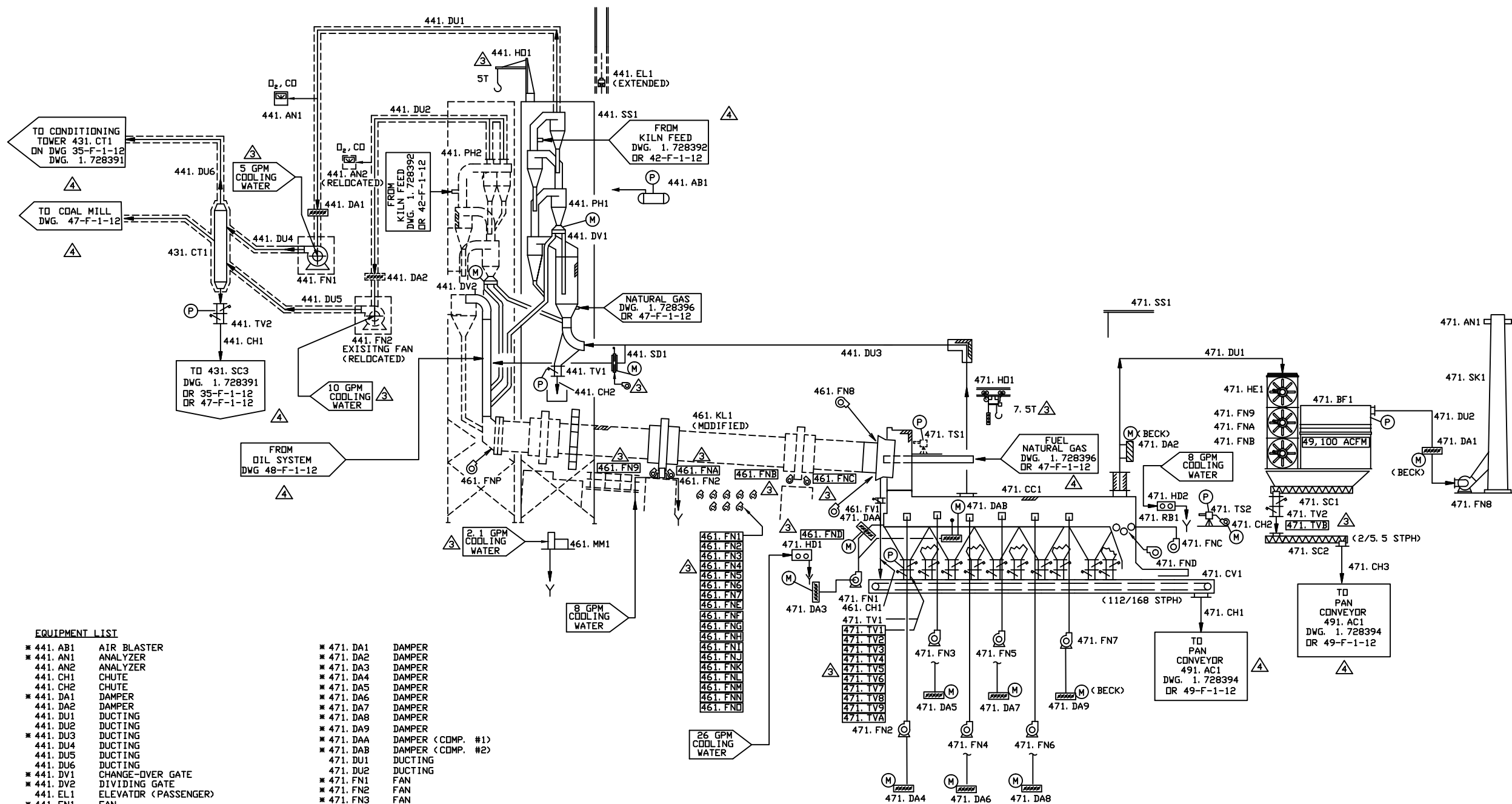
BAGHOUSE DUST TRANSPORT AND
METERING TO FINISH MILLS CM1 & CM2
FLOW DIAGRAM

JANSEN 28DEC10
DUDASH 08JAN11 101031-P-001 0
CARDWELL 27APR11
JANSEN NONE

AGC DRAWING NO
43-F-3-12

AGP000025

DRAWING.DWG ----- AUTODESK



EQUIPMENT LIST

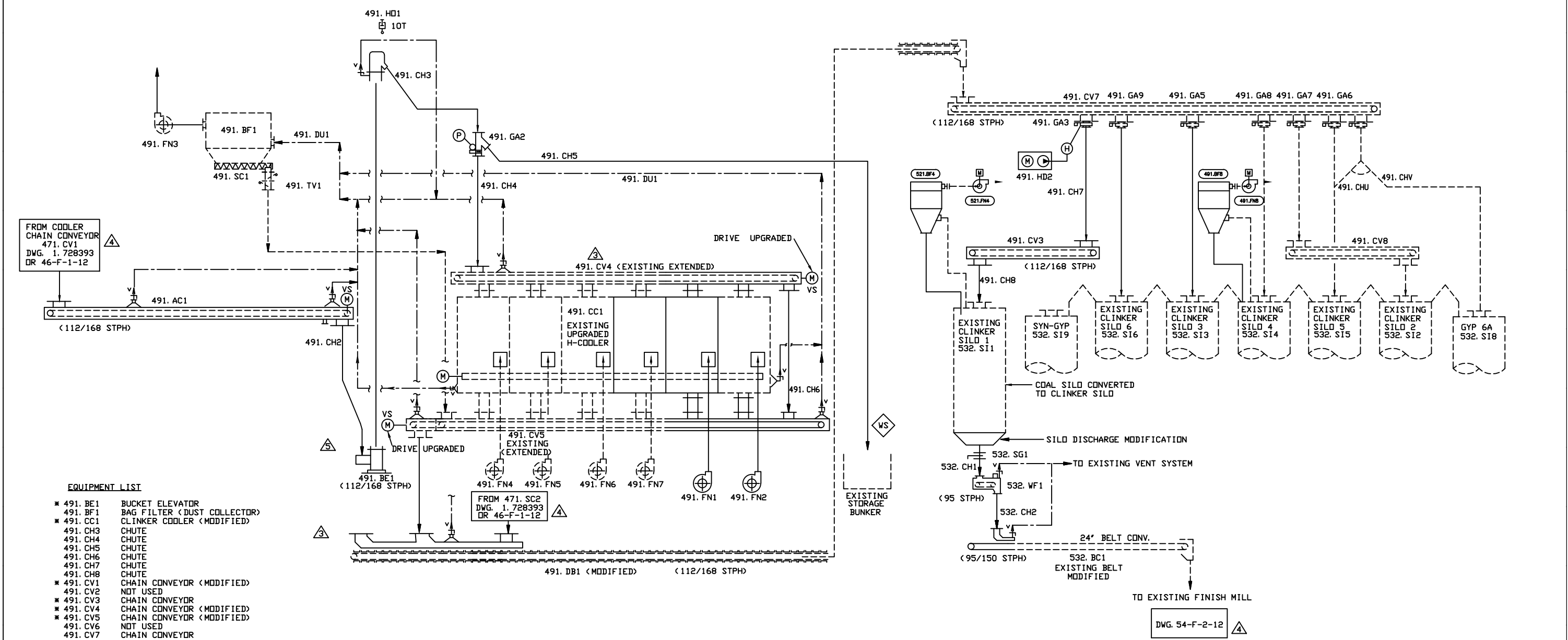
* 441. AB1	AIR BLASTER	* 471. DA1	DAMPER
* 441. AN1	ANALYZER	* 471. DA2	DAMPER
* 441. AN2	ANALYZER	* 471. DA3	DAMPER
* 441. CH1	CHUTE	* 471. DA4	DAMPER
* 441. CH2	CHUTE	* 471. DA5	DAMPER
* 441. DA1	DAMPER	* 471. DA6	DAMPER
* 441. DA2	DAMPER	* 471. DA7	DAMPER
* 441. DU1	DUCTING	* 471. DA8	DAMPER
* 441. DU2	DUCTING	* 471. DA9	DAMPER
* 441. DU3	DUCTING	* 471. DAA	DAMPER (COMP. #1)
* 441. DU4	DUCTING	* 471. DAB	DAMPER (COMP. #2)
* 441. DU5	DUCTING	* 471. DU1	DUCTING
* 441. DU6	DUCTING	* 471. DU2	DUCTING
* 441. DV1	CHANGE-OVER GATE	* 471. FN1	FAN
* 441. DV2	DIVIDING GATE	* 471. FN2	FAN
* 441. EL1	ELEVATOR (PASSENGER)	* 471. FN3	FAN
* 441. FN1	FAN	* 471. FN4	FAN
* 441. FN2	FAN	* 471. FN5	FAN
* 441. HD1	HOIST	* 471. FN6	FAN
* 441. PH1	PREHEATER	* 471. FN7	FAN
* 441. PH2	PREHEATER (EXISTING)	* 471. FN8	FAN
* 441. SD1	HOISTING DAMPER	* 471. FN9	FAN
* 441. SS1	STEEL STRUCTURES FOR EQUIPMENT	* 471. FNA	FAN
* 441. TV1	TIPPING VALVE	* 471. FNB	FAN
* 441. TV2	TIPPING VALVE	* 471. FNC	SHAFT COOLING FAN
* 461. CH1	CHUTE	* 471. FND	FRAME COOLING FAN
* 461. FN1	FAN (8)	* 471. HD1	HYDRAULIC DRIVE (COOLER)
* 461. FN2	FAN (4)	* 471. HD2	HYDRAULIC DRIVE (HRB)
* 461. FN3	FAN	* 471. HE1	HEAT EXCHANGER
* 461. FN4	FLAP VALVE	* 471. HD1	HOIST (MONORAIL)
* 461. FN5	KILN (MODIFIED)	* 471. RB1	ROLL BREAKER
* 461. FN6	MAIN MECHANICAL DRIVE UNITS	* 471. SC1	SCREW CONVEYOR
* 471. AN1	OPACITY MONITOR	* 471. SC2	SCREW CONVEYOR
* 471. BF1	BAG FILTER	* 471. SK1	STACK
* 471. CC1	CLINKER COOLER	* 471. SS1	STEEL STRUCTURES FOR EQUIPMENT
* 471. CH1	CHUTE	* 471. TS1	TV CAMERA (KILN)
* 471. CH2	CHUTE	* 471. TS2	TV CAMERA (COOLER)
* 471. CH3	CHUTE	* 471. TV1	TIPPING VALVE (10)
* 471. CV1	CHAIN CONVEYOR	* 471. TV2	TIPPING VALVE

LEGEND	
(*/*)	NORMAL/DESIGN CAPACITIES
-----	EXISTING
=====	INSULATED
-----	NEW EQUIPMENT
XXX.XXX	ASH GROVE EQUIPMENT NUMBER WHERE DIFFERENT FROM FULLER EQUIP. NO.
*	DENOTES EQUIPMENT SUPPLIED BY FULLER
△	DENOTES REVISION NUMBER

DRAWING LIST:

1. 728391
1. 728392
1. 728393
1. 728394
1. 728395
1. 728396

Rev.	Date	CTB	TGB	TGB	DWG REFS & UPDATE DWG #S
Rev. 4	26JAN12	CTB			
Rev. 3	06MAR98	KSB	TGB	TGB	ADDED ASH GROVE EQUIPMENT NUMBERS
Rev. 2	10JUL97	JB	TGB	TGB	GENERAL REVISION
Rev. 1	08NOV96	GS	TGB	TGB	GENERAL REVISION
Original	20SEP96	DJW	TGB	TGB	Revision in zone / Description
Scale:	Date	Sign.	Sign.	Sign.	Number with see list No.
NONE	Drawn	Chkd	Appr	PC: 135	
EQUIPMENT FLOW SHEET					
PYROPROCESSING SYSTEM					
2700 STPD PLANT EXPANSION					
ASH GROVE CEMENT COMPANY - DURKEE, OREGON					
ASH GROVE DRAWING NUMBER				Drawing Number	Rev.
46-F-1-12				1. 728393	3



EQUIPMENT LIST

- * 491. BE1 BUCKET ELEVATOR
- 491. BF1 BAG FILTER (DUST COLLECTOR)
- * 491. CC1 CLINKER COOLER (MODIFIED)
- 491. CH3 CHUTE
- 491. CH4 CHUTE
- 491. CH5 CHUTE
- 491. CH6 CHUTE
- 491. CH7 CHUTE
- 491. CH8 CHUTE
- * 491. CV1 CHAIN CONVEYOR (MODIFIED)
- 491. CV2 NOT USED
- * 491. CV3 CHAIN CONVEYOR
- * 491. CV4 CHAIN CONVEYOR (MODIFIED)
- * 491. CV5 CHAIN CONVEYOR (MODIFIED)
- 491. CV6 NOT USED
- 491. CV7 CHAIN CONVEYOR
- 491. CV8 CHAIN CONVEYOR
- 491. DB1 DEEP BUCKET CONVEYOR
- 491. DU1 VENT DUCTING
- * 491. FN1 FAN
- * 491. FN2 FAN
- 491. FN3 FAN
- 491. FN4 FAN
- 491. FN5 FAN
- 491. FN6 FAN
- 491. FN7 FAN
- * 491. GA2 GATE
- * 491. GA3 GATE
- * 491. GA4 GATE
- * 491. HD2 HYDRAULIC UNIT
- 491. HD1 HOIST
- 491. SC1 SCREW CONVEYOR
- 491. TV1 TIPPING VALVE
- * 532. BC1 BELT CONVEYOR (MODIFIED)
- 532. CH1 CHUTE
- 532. CH2 CHUTE
- * 532. SG1 SHUT-OFF GATE
- 532. S11 SILO (MODIFIED)
- * 532. WF1 WEIGHFEEDER

LEGEND

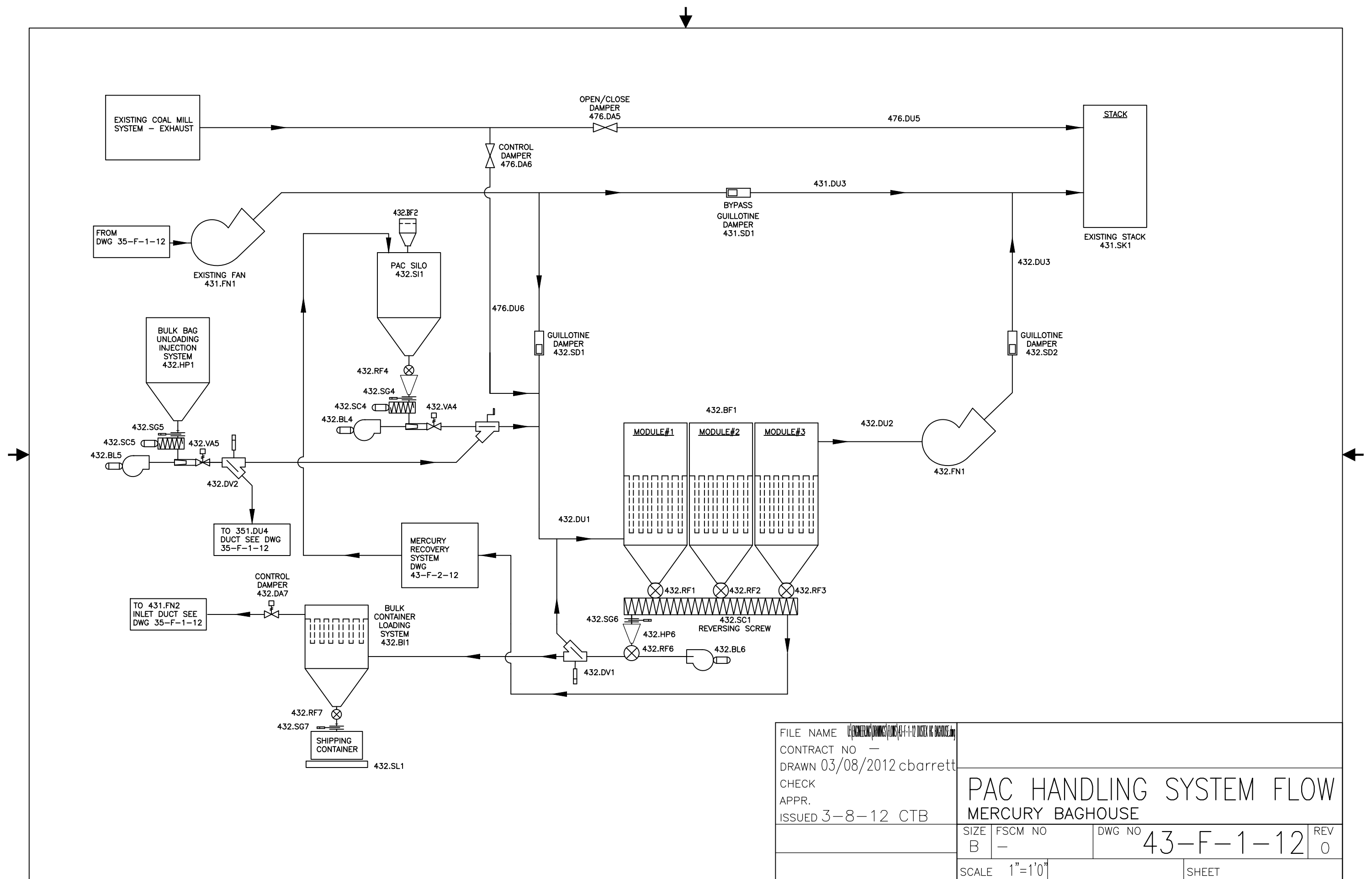
- (*/*) NORMAL/DESIGN CAPACITIES
- NEW EQUIPMENT
- EXISTING EQUIPMENT
- * DENOTES EQUIPMENT SUPPLIED BY FULLER
- △ DENOTES REVISION NUMBER

DRAWING LIST:

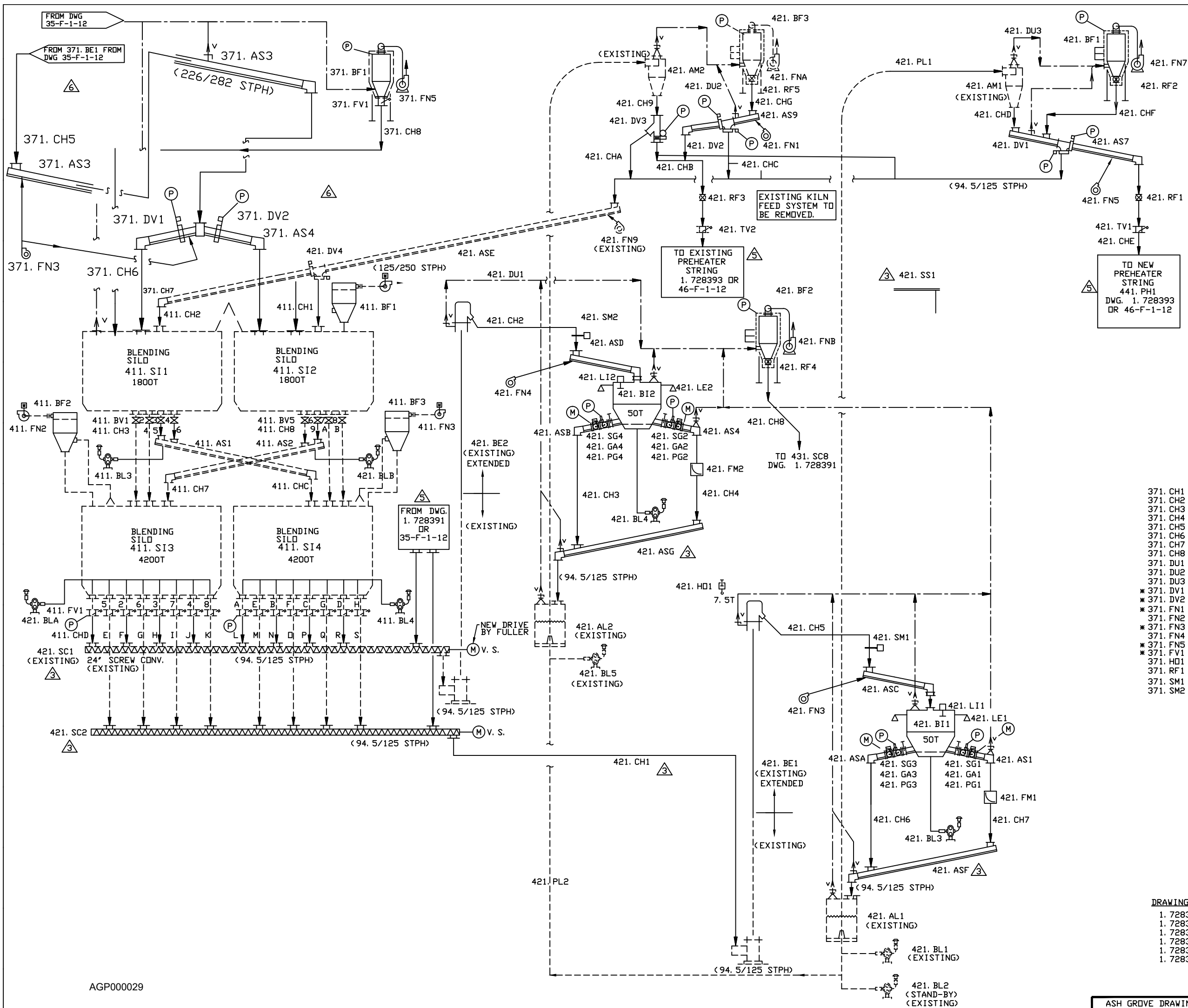
- 1. 728391
- 1. 728392
- 1. 728393
- 1. 728394
- 1. 728395
- 1. 728396

Rev. 5	1-15-18	SHM			REMOVE H-COOLER BYPASS SYSTEM
Rev. 4	2-9-12	CTB			UPDATE DWG # AND REFS
Rev. 3	06MAR98	KSB	TB	TGB	GENERAL REVISION
Rev. 2	10JUL97	JB	TGB	TGB	GENERAL REVISION
Rev. 1	08NOV96	GS	TGB	TGB	GENERAL REVISION
Original	20SEP96	DJW	TGB	TGB	Revision in zone / Description
Scale	Date	Sign.	Sign.	Sign.	Number with , see list No.
NONE		Drawn	Chkd	Appr	PC: 135

EQUIPMENT FLOW SHEET
H-COOLER AND CLINKER HANDLING
2700 STPD AND PLANT EXPANSION
ASH GROVE CEMENT COMPANY - DURKEE, DREGON



FILE NAME 14\ENGINEERING\DRAWINGS\PLANS\43-F-1-12 DUSTY HG BAGHOUSE.dwg			
CONTRACT NO —			
DRAWN 03/08/2012 cbarrett			
CHECK			
APPR.			
ISSUED 3-8-12 CTB			
SIZE B		FSCM NO —	DWG NO 43-F-1-12
SCALE 1"=1'0"		REV 0	
		SHEET	



EQUIPMENT LIST:

421. AL1	AIR LIFT	*421. DV1	DIVERTER GATE (AIRSLIDE)
421. AL2	AIR LIFT	*421. DV2	DIVERTER GATE (AIRSLIDE)
421. AM1	ALLEVIATOR	*421. DV3	DIVERTER GATE
421. AM2	ALLEVIATOR	421. DV4	DELETED
*421. AS1	AIR SLIDE	*421. FM1	FLOWMETER
421. AS2	NOT USED	*421. FM2	FLOWMETER
421. AS3	NOT USED	*421. FN1	FAN
*421. AS4	AIR SLIDE	421. FN2	NOT USED
421. AS5	NOT USED	*421. FN3	FAN
421. AS6	NOT USED	*421. FN4	FAN
*421. AS7	AIR SLIDE	*421. FN5	FAN
421. AS8	NOT USED	421. FN6	NOT USED
*421. AS9	AIR SLIDE	*421. FN7	FAN
*421. ASA	AIR SLIDE	421. FN8	NOT USED
*421. ASB	AIR SLIDE	421. FN9	FAN
*421. ASC	AIR SLIDE	421. FNA	FAN
*421. ASD	AIR SLIDE	*421. FNB	FAN
421. ASE	AIR SLIDE	*421. GA1	ROTARY CUT-OFF GATE
*421. ASF	AIR SLIDE	*421. GA2	ROTARY CUT-OFF GATE
*421. ASG	AIR SLIDE	*421. GA3	ROTARY CUT-OFF GATE
*421. BE1	BUCKET ELEVATOR	*421. GA4	ROTARY CUT-OFF GATE
*421. BE2	BUCKET ELEVATOR	421. HD1	HOIST
*421. BF1	BAG FILTER	*421. LE1	LOAD CELL
*421. BF2	BAG FILTER	*421. LE2	LOAD CELL
421. BF3	BAG FILTER	*421. LI1	LEVEL INDICATOR
*421. BI1	BIN	*421. LI2	LEVEL INDICATOR
*421. BI2	BIN	*421. PG1	PROPORTIONING GATE
421. BL1	BLOWER	*421. PG2	PROPORTIONING GATE
421. BL2	BLOWER	*421. PG3	PROPORTIONING GATE
*421. BL3	BLOWER	*421. PG4	PROPORTIONING GATE
*421. BL4	BLOWER	421. PL1	PIPELINE
421. BL5	BLOWER	*421. RF1	ROTARY FEEDER
421. CH1	CHUTE	*421. RF2	ROTARY FEEDER
421. CH2	CHUTE	421. RF3	ROTARY FEEDER
421. CH3	CHUTE	*421. RF4	ROTARY FEEDER
421. CH4	CHUTE	421. RF5	ROTARY FEEDER
421. CH5	CHUTE	*421. SC1	SCREW CONVEYOR (MODIFIED)
421. CH6	CHUTE	*421. SC2	SCREW CONVEYOR
421. CH7	CHUTE	*421. SG1	SHUT-OFF GATE
421. CH8	CHUTE	*421. SG2	SHUT-OFF GATE
421. CH9	CHUTE	*421. SG3	SHUT-OFF GATE
421. CHA	CHUTE	*421. SG4	SHUT-OFF GATE
421. CHB	CHUTE	*421. SM1	SAMPLER
421. CHC	CHUTE	*421. SM2	SAMPLER
421. CHD	CHUTE	421. SS1	STEEL STRUCTURES
421. CHE	CHUTE	*421. TV1	TIPPING VALVE
421. CHG	CHUTE	421. TV2	TIPPING VALVE
421. DU1	VENT DUCTING	371. AS1	AIR SLIDE
421. DU2	VENT DUCTING	371. AS2	NOT USED
421. DU3	VENT DUCTING	371. AS3	AIR SLIDE
		371. AS4	AIR SLIDE

371. CH1 CHUTE
371. CH2 CHUTE
371. CH3 CHUTE
371. CH4 CHUTE
371. CH5 CHUTE
371. CH6 CHUTE
371. CH7 CHUTE
371. CH8 CHUTE
371. DU1 VENT DUCTING
371. DU2 VENT DUCTING
371. DU3 VENT DUCTING
*371. DV1 DIVERTER GATE
*371. DV2 DIVERTER GATE
*371. FN1 FAN
371. FN2 NOT USED
*371. FN3 FAN
371. FN4 NOT USED
*371. FN5 FAN
*371. FV1 FLAP VALVE
371. HD1 HOIST
371. RF1 DELETED
371. SM1 SAMPLER (EXIST. RELOCATED)
371. SM2 SAMPLER (EXIST. RELOCATED)

LEGEND

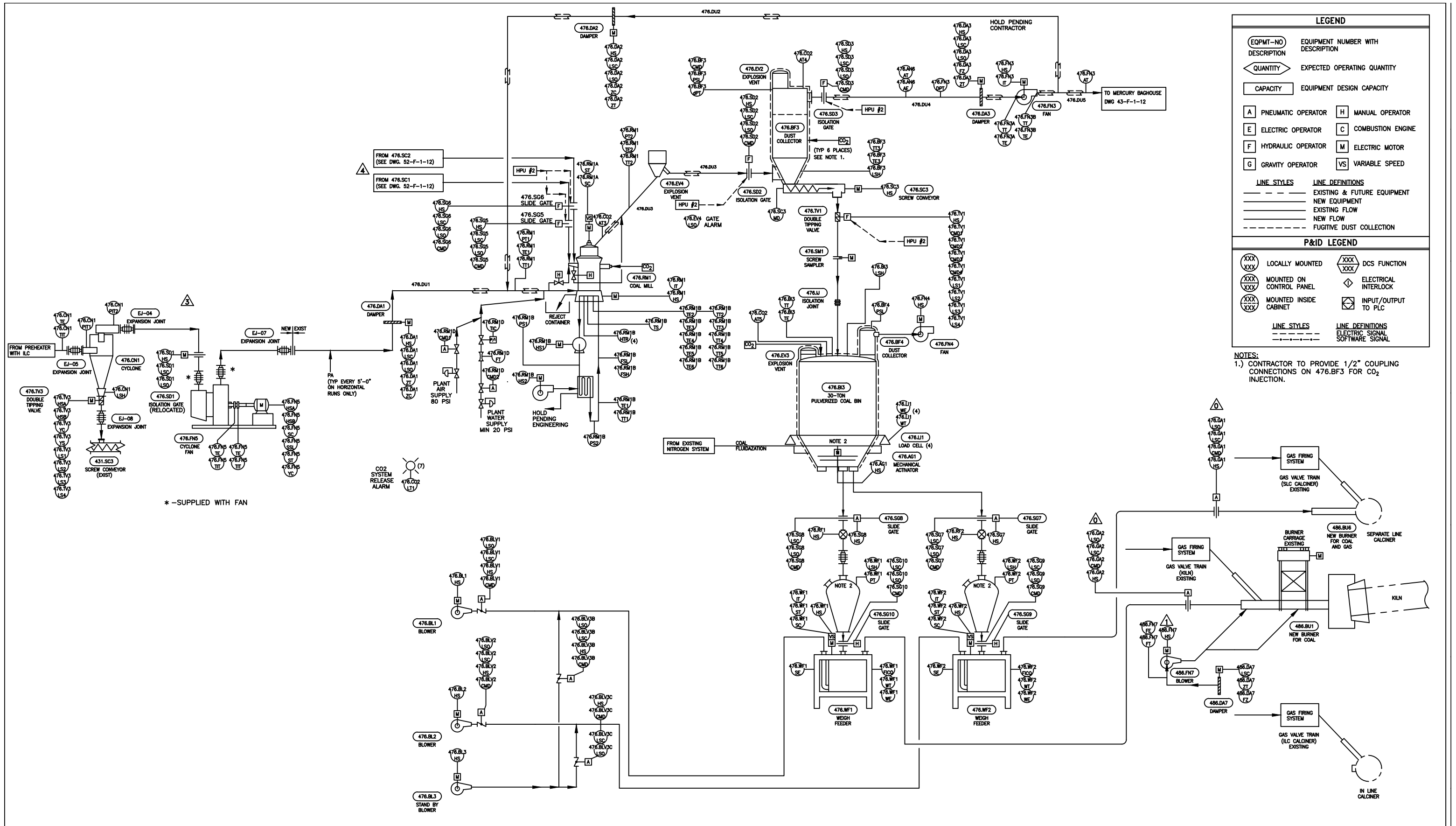
(*/*)	NORMAL/DESIGN CAPACITIES
-----	EXISTING
=====	INSULATED
_____	NEW EQUIPMENT
*	DENOTES EQUIPMENT SUPPLIED BY FULLER
△	DENOTES REVISION NUMBER

DRAWING LIST:

1. 728391
1. 728392
1. 728393
1. 728394
1. 728395
1. 728396

Rev. 6	1/18/18	SHM			ADDED 421. DV4 & NOTE ON 371 AIRSLIDES
Rev. 5	2/9/12	CTB			DWG NUMBERS UPDATED
Rev. 4	RLW	MJH			
Rev. 3	06MAR98	KSB	TGB	TGB	ADDED 421. ASF AND 421. ASG
Rev. 2	10JUL97	JB	TGB	TGB	GENERAL REVISION
Rev. 1	08NOV96	GS	TGB	TGB	GENERAL REVISION
Original	20SEP96	DJW	TGB	TGB	Revision in zone: / Description
Scale:	Date	Sign.	Sign.	Number with	△, see list No.
NONE	Drawn	Chkd	Appr	PC: 135	
EQUIPMENT FLOW SHEET					
KILN FEED SYSTEM					
2700 STPD PLANT EXPANSION					
ASH GROVE CEMENT COMPANY - DURKEE, OREGON					

ASH GROVE DRAWING NUMBER	Drawing Number	Rev.
42-F-1-12	1. 728392	6



DWG. NO.	REFERENCE DRAWINGS	REV	ISSUANCE	DESCRIPTION	DATE	DSG NR	LD DSG NR	DSPL ENGR	LD ENGR	PROJ ENGR	PROJ MGR	STATUS:	CLIENT:
		1										ISSUED FOR CONSTRUCTION	ASH GROVE CEMENT COMPANY
		2											PROJECT:
		3											NEW INDIRECT COAL SYSTEM
		4											LOCATION:
		5											DURKEE, OREGON
		6											DWG NAME:
		7											PIPING AND INSTRUMENT DIAGRAM
		8											ACAD FILE
		9											DRAWING NUMBER
		10											REVISION
AGP000030		1	ISSUED FOR CONSTRUCTION	CHANGED DWG'S AND REFS TO AGC #S	3-8-12	JRS	EPB	TS	JWM	HS	ASH GROVE DWG. NO.		
		2	ASBUILTS	ADDED CYCLONE & FAN	07/23/01	JRS	EPB	TS	JWM	HS	47-F-1-12		
		3	ISSUED FOR CONSTRUCTION	GENERAL REVISIONS	04/30/01	RJG	EPB	TS	JWM	HS	SCALE: AS NOTED		
		4	ISSUED FOR CONSTRUCTION	DELETED DIFFERENTIAL PRESSURE SWITCHES	01/30/01	TRG	EPB	TS	JWM	HS	PROJECT NO: 01-852		
		5	ISSUED FOR CONSTRUCTION		01/22/01	TRG	EPB	TS	JWM	HS			

Exhibit B

**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
OREGON TITLE V OPERATING PERMIT**

Eastern Region
475 NE Bellevue Dr., Suite 110
Bend, OR 97701

Issued in accordance with provisions of ORS 468A.040
and based on land use compatibility findings included in the permit record.

ISSUED TO:

Ash Grove Cement Company
PO Box 287
Durkee, OR 97905-0287

INFORMATION RELIED UPON:

Application Number: 20879, 23680
Received: 1/2/2004, 4/28/2009


PLANT SITE LOCATION:

33060 Shirttail Creek Road
Durkee, OR 97905-0287

LAND USE COMPATIBILITY STATEMENT:

Issued by: Baker County
Dated: 6/26/1996

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY


Mark Bailey, Eastern Region Air Quality Manager

OCT 16 2020

Date

Nature of Business**SIC****NAICS**

Portland Cement Manufacturing

3241

327310

Limestone Quarry

1422

212312

RESPONSIBLE OFFICIAL

Title: Durkee Plant Manager

FACILITY CONTACT PERSON

Name: Norma Job

Title: Environmental Manager

Phone: (541) 877-2411, Ext. 2640

TABLE OF CONTENTS

LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT	3
PERMITTED ACTIVITIES	4
EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION	4
EMISSION LIMITS AND STANDARDS, TESTING, MONITORING AND RECORDKEEPING REQUIREMENTS	6
Facility-Wide Requirements	6
Emissions Unit OA (Kiln) Requirements	9
Emissions Unit CC (Clinker Cooler) Requirements	15
Emissions Units RM-A, HO, CM, CP, and KG Requirements	16
Emissions Unit CH Requirements	18
Emissions Unit FU-CRUSH Requirements	19
Emissions Unit RM-B and CRUSH Requirements	19
Emissions Unit FU4-A, TEMP-S Requirements	20
Baghouses Subject to 1977 PSD Permit Limits (except kiln) [1977 PSD Permit - PSD-X-77-03]	21
Insignificant Activities Requirements	22
PLANT SITE EMISSION LIMITS	24
EMISSION FEES	26
GENERAL TESTING REQUIREMENTS	27
GENERAL MONITORING AND RECORDKEEPING REQUIREMENTS	27
REPORTING REQUIREMENTS	29
NON-APPLICABLE REQUIREMENTS	32
GENERAL CONDITIONS	32

LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit
ASTM	American Society of Testing and Materials
CAO	Cleaner Air Oregon
CEMS	Continuous Emissions Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
CPMS	Continuous Parameter Monitoring System
DEQ	Department of Environmental Quality
dscf	Dry standard cubic feet
EF	Emission Factor
EPA	US Environmental Protection Agency
EU	Emissions Unit
FCAA	Federal Clean Air Act
FPM	Filterable Particulate Matter
GDF	Gasoline Dispensing Facility
GHG	Greenhouse Gas
gr/dscf	Grain per dry standard cubic feet (1 pound = 7000 grains)
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040
HCFC	Halogenated Chloro-Fluoro-Carbons
Hg	Mercury
ID	Identification Number or Label
IEU	Insignificant Emissions Unit
I&M	Inspection and Maintenance
lb	Pound(s)
MMBtu	Million British thermal units
NA	Not Applicable
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standard
O ₂	Oxygen
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
O&M	Operation and Maintenance
Pb	Lead
PCD	Pollution Control Device
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 microns in size
PM _{2.5}	Particulate Matter less than 2.5 microns in size
ppm	Parts per million
PSD	Prevention of Significant Deterioration
PSEL	Plant Site Emission Limit
psia	Pounds per square inch, actual
RICE	Reciprocating Internal Combustion Engine
SER	Significant Emission Rate
SIC	Standard Industrial Code
SO ₂	Sulfur Dioxide
SSOL	Site-specific Operating Limit
ST	Source Test
THC	Total Hydrocarbons
VE	Visible Emissions
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

PERMITTED ACTIVITIES

1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related to or associated with air contaminant source(s) in accordance with the requirements, limitations and conditions of this permit. [OAR 340-218-0010 and 340-218-0120(2)]
2. All conditions in this permit are federally enforceable, meaning that they are enforceable by DEQ, EPA and citizens under the Clean Air Act, except Conditions 6, 7, 8, 12, 78.f, 99.b.iii, G5 and G9 (OAR 340-248-0005 through 340-248-0180) are only enforceable by the state. [OAR 340-218-0060]

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units regulated by this permit are the following: [OAR 340-218-0040(3)]

Emission Unit Description	EU ID	Pollution Control Device Description	PCD ID
Raw Material Storage and Handling	RM-A	Baghouse	331.BF1
			331.BF2
			341.BF1*
			351.BF2
			351.BF3
			351.BF4
			371.BF1*
Raw Product Silo	RM-B	Baghouse	341.BF2
Kiln Feed System	HO	Baghouse	411.BF1*
			411.BF2
			411.BF3
			421.BF3*
			421.BF2
			421.BF1
			431.BF2
Pyroprocessing	OA	Baghouse	431.BF1*
			432.BF1
			432.BF2
			476.BF3
Clinker Cooler	CC	Baghouse	471.BF1
Raw & Pulverized Coal Bins	CH	Baghouse	476.BF1
			476.BF2
			476.BF4

Emission Unit Description	EU ID	Pollution Control Device Description	PCD ID
Miscellaneous Loading Systems	KG	Baghouse	521.BF1
			521.BF2
			521.BF3*
			521.BF5
			521.BF6
Clinker Silos, Finish Mills & Transfer Equipment	CM	Baghouse	542.BF2*
			542.BF1*
			532.BF2
			532.BF1
			532.BF4
			532.BF3
			542.BF3
			542.BF4
			532.BF5
			532.BF6
			532.BF7
			532.BF8
			532.BF9
			532.BFA
			532.BFB
			532.BFC
			531.BF1
			541.BF2
			541.BF1
			491.BF1
Cement Silos and Loading Equipment	CP	Baghouse	521.BF4
			523.BF1
			523.BF2
			523.BF3
			491.BF8*
			611.BF1*
			611.BF2*
			611.BF3*
			611.BF8
			622.BF1*
			621.BF1*
			611.BF4
			611.BF5

Emission Unit Description	EU ID	Pollution Control Device Description	PCD ID
Plant Fugitive Sources	FU2	Work Practices	NA
Pre-1970 Quarry Fugitive Sources	FU3	Work Practices	NA
Conveyor Transfer Points and Clay/Shale Crusher	CRUSH	Baghouse	282.BF2
			282.BF1
			271.BF1
			252.BF1
Primary and Secondary Crusher	FU-CRUSH	Work Practices	NA
Portable Screening Plant	TEMP-S	Work Practices	NA
Quarry Fugitives Subject to Subpart OOO	FU4-A	Work Practices	NA
Quarry Fugitives not Subject to Subpart OOO	FU4-B	Work Practices	NA

*Indicates PCD is subject to limits in 1977 PSD permit.

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING AND RECORDKEEPING REQUIREMENTS

The following tables and conditions contain the applicable requirements along with testing, monitoring and recordkeeping requirements for the emissions units to which those requirements apply.

Facility-Wide Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
OAR 340-208-0210(1)	4	Fugitive Emissions	Minimize	NA	NA	5
OAR 340-208-0300	6	Nuisance	No Nuisance	NA	NA	8
OAR 340-208-0450	7	PM >250µm	No Fallout	NA	NA	8
OAR 340-228-0110(1)	9.a	#1 Distillate Oil Sulfur Content	≤0.3% S by Weight	Each Shipment	NA	10
OAR 340-228-0110(2)	9.b	#2 Distillate Oil Sulfur Content	≤0.5% S by Weight	Each Shipment	NA	10
OAR 340-228-0100	9.c	Residual Oil Sulfur Content	≤1.75% S by Weight	Each Shipment	NA	10
OAR 340-228-0120	9.d	Coal Sulfur Content	≤1% S by Weight	Each Shipment	NA	10
40 CFR 279.11	11	Used Oil Specification	≤0.5% S by Weight and as Listed in 40 CFR 279.11	30-day Composite	NA	13
ACDP 01-0029 Condition 6	12	Used Oil PCB Content	50 ppm by Weight	30-day Composite	NA	13
40 CFR Part 68	15	Risk Management	Risk Management Plan	NA	NA	15

Fugitive Conditions

4. Applicable Requirement: The permittee must not cause or permit any materials to be handled, transported or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne.
 - 4.a. Such reasonable precautions must include, but not be limited to the following: [OAR 340-208-0210(1)]
 - 4.a.i. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - 4.a.ii. Application of water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - 4.a.iii. Full or partial enclosure of materials stockpiles in cases where application of water or chemicals are not sufficient to prevent particulate matter from becoming airborne;
 - 4.a.iv. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials;
 - 4.a.v. Adequate containment during sandblasting or other similar operations;
 - 4.a.vi. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and
 - 4.a.vii. Prompt removal from paved streets of earth or other material that does or may become airborne.
 - 4.b. Upon request by DEQ, the permittee must develop a fugitive emission control plan for approval by DEQ if the above precautions are not adequate, and implement the plan whenever fugitive emissions leave the property for more than 18 seconds in a six-minute period.
5. Monitoring Requirement: At least once each month for a minimum period of 30 minutes, the permittee must visually survey the plant for any sources of excess fugitive emissions. For the purpose of this survey, excess fugitive emissions are considered to be any visible emissions that leave the plant site boundaries for more than 18 seconds in a six-minute period. The person conducting the observation must follow the procedures of EPA Method 22. If sources of visible emissions are identified, the permittee must:
 - 5.a. Immediately take corrective action to minimize the fugitive emissions, including but not limited to those actions identified in Condition 4; or
 - 5.b. Develop a DEQ approved fugitive emission control plan upon request by DEQ and implement the plan whenever fugitive emissions leave the property for more than 18 seconds in a six-minute period. [OAR 340-218-0050(3)(a)]
 - 5.c. Recordkeeping: The permittee must maintain records of the fugitive emissions surveys, corrective actions (if necessary), and/or the results of any EPA Method 22 tests.

Nuisance Conditions

6. Applicable Requirement: The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by DEQ personnel. [OAR 340-208-0300] This condition is enforceable only by the State.
7. Applicable Requirement: The permittee must not cause or permit the deposition of any particulate matter larger than 250 microns in size at sufficient duration or quantity, as to create an observable deposition upon the real property of another person. [OAR 340-208-0450] This condition is enforceable only by the State.
8. Monitoring Requirement: The permittee must maintain a log of each nuisance complaint received by the permittee during the operation of the facility. Documentation must include date of contact, time of observed nuisance condition, description of nuisance condition, location of receptor, status of plant

operation during the observed period, and time of response to complainant. A plant representative must immediately investigate the condition following the receipt of the nuisance complaint and a plant representative must provide a response to the complainant within 24 hours, if possible. This condition is only enforceable by the state. [OAR 340-218-0050(3)(a)]

Fuels

9. Applicable Requirement: If the permittee burns any of the fuels listed below, the sulfur content cannot exceed:
 - 9.a. 0.3% sulfur by weight for ASTM Grade 1 distillate oil; [OAR 340-228-0110(1)]
 - 9.b. 0.5% sulfur by weight for ASTM Grade 2 distillate oil; [OAR 340-228-0110(2)]
 - 9.c. 1.75% sulfur by weight for residual oil; [OAR 340-228-0100]
 - 9.d. 1% sulfur by weight for coal. [OAR 340-228-0120]
10. Monitoring Requirement: The permittee must monitor the sulfur content of each shipment of fuel received by: [OAR 340-218-0050(3)(a)]
 - 10.a. Obtaining a sulfur content certificate from each vendor for each shipment of fuel received; or
 - 10.b. Analyzing or having analyzed by a contract laboratory a representative sample taken by the permittee from each shipment of fuel received.
11. Applicable Requirement: The permittee is allowed to use on-specification used oil that contains no more than 0.5% sulfur by weight and does not exceed the used oil specifications contained in 40 CFR Part 279.11, Table 1. [40 CFR 279.11]
12. Applicable Requirement: The permittee must not burn any used oil containing more than 50 ppm polychlorinated-biphenyls (PCB) by weight as determined by a composite of representative samples obtained from each shipment of used oil. [1987 ACDP #01-0029, Condition 6] This condition is only enforceable by the State.
13. Monitoring Requirement: The permittee must monitor the specifications and PCB content of each shipment of used oil received from off-site by obtaining an analysis certificate from the vendor for each shipment of fuel received; or by analyzing, or having analyzed by a contract laboratory, a monthly composite of representative samples taken by the permittee for each shipment of fuel received. [OAR 340-218-0050(3)(a)]
14. Recordkeeping Requirement: The permittee must maintain records of the sulfur content of all oil and coal shipments received from off-site. The permittee must maintain records of the PCB analyses performed on the used oil burned at the facility. If a field test is performed, the permittee must maintain records of the date and results of the test.

Accidental Release Prevention

15. Applicable Requirement: Should this stationary source become subject to the accidental release prevention regulations in 40 CFR Part 68, then the permittee must submit a risk management plan (RMP) by the date specified in 40 CFR 68.10 and comply with the plan and all other applicable Part 68 requirements. [40 CFR Part 68]

Emissions Unit OA (Kiln) Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
OAR 340-208-0110(4)	16	Visible Emissions	20% Opacity	6-Minute Block Average	NA	17
40 CFR 60.62(a)(1)(iii), 40 CFR 63.1343(b)(1) 1/10/17 ACDP 01-0029- CS-01 Condition 3.1	18.a	PM	0.07 lb/ton Clinker	Avg. of 3 Test Runs	19	20, 21
40 CFR 63.1346(g)	18.b	PM	Clean Fuels During Startup	NA	NA	22
1/10/17 ACDP 01-0029- CS-01 Condition 2.1	23	SO ₂	0.4 lb/ton Clinker	Avg. of 3 Test Runs	24	25
1/10/17 ACDP 01-0029- CS-01 Condition 1.1	27	NO _x	2.0 lbs/ton Clinker	30-day Rolling Average	NA	28
1997 PSD Permit, 01- 0029, Condition 19	29	CO	490 lb/hr	8-hour Rolling Average	NA	30
40 CFR 63.1343(b)	31	Dioxin/Furan	0.2 ng/dscm TEQ @ 7% O ₂ if T _{baghouse} > 400°F 0.40 ng/dscm TEQ @ 7% O ₂ if T _{baghouse} ≤ 400°F	Avg. of 3 Test Runs for Each RM Operating Condition	32	33
40 CFR 63.1343(b)	36	Hg	55 lb/million Ton Clinker	30-day Rolling Average	37	38
40 CFR 63.1343(b)	39	THC	24 ppmvd @ 7% O ₂ as Propane	30-day Rolling Average	40	41
40 CFR 60.2875	43	CISWI Exemption	No Solid Waste Combustion	NA	NA	44

Visible Emissions

16. Applicable Requirement: The permittee shall not cause or allow the emissions of any air contaminant in the atmosphere from the kiln which is equal to or greater than 20% opacity, 6 minute block average, excluding uncombined water. [OAR 340-208-0110(4)]
17. Monitoring and Recordkeeping Requirement: The opacity standard in this condition is based on the average of 24 consecutive observations recorded at 15-second intervals, or more frequently, which comprise a six-minute block. Six-minute blocks need not be consecutive in time and in no case may two blocks overlap. For each set of 24 observations, the six-minute block average is calculated by summing the opacity of the 24 observations and dividing the sum by 24. Six-minute block averages are measured by: EPA Method 9; a continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR Part 60; or an alternative monitoring method approved by DEQ that is equivalent to EPA Method 9. [OAR 340-208-0110(2)]

Particulate Emissions

18. Applicable Requirement: The permittee must not cause or allow the emissions of particulate matter from the kiln in excess of the following levels:
- 18.a. 0.07 lb/ton clinker; [40 CFR 60.62(a)(1)(iii), 63.1343(b)(1), 01/10/17 ACDP 01-0029-CS-01 Condition 3.1]
 - 18.b. During startup the permittee must use any one or a combination of the following clean fuels until the kiln reaches a temperature of 1200°F: natural gas, synthetic natural gas, propane, distillate oil, syngas, and ultra-low sulfur diesel (ULSD). Combustion of other fuels may commence once the kiln temperature reaches 1200°F. Particulate control devices (baghouses) should be operational during startup and shutdown. [40 CFR 63.1346(g)]
19. Testing Requirement: The permittee must demonstrate compliance with the particulate limits by conducting an annual test using EPA Method 5 or Method 5I. In addition to demonstrating compliance, the tests will be used to establish a site-specific operating limit (SSOL) for the PM Continuous Parametric Monitoring System (CPMS) in accordance with 40 CFR 63.1349(b)(1). [01/10/17 ACDP 01-0029-CS-01 Condition 3.2]
- 19.a. For each performance test, a minimum of 3-test runs is required. Separate tests must be performed while the raw mill is operating under normal conditions and while the raw mill is not operating. [40 CFR 63.1349(b)(1)(vi)]
 - 19.b. The annual test requirement is met if a source test is completed no more than 13 calendar months after the previous performance test.
20. Monitoring Requirement: The permittee must operate a PM CPMS on the kiln stack in accordance with 40 CFR 63.1350(b) to demonstrate continuous compliance with the particulate limits. The monitor output will be compared to the SSOL established during the testing required by Condition 19. [01/10/17 ACDP 01-0029-CS-01 Condition 3.3] This monitoring also meets the requirements of Compliance Assurance Monitoring (CAM) in OAR 340-212-0200 through 280.
- 20.a. The CPMS must be operated at all times the kiln is in operation except during CPMS breakdowns, repairs, calibration checks and zero span adjustments.
 - 20.b. To determine continuous operating compliance, the permittee must record the CPMS output data for all periods when the kiln is operating and the CPMS is not out of control. The permittee must use all quality-assured average hourly data collected by the CPMS for all hours of operation on a 30-operating day rolling average basis updated at the end of each new kiln operating day. [40 CFR 63.1350(b)(1)(ii)]
 - 20.c. For any exceedance of the SSOL, the permittee must: [40 CFR 63.1350(b)(1)(iii)]
 - 20.c.i. Within 48 hours of the deviation visually inspect the kiln baghouse;
 - 20.c.ii. If inspection of the kiln baghouse identifies the cause of the deviation, take corrective action as soon as possible and return the CPMS measurement to within the SSOL;
 - 20.c.iii. Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM compliance test to verify or re-establish the SSOL within 45 days. The permittee is not required to conduct additional testing for any deviations that occur between the time of the original deviation and the testing required under this paragraph; and
 - 20.c.iv. Except as identified in Condition 20.d, a deviation from the SSOL does not constitute a permit violation.
 - 20.d. Any deviation of the 30-day rolling average from the established SSOL leading to more than four required performance tests in a 12-consecutive month period (rolling monthly) shall be treated as a permit violation. [40 CFR 63.1350(b)(1)(iv)]
 - 20.e. The permittee must develop an emission monitoring plan in accordance with 40 CFR 63.1350(p)(1-4). [40 CFR 63.1350(d)(4)]

21. Monitoring Requirement: The permittee must determine hourly clinker production by one of two methods: [40 CFR 63.1350(d), 1/10/17 ACDP 01-0029-CS-01 Condition 1.2]
- 21.a. Install, calibrate, maintain and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within $\pm 5\%$ accuracy; or
- 21.b. Install, calibrate, maintain and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within $\pm 5\%$ accuracy. Calculate the hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, the permittee must use the new ratio going forward, but does not have to retroactively change clinker production rates previously estimated.
- 21.c. During each quarter of facility operation, the permittee must determine, record and maintain a record of the ongoing accuracy of the system measuring hourly clinker production (or feed mass flow).
- 21.d. Records of the daily clinker production rate and kiln feed rate must be maintained.
22. Monitoring Requirement: The permittee must monitor and record the types of fuel used in the kiln during startup.

SO₂ Emissions

23. Applicable Requirement: The permittee must not cause or allow the emissions of sulfur dioxide (SO₂) from the kiln in excess of 0.4 lb/ton clinker, as the average of 3 test runs. [1/10/17 ACDP 01-0029-CS-01 Condition 2.1]
24. Testing Requirement: The permittee must conduct a stack test for SO₂ emissions in accordance with DEQ's Source Sampling Manual at least once every two years. A test is considered to meet the two year requirement if completed no more than 25 calendar months after the previous stack test. EPA Method 6 or 6C shall be used with each test run a minimum of 60 minutes in duration. [1/10/17 ACDP 01-0029-CS-01 Condition 2.2]
25. Monitoring Requirement: The permittee shall monitor continuing compliance with the SO₂ limits by fuel sulfur monitoring requirement in Condition 10. [OAR 340-218-0050(3)(a)]
26. Recordkeeping Requirement: The permittee must maintain records of the fuel sulfur content required by Condition 10.

NO_x Emissions

27. Applicable Requirement: The permittee must install, maintain and continuously operate a Selective Non-Catalytic Reduction (SNCR) unit to limit emissions of NO_x from the kiln to no more than 2.0 lb/ton clinker on a 30-day rolling average period. [1/10/17 ACDP 01-0029-CS-01 Condition 1.1] This limit was used by DEQ to support Ash Grove's request to be excused from conducting a 4-factor analysis during the second planning period of the Regional Haze Program conducted in response to 40 CFR 51, Subpart P.
28. Monitoring Requirement: The permittee must certify, operate, maintain and record the output of a NO_x Continuous Emissions Monitoring System (CEMS) with automated data acquisition and handling system (DAHS) for measuring and recording emissions of NO_x discharged to the atmosphere from the kiln stack. The CEMS must be operated and maintained in accordance with 40 CFR 60, Appendices B and F, and DEQ's Continuous Monitoring Manual. Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the CEMS must be operated at all times during kiln operation. During any time when the CEMS are inoperable and otherwise not measuring emissions of NO_x from the kiln, the permittee must apply the missing data substitution procedures in 40 CFR Part 75. In calculating the 30-day rolling

average emission rate, the total pounds of NO_x emitted from the kiln during a specific period shall include all kiln emissions that occur on any day where raw materials are fed into the kiln and any combustion is occurring in the kiln, including emissions during each startup, shutdown or malfunction. [01/10/17 ACDP 01-0029-CS-01 Condition 1.2] This monitoring meets the requirements for Compliance Assurance Monitoring (CAM) under OAR 340-212-0200 through 0280.

CO Emissions

29. Applicable Requirement: The permittee must not cause or allow the emissions of carbon monoxide in excess of 490 lb/hr as an 8-hour rolling average from the kiln. [1997 PSD ACDP 01-0029 Condition 19]
30. Monitoring and Recordkeeping Requirement: The permittee must monitor carbon monoxide emissions from the kiln by calibrating, maintaining and recording the output of a continuous emissions monitoring system (CEMS) for carbon monoxide on the kiln stack in accordance with DEQ's Continuous Monitoring Manual. The hourly emission rate based on an 8-hour rolling average of the data must be recorded each clock hour that the kiln is in operation.

Dioxin and Furan Emissions

31. Applicable Requirement: The permittee must not cause or allow the emissions of dioxins and furans from the kiln in excess of:
- 31.a. 0.2 ng/dscm TEQ, corrected to 7% O₂ if the average of the performance test run average temperature at the inlet to baghouse 431.BF1 is greater than 400°F; or [40 CFR 63.1343(b)]
 - 31.b. 0.40 ng/dscm TEQ, corrected to 7% O₂ if the average of the performance test run average temperature at the inlet to baghouse 431.BF1 is 400°F or less. [40 CFR 63.1343(b)]
 - 31.c. TEQ is calculated as defined in 40 CFR 63.1341.
32. Testing Requirement: The permittee must demonstrate compliance with the dioxin and furan limit by conducting a performance test using EPA Method 23. Separate performance tests shall be conducted while the raw mill is running under normal operating conditions and while the raw mill is not operating. Each test shall consist of three separate test runs. The duration of each run shall be at least three hours and the sample volume for each run must be at least 2.5 dscm (90 dscf). The arithmetic average of the concentration measured during the three runs shall be calculated and used to determine compliance. The temperature at the inlet to the baghouse (431.BF1) shall be continuously recorded during the tests and the continuous temperature records must be included in the test report. [40 CFR 63.1349(b)(3)] Performance tests are required every 30 months and must be completed no more than 31 calendar months after the previous performance test. [40 CFR 63.1349(c)]
33. Monitoring Requirement: The permittee must install, calibrate, maintain and operate a continuous monitor to record the exhaust gas temperature at the inlet to the baghouse (431.BF1). The temperature monitor must meet the requirements of 40 CFR 63.1350(g)(1). The required minimum data collection frequency must be one minute. Each minute the permittee must demonstrate compliance using the 3-hour rolling average calculated as the arithmetic average of the current minute and the last 179 valid operating minutes until a change in the operating status of the raw mill. Periods of time when the one-minute averages are not available due to the monitoring system being out of control shall be ignored in the calculation of the 3-hour rolling average. When the operating status of the raw mill changes from off to on or on to off, the calculation of the three hour rolling average must begin anew without considering previous recordings. [40 CFR 63.1350(g)]
- 33.a. A limit on the gas temperature at the inlet to the baghouse (431.BF1) shall be established as the average of the temperature averages during the compliance test. [40 CFR 63.1349(b)(3)(iv)]
 - 33.b. The permittee must conduct all monitoring in continuous operation at all times the kiln is operating. [40 CFR 63.1350(m)(2)]
 - 33.c. During periods of startup and shutdown the temperature limit may be exceeded by no more than 10%. [40 CFR 63.1346(a)(1) and (2)]

- 33.d. The permittee must record the result of each temperature monitor inspection, calibration and validation check. [40 CFR 63.1350(m)(4)]
- 33.e. The permittee must maintain an emissions monitoring plan in accordance with 40 CFR 63.1350(p)(1-4). [40 CFR 1350(g)]
34. Recordkeeping Requirement: The permittee must maintain records of the dioxin/furan test results and the gas temperature at the inlet to the baghouse 431.BF1. [40 CFR 63.1355(c)]
35. Notification Requirements: The permittee must notify DEQ in writing of its intention to perform the testing of Condition 32 at least 60 calendar days before the test is to begin. [40 CFR 63.7(b), 63.9(e), 63.1353(b)(2)]

The permittee must notify DEQ of its compliance status. [40 CFR 63.9(h), 63.1353(b)(5)] The notification must include a report of the results of the performance test required in Condition 32 and be submitted before the close of business on the 60th day following the performance test unless otherwise allowed. [40 CFR 63.10(d)(2), 63.1354(b)(1)]

Mercury Emissions

36. Applicable Requirement: The permittee must not cause or allow the emissions of mercury from the kiln in excess of 55 lb/million tons clinker produced during normal operations as a 30-day rolling average. [40 CFR 63.1343(b)] During startup the permittee must use any one or a combination of the following clean fuels until the kiln reaches a temperature of 1200°F: natural gas, synthetic natural gas, propane, distillate oil, syngas, and ultra-low sulfur diesel (ULSD). Combustion of other fuels may commence once the kiln temperature reaches 1200°F. During startup the activated carbon injection must be turned on and operating at the time the gas stream at the inlet to the baghouse reaches 300°F (5-minute average). The injection system can be turned off during shutdown. [40 CFR 63.1346(g)]
37. Testing Requirement: The permittee must operate and maintain a mercury CEMS or a sorbent trap monitoring system in accordance with the requirements of Condition 38. [40 CFR 63.1349(b)(5)]
38. Monitoring Requirement: The permittee must operate and maintain a mercury CEMS in accordance with EPA Performance Specification 12A (Appendix B of 40 CFR 60) or a sorbent trap-based integrated monitoring system in accordance with EPA Performance Specification 12B (Appendix B of 40 CFR 60). The mercury monitoring system must meet the requirements of 40 CFR 63.1350(k).
- 38.a. The permittee must conduct all monitoring in continuous operation at all times the kiln is operating. [40 CFR 63.1350(m)(2)]
- 38.b. The permittee must record the results of each inspection, calibration and validation check. [40 CFR 63.1350(m)(4)]
- 38.c. The permittee must install, operate, calibrate and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements of 40 CFR 63.1350(n). [40 CFR 63.1350(k)(5)]
- 38.d. The permittee must develop an emissions monitoring plan in accordance with 40 CFR 63.1350(p)(1-4). [40 CFR 63.1350(k)]

Total Hydrocarbon Emissions

39. Applicable Requirement: The permittee must not cause or allow the emissions of total hydrocarbons (THC) from the kiln in excess of 24 ppmvd, corrected to 7% O₂, measured as propane during normal operations as a 30-operating day rolling average. As an alternative, the permittee may elect to meet an emission limit of 12 ppmvd total organic HAP. If the permittee demonstrates compliance with the total organic HAP limit, the permittees must comply with a site-specific THC emission limit established using the procedures of 40 CFR 63.1349(b)(7). [40 CFR 63.1343(b)]

During startup the permittee must use any one or a combination of the following clean fuels until the kiln reaches a temperature of 1200°F: natural gas, synthetic natural gas, propane, distillate oil, syngas, and ultra-low sulfur diesel (ULSD). Combustion of other fuels may commence once the kiln temperature reaches 1200°F. [40 CFR 63.1346(g)]

40. Testing Requirement: The permittee must operate and maintain a THC CEMS in accordance with Condition 41. [40 CFR 63.1349(b)(4)] If the permittee elects to comply with the total organic HAP limit, either EPA Method 320, EPA Method 18, ASTM D6348-03, or a combination must be used to determine emissions of total organic HAP. Each test must consist of a minimum of 3 separate runs under the conditions that exist when the kiln is operating at representative performance conditions in accordance with 40 CFR 63.7(e). Each run must be conducted for at least 1-hour. [40 CFR 63.1349(b)(7)(i)] The permittee can extend the run duration if extended time is required to adequately capture variability. The site-specific THC emission limit, as measured by a THC CEMS, must also be determined during this test as required in 40 CFR 63.1349(b)(7). Total organic HAP testing must be repeated every 30 months.
41. Monitoring Requirement: The permittee must operate and maintain a THC CEMS in accordance with EPA Performance Specification 8 or 8A (Appendix B of 40 CFR 60) and comply with all of the requirements for continuous monitoring systems found in 40 CFR 63, Subpart A. The THC CEMS must meet the quality assurance requirements of EPA Procedure 1 (Appendix F of 40 CFR 60). For the THC CEMS certified under Performance Specification 8A, the permittee must conduct the relative accuracy test audits (RATA) required under Procedure 1 in accordance with Performance Specification 8, Section 8 and 11, using Method 25A in Appendix A of 40 CFR 60. The relative accuracy test must meet the criteria of Performance Specification 8, Section 13.2. [40 CFR 63.1350(i)(1)]
- 41.a. The permittee must conduct all monitoring in continuous operation at all times the kiln is operating. [40 CFR 63.1350(m)(2)]
- 41.b. The permittee must record the results of each inspection, calibration and validation check. [40 CFR 63.1350(m)(4)]
- 41.c. The permittee must develop an emissions monitoring plan in accordance with 40 CFR 63.1350(p)(1-4). [40 CFR 63.1350(i)]

Operation and Maintenance Plan requirements

42. Applicable Requirement: The permittee must maintain and implement a DEQ-approved operations and maintenance plan consistent with the requirements of 40 CFR 63.1347. The plan must include procedures to be used during an inspection of the components of the combustion system of the kiln, the in-line raw mill and associated air pollution control devices at least annually. The annual inspection requirement is met if an inspection is completed at least once per calendar year. [40 CFR 63.1347]

Non-Hazardous Secondary Materials

43. Applicable Requirement: The permittee shall not heat the kiln, in whole or in part, by combusting solid waste (as the term is defined in 40 CFR 241). Secondary materials used in the kiln shall not be deemed to be combusted unless they are introduced into the flame zone in the hot end of the kiln or mixed with the precalciner fuel. [40 CFR 60.2875 – definition of “waste-burning kiln”] Waste tires are not considered a solid waste.
44. Monitoring Requirement: The permittee must maintain records of any non-hazardous secondary materials that are combusted in order to heat the kiln and that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1). These records must document how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), records must be maintained as to how the operations that produced the fuel satisfy the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), records must be

maintained that document how the fuel satisfies the requirements of the petition process. If the permittee combusts non-hazardous secondary material as fuel per 40 CFR 241.4, records must be maintained documenting that the material is a listed non-waste under 40 CFR 241.4(a). [40 CFR 63.2740(u)]

45. Nothing in this permit constitutes a waiver of any requirements in OAR 340 Divisions 100 through 135.

Emissions Unit CC (Clinker Cooler) Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
OAR 340-208-0110(4)	46	Visible Emissions	20% Opacity	6-minute Block Average	NA	47
OAR 340-226-0210(2)(b)(B)	48.a	PM	0.14 gr/dscf	Avg. of 3 Test Runs	49	50
40 CFR 60.62(b)(1)(ii), 40 CFR 63.1343(b)(1)	48.b	PM	0.07 lb/ton Clinker	30-day Rolling Average	49	50
40 CFR 63.1346(g)	48.c	PM	Startup/Shutdown Work Practices	NA	NA	50

Visible Emissions

46. Applicable Requirement: The permittee shall not cause or allow the emissions of any air contaminant in the atmosphere from the clinker cooler which is equal or greater than 20% opacity, excluding uncombined water. [OAR 340-208-0110(2) and (4)]
47. Monitoring and Recordkeeping Requirement: The permittee must monitor visible emissions from the clinker cooler by calibrating, maintaining and recording the output of a continuous opacity monitoring system (COMS) in accordance with DEQ's continuous monitoring manual. Averaging times and data reporting requirements must be in accordance with the Continuous Monitoring Manual. [OAR 340-208-0110(2)]

Particulate Emissions

48. Applicable Requirement: The permittee must not cause or allow the emissions of particulate matter from the clinker cooler in excess of the following levels:
- 48.a. 0.14 gr/dscf; [OAR 340-226-210(2)(b)(B)]
- 48.b. 0.07 lb/ton clinker during normal operation, 30-day rolling average; [40 CFR 60.62(b)(1)(ii), 63.1343(b)(1)]
- 48.c. Particulate control devices (471.BF1) should be operational during startup and shutdown. [40 CFR 63.1346(g)]
49. Testing Requirement: The permittee must demonstrate compliance with the particulate limits by conducting an annual test using EPA Method 5 or Method 5I. In addition to demonstrating compliance, the tests will be used to establish a site-specific operating limit (SSOL) for the PM Continuous Parameter Monitoring System (CPMS) in accordance with 40 CFR 63.1349(b)(1).
- 49.a. For each performance test a minimum of 3-test runs is required. [40 CFR 63.1349(b)(1)(vi)]
- 49.b. The annual test requirement is met if a source test is completed no more than 13 calendar months after the previous performance test.

- 49.c. Separate testing is not required for Condition 48.a but if DEQ requires testing in the future, compliance with the grain loading limit will be demonstrated by using DEQ Method 5 or an alternative method approved by DEQ in advance of the test.
50. **Monitoring Requirement:** The permittee must operate a PM CPMS on the clinker cooler stack in accordance with 40 CFR 63.1350(b) to demonstrate continuous compliance with the particulate limits. The monitor output will be compared to the SSOL established during the testing required by Condition 49. This monitoring also meets the requirements of Compliance Assurance Monitoring (CAM) in OAR 340-212-0200 through 280.
- 50.a. The CPMS must be operated at all times the clinker cooler is in operation except during CPMS breakdowns, repairs, calibration checks and zero span adjustments.
- 50.b. To determine continuous operating compliance, the permittee must record the CPMS output data for all periods when the clinker cooler is operating and the CPMS is not out of control. The permittee must use all quality-assured average hourly data collected by the CPMS for all hours of operation on a 30-operating day rolling average basis updated at the end of each new clinker cooler operating day. [40 CFR 63.1350(b)(1)(ii)]
- 50.c. For any exceedance from the SSOL, the permittee must: [40 CFR 63.1350(b)(1)(iii)]
- 50.c.i. Within 48 hours of the exceedance visually inspect the clinker cooler baghouse;
- 50.c.ii. If inspection of the clinker cooler baghouse identifies the cause of the deviation, take corrective action as soon as possible and return the CPMS measurement to within the SSOL;
- 50.c.iii. Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM compliance test to verify or re-establish the SSOL within 45 days. The permittee is not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the testing required under this paragraph; and
- 50.c.iv. Except as identified in Condition 50.d, an exceedance of the SSOL does not constitute a permit violation.
- 50.d. Any exceedance of the 30-day rolling average from the established SSOL leading to more than four required performance tests in a 12-consecutive month period (rolling monthly) shall be treated as a permit violation. [40 CFR 63.1350(b)(1)(iv)]
- 50.e. The permittee must develop an emission monitoring plan in accordance with 40 CFR 63.1350(p)(1-4). [40 CFR 63.1350(d)(4)]

Emissions Units RM-A, HO, CM, CP, and KG Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
40 CFR 60.62(c), 40 CFR 63.1345	51	Visible Emissions	10% Opacity	6-minute Block Average	52	53, 54, 55
OAR 340-226-0210(2)(b)(A)	56.a	PM	0.10 gr/dscf	Avg. of 3 Test Runs	NA	57, 58
OAR 340-226-0210(2)(b)(B)	56.b	PM	0.14 gr/dscf	Avg. of 3 Test Runs	NA	57, 58

Visible Emissions

51. **Applicable Requirement:** The permittee shall not cause or allow the emissions of any air contaminant in the atmosphere from the emission units RM-A, HO, CM, CP or KG which is equal to or greater than 10% opacity, excluding uncombined water. [40 CFR 60.62(c), 40 CFR 63.1345]

52. Testing Requirement: When testing is required, the opacity is based on the average of 24 consecutive observations recorded at 15-second intervals, or more frequently, which comprise a six-minute block. Six-minute block averages are measured by EPA Method 9. [40 CFR 60.64(b)(2)]
53. Monitoring and Recordkeeping Requirement: The permittee must monitor visible emissions from emission unit RM-A, HO, CP, and KG by using the procedures of EPA Method 22 to conduct a monthly 10-minute visible emission test of each affected source. The test must be conducted while the affected source is in operation. If no visible emissions are observed in six consecutive monthly tests, the permittee may decrease the frequency from monthly to semi-annually. If no visible emissions are observed during the semi-annual test, the permittee may decrease frequency from semi-annually to annually. [40 CFR 63.1350(f)(1)]
- If visible emissions are observed during any EPA Method 22 test, the permittee must conduct 30 minutes of opacity observations, recorded at 15-second intervals using EPA Method 9 at the affected source with visible emissions. The EPA Method 9 test must begin within 1 hour of any observation of visible emissions reported using Method 22. In addition, the permittee must resume Method 22 testing on a monthly basis and maintain that schedule until no visible emissions are observed for six consecutive monthly tests. A log must be kept of all visible emission tests. [40 CFR 63.1350(f)(1)(iv)]
54. Monitoring and Recordkeeping Requirement: The permittee must monitor visible emissions from emission units CM by using the procedures of EPA Method 22 to conduct a daily 6-minute visible emission test of each affected source. The test must be conducted while the affected source is in operation. If visible emissions are observed, the permittee must conduct a follow-up Method 22 test within 24 hours for each emission point where visible emissions were observed. If visible emissions are observed in the follow-up Method 22 test, the permittee must immediately conduct 30 minutes of opacity observations, recorded at 15-second intervals using EPA Method 9 for each point with observed visible emissions. The requirement under this condition to conduct daily Method 22 testing does not apply to any specific finish mill equipped with a bag leak detection system (BLDS). [40 CFR 63.1350(f)(2), (f)(4)]
55. Monitoring and Recordkeeping Requirement: The permittee must prepare a written opacity monitoring plan for emission units RM-A, HO, CM, CP, and KG in accordance with 40 CFR 63.1350(p)(1-4) and (o)(5). [40 CFR 63.1350(f)] The permittee must prepare a written operations and maintenance plan for emission units RM-A, HO, CM, CP, and KG consistent with the requirements of 40 CFR 63.1347. The permittee must initiate, within 1 hour of observing any visible emissions during a Method 22 test, the corrective actions specified in the facility's Operation and Maintenance Plan. [40 CFR 63.1350(f)(3)]

Particulate Emissions

56. Applicable Requirement: The permittee must not cause or allow the emissions of particulate matter from the baghouses in emission units RM-A, HO, CM, CP, and KG in excess of the following levels:
- 56.a. 0.10 gr/dscf for baghouses 541.BF1 and 542.BF3 in emission unit CM, since tests prior to 4/16/15 were less than 0.080 gr/dscf; [OAR 340-226-0210(2)(b)(A)]
- 56.b. 0.14 gr/dscf for all baghouses in emission units RM-A, HO, CM, CP and KG, except 541.BF1 and 542.BF3, since there are no representative test results. [OAR 340-226-210(2)(b)(B)]
57. Monitoring Requirement: The permittee must perform and maintain records of maintenance activities as described in the permittee's written "Dust Collector Preventative Maintenance Program" as a surrogate to particulate emissions monitoring. This monitoring shall include at a minimum weekly differential pressure checks and visual inspections of the baghouses. The "Dust Collector Preventative Maintenance Program" shall be reviewed annually by the permittee and revised as necessary. DEQ shall be notified of any revisions as part of the annual report.

58. **Compliance Assurance Monitoring (CAM):** The permittee shall monitor and record the differential pressure for the baghouses identified below during each day that the process controlled by that baghouse operates for more than four hours. If the differential pressure is outside the CAM indicator range, the permittee shall take expeditious corrective action to return the baghouse to operation within the range. Operation of the baghouse outside of the indicator range does not necessarily indicate a violation any applicable requirement. The permittee must record the differential pressure and any corrective action taken. [OAR 340-212-0250]

Baghouse	EU	CAM Indicator Range	Monitoring Period
421.BF3	HO	Maintain ΔP across unit between 0.5 – 8 inches w.c.	Daily
542.BF2	CM	Maintain ΔP across unit between 1.5 – 8 inches w.c.	Daily
542.BF3	CM	Maintain ΔP across unit between 2 – 8 inches w.c.	Daily
541.BF1	CM	Maintain ΔP across unit between 2 – 8 inches w.c.	Daily
491.BF1	CM	Maintain ΔP across unit between 2 – 8 inches w.c.	Daily

Emissions Unit CH Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
40 CFR 60.254(a) OAR 340-208-0110(4)	59	Visible Emissions	20% Opacity	6-minute Block Average	60	61
OAR 340-226-0210(2)(b)(B)	62	PM	0.14 gr/dscf	Avg. of 3 Test Runs	NA	63

Visible Emissions

59. **Applicable Requirement:** The permittee shall not cause or allow the emissions of any air contaminant in the atmosphere from the emission unit CH which is equal or greater than 20% opacity, as a 6-minute block average, excluding uncombined water. [40 CFR 60.254(a), OAR 340-208-0110(4)]
60. **Testing Requirement:** When testing is required, six-minute block averages are measured by EPA Method 9. The duration of the Method 9 test shall be 1 hour (ten six-minute averages). If during the initial 30 minutes of observation all six-minute averages are less than or equal to half the opacity limit, then the observation period may be reduced from 1-hour to 30-minutes. [40 CFR 60.257(a)(1)]
61. **Monitoring and Recordkeeping Requirement:** The permittee must monitor visible emissions from emission unit CH by using the procedures of EPA Method 22 to conduct a monthly 10-minute visible emission test of each affected source. The test must be conducted while the affected source is in operation. If no visible emissions are observed in six consecutive monthly tests, the permittee may decrease the frequency from monthly to semi-annually. If no visible emissions are observed during the semi-annual test, the permittee may decrease frequency from semi-annually to annually. [40 CFR 63.1350(f)(1)]

If visible emissions are observed during any EPA Method 22 test, the permittee must conduct 30-minutes of opacity observations, recorded at 15-second intervals using EPA Method 9 at the affected source with visible emissions. The EPA Method 9 test must begin within 1 hour of any observation of visible emissions reported using Method 22. In addition, the permittee must resume Method 22 testing on a monthly basis and maintain that schedule until no visible emissions are observed for six consecutive monthly tests. A log must be kept of all visible emission tests. [40 CFR 63.1350(f)(1)(iv)]

Particulate Emissions

62. Applicable Requirement: The permittee must not cause or allow the emissions of particulate matter in excess of 0.14 gr/dscf for all baghouses in emission unit CH since there are no representative particulate test results. [OAR 340-226-210(2)(b)(B)]
63. Monitoring Requirement: The permittee must perform and maintain records of maintenance activities as described in the permittee's written "Dust Collector Preventative Maintenance Program" as a surrogate to particulate emissions monitoring. This monitoring shall include at a minimum weekly differential pressure checks and visual inspections of the baghouses. The "Dust Collector Preventative Maintenance Program" shall be reviewed annually by the permittee and revised as necessary. DEQ shall be notified of any revisions as part of the annual report.
64. Monitoring and Recordkeeping Requirement: The permittee must perform and maintain records of maintenance activities as described in the permittee's written "Dust Collector Preventative Maintenance Program" as a surrogate to particulate emissions monitoring. The "Dust Collector Preventative Maintenance Program" shall be reviewed annually by the permittee and revised as necessary. DEQ shall be notified of any revisions as part of the annual report.

Emissions Unit FU-CRUSH Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
40 CFR 60.672(b)	65	Visible Emissions	15% Opacity	6-minute Block Average	66	67

Visible Emissions

65. Applicable Requirement: The permittee shall not cause or allow the emissions of any air contaminant in the atmosphere from the emission unit FU-CRUSH which is equal to or greater than 15% opacity, as a 6 minute average, excluding uncombined water. [40 CFR 60.672(b) – Table 3]
66. Testing Requirement: When testing is required six-minute block averages are measured by EPA Method 9 in accordance with 40 CFR 60.675(c)(1). The duration of the Method 9 test must be 30 minutes (five six-minute averages). Compliance is based on the average of the 5 six-minute averages. [40 CFR 60.675(c)(3)]
67. Monitoring and Recordkeeping Requirement: During warm weather months (between April 1 and October 1) the permittee must conduct daily inspections and maintain the water spray systems used to control fugitive emissions. These activities must be conducted on days when this emission unit is in operation and there is neither measurable precipitation nor the temperature is below freezing. A log must be kept of the inspections.

Emissions Unit RM-B and CRUSH Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
40 CFR 60.672(a)	68	Visible Emissions	7% Opacity	6-minute Block Average	69	70
40 CFR 60.672(a)	71	PM	0.022 gr/dscf	Avg. of 3 Test Runs	72	73

Visible Emissions

68. Applicable Requirement: The permittee shall not cause or allow the emissions of any air contaminant in the atmosphere from the emission units RM-B and CRUSH which is greater than 7% opacity, as a 6 minute block average, excluding uncombined water. [40 CFR 60.672(a) – Table 2]
69. Testing Requirement: When opacity testing is required, six-minute block averages are measured by EPA Method 9. [40 CFR 60.675(b)(2)]
70. Monitoring and Recordkeeping Requirement: The permittee must monitor visible emissions from emission units RM-B and CRUSH during any month where the equipment has operated by using the procedures of EPA Method 22 to conduct a monthly 10-minute visible emission test of each affected source. The test must be conducted while the affected source is in operation. If no visible emissions are observed in six consecutive monthly tests, the permittee may decrease the frequency from monthly to semi-annually. If no visible emissions are observed during the semi-annual test, the permittee may decrease frequency from semi-annually to annually. [40 CFR 63.1350(f)(1)]

If visible emissions are observed during any EPA Method 22 test, the permittee must conduct 30-minutes of opacity observations, recorded at 15-second intervals using EPA Method 9 at the affected source with visible emissions. The EPA Method 9 test must begin within 1 hour of any observation of visible emissions reported using Method 22. In addition, the permittee must resume Method 22 testing on a monthly basis and maintain that schedule until no visible emissions are observed for six consecutive monthly tests. A log must be kept of all visible emission tests. [40 CFR 63.1350(f)(1)(iv)]

Particulate Emissions

71. Applicable Requirement: The permittee must not cause or allow the emissions of particulate matter from emission units RM-B and CRUSH in excess of 0.022 gr/dscf. [40 CFR 60.672(a) – Table 2]
72. Testing Requirement: Testing is not required in this permit for these emission points. However, if compliance testing is necessary, EPA Method 5, 5I, or 17 shall be used in accordance with 40 CFR 60.675(b)(1)]
73. Monitoring Requirement: The visible emissions monitoring of Condition 70 is considered to be sufficient to monitor particulate emissions from RM-B and CRUSH.

Emissions Unit FU4-A, TEMP-S Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
40 CFR 60.672(b)	74.a	Visible Emissions	10% Opacity	6-minute Block Average	75	76
	74.b		7% Opacity			

Visible Emissions

74. Applicable Requirement: The permittee shall not cause or allow the emissions of any air contaminant in the atmosphere from the emission unit FU4-A or TEMP-S which is greater than: [40 CFR 60.672(b) – Table 3]
- 74.a. 10% opacity, as a 6-minute block average, excluding uncombined water for equipment that commenced construction, modification or reconstruction prior to April 22, 2008.
- 74.b. 7% opacity, as a 6-minute block average, excluding uncombined water for equipment that commenced construction, modification or reconstruction on or after April 22, 2008.

75. Testing Requirement: When testing is required, six-minute block averages are measured by EPA Method 9 in accordance with 40 CFR 60.675(c)(1). The duration of the Method 9 test shall be 30 minutes (five six-minute averages). Compliance is based on the average of the 5 six-minute averages. [40 CFR 60.675(c)(3)]
76. Monitoring and Recordkeeping Requirement: During warm weather months (between April 1 and October 1) the permittee must conduct daily inspections and maintain the water spray systems used to control fugitive emissions. These activities must be conducted on days when this emission unit is in operation and there is neither measurable precipitation nor the temperature is below freezing.

Baghouses Subject to 1977 PSD Permit Limits (except kiln) [1977 PSD Permit - PSD-X-77-03]

77. Applicable Requirement: The permittee must not cause or allow the emissions of filterable particulate matter from the following baghouses in excess of the limits stated.

Emission Point	Pollutant/ Parameter	Limit/Standard	Averaging Time
431.BF1 (OA5)	Filterable Particulate Matter	0.0325 gr/dscf 435.92 lb/day 10% opacity	3 test average Daily 6-minute block
	SO ₂	10 ppm by volume 150 lb/day	3-hour average Daily
341.BF1 (KA5)	Filterable Particulate Matter	0.0185 gr/dscf 2.76 lb/day 10% opacity	3 test average Daily 6-minute block
371.BF1 (RM19)	Filterable Particulate Matter	0.0185 gr/dscf 15.41 lb/day 10% opacity	3 test average Daily 6-minute block
411.BF1 (HO3)	Filterable Particulate Matter	0.0185 gr/dscf 44.99 lb/day 10% opacity	3 test average Daily 6-minute block
421.BF3 (HO16)	Filterable Particulate Matter	0.0185 gr/dscf 45.21 lb/day 10% opacity	3 test average Daily 6-minute block
491.BF8 (KL7a & 7b)	Filterable Particulate Matter	0.0185 gr/dscf 7.74 lb/day 10% opacity	3 test average Daily 6-minute block
542.BF1 (CM18)	Filterable Particulate Matter	0.0185 gr/dscf 20.55 lb/day 10% opacity	3 test average Daily 6-minute block
521.BF3 (KG10)	Filterable Particulate Matter	0.0185 gr/dscf 0.95 lb/day 10% opacity	3 test average Daily 6-minute block
611.BF1 (CP1a)	Filterable Particulate Matter	0.0185 gr/dscf 3.36 lb/day 10% opacity	3 test average Daily 6-minute block
611.BF2 (CP1b)	Filterable Particulate Matter	0.0185 gr/dscf 3.36 lb/day 10% opacity	3 test average Daily 6-minute block
611.BF3 (CP1c)	Filterable Particulate Matter	0.0185 gr/dscf 3.36 lb/day 10% opacity	3 test average Daily 6-minute block

Emission Point	Pollutant/ Parameter	Limit/Standard	Averaging Time
622.BF1 (CP9a)	Filterable Particulate Matter	0.0185 gr/dscf 2.67 lb/day 10% opacity	3 test average Daily 6-minute block
621.BF1 (CP9b)	Filterable Particulate Matter	0.0185 gr/dscf 2.67 lb/day 10% opacity	3 test average Daily 6-minute block
542.BF2 (CM15)	Filterable Particulate Matter	0.0165 gr/dscf 39.92 lb/day 10% opacity	3 test average Daily 6-minute block

Insignificant Activities Requirements

78. DEQ acknowledges that insignificant emissions units (IEUs) identified by rule as either categorically insignificant activities or aggregate insignificant emissions as defined in OAR 340-200-0020 exist at facilities required to obtain an Oregon Title V Operating Permit. IEUs must comply with all applicable requirements. In general, the requirements that could apply to IEUs are incorporated as follows:
- 78.a. OAR 340-208-0110 (20% opacity)
 - 78.b. OAR 340-228-0210 (0.10 gr/dscf corrected to 12% CO₂ or 50% excess air for fuel burning equipment)
 - 78.c. OAR 340-226-0210 (0.10 gr/dscf for non-fugitive, non-fuel burning equipment)
 - 78.d. Since the permittee may have open clinker storage piles, the permittee must prepare and operate in accordance with the fugitive dust emission control measures described in the operation and maintenance plan. The operation and maintenance plan must describe the measures that will be used to minimize fugitive dust emissions from piles of clinker, such as accidental spillage, that are not part of the open clinker storage piles. The plan must identify and describe the location of each current or future open clinker storage pile and fugitive dust control measures that will be used to minimize fugitive dust from the piles. The plan must specify that one or more of the following control measures will be used to minimize to the greatest extent practicable fugitive dust from the piles: locating the piles inside a partial enclosure; installing and operating a water spray or fogging system; applying appropriate chemical dust suppression agents; use of a wind barrier; compaction; use of a tarpaulin or other equally effective cover; or use of a vegetative cover. The plan must explain how the selected control measures are applicable and appropriate for site conditions. The plan must be revised as necessary to reflect any changing conditions at the source. Temporary piles of clinker that result from accidental spillage or clinker storage cleaning operations must be cleaned up within 3 days. [40 CFR 63.1343(c)]
 - 78.e. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to the following: [40 CFR 63.11116(a), (b), (d) and OAR 340-244-0240, federally enforceable]
 - 78.e.i. Minimize gasoline spills;
 - 78.e.ii. Clean up spills as expeditiously as practicable;
 - 78.e.iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - 78.e.iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
 - 78.e.v. The permittee is not required to submit the notifications or reports as specified in 40 CFR 63.11124 and 63.11126, or Subpart A, but the permittee must have records available within 24 hours of a request by DEQ to document gasoline throughput.
 - 78.e.vi. Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F, are considered acceptable for compliance with Condition 78.e.iii.

- 78.f. In addition to the measures specified in Condition 78.e, the permittee must take the following measures to minimize vapor releases from gasoline tanks: [OAR 340-244-0240, state only enforceable]
- 78.f.i. Do not top off or overfill vehicle tanks. If a person can confirm that a vehicle tank is not full after the nozzle clicks off (such as by checking the vehicle's fuel tank gauge), the person may continue to dispense fuel using best judgment and caution to prevent a spill;
 - 78.f.ii. Post a sign at the gasoline dispensing facility (GDF) instructing a person filling up a motor vehicle to not top off the vehicle tank;
 - 78.f.iii. Ensure that cargo tanks unloading at the GDF comply with Conditions 78.e.i through 78.e.iii, 78.f.i and 78.f.ii.
 - 78.f.iv. The permittee must only load gasoline into storage tanks at the facility by utilizing submerged filling, as defined in OAR 340-244-0030. The submerged fill pipe must be no more than 12 inches from the bottom of the storage tank.
- 78.g. Emergency stationary reciprocating internal combustion engines (RICE) are subject to the following requirements: [40 CFR 63.6640(f)]
- 78.g.i. For each emergency stationary RICE, the permittee must:
 - 78.g.i.A. Change oil and filter every 500 hours of operation or annually, whichever comes first; [40 CFR 63.6603(a), Table 2d(4)(a)]
 - 78.g.i.B. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; [40 CFR 63.6603(a), Table 2d(4)(b)]
 - 78.g.i.C. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; [40 CFR 63.6603(a), Table 2d(4)(c)]
 - 78.g.i.D. During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6603(a), Table 2d]
 - 78.g.ii. The permittee must install a non-resettable hour meter on each emergency stationary RICE, if one is not already installed. [40 CFR 63.6625(f)]
 - 78.g.iii. The permittee must operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions. [40 CFR 63.6640(a), Table 6(9)]
 - 78.g.iv. Operating conditions: [40 CFR 63.6640(f)(2)]
 - 78.g.iv.A. There is no time limit on the use of emergency stationary RICE in emergency situations.
 - 78.g.iv.B. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.
 - 78.g.iv.C. Emergency stationary RICE may be operated for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another utility.
 - 78.g.v. The permittee must keep records of the hours of operation of each emergency stationary RICE that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation,

the permittee must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)]

79. Unless otherwise specified in this permit or an applicable requirement, DEQ is not requiring any testing, monitoring, recordkeeping or reporting for the applicable emissions limits and standards that apply to IEUs. However, if testing were performed for compliance purposes, the permittee would be required to use the test methods identified in and perform the testing in accordance with DEQ's Source Sampling Manual.

PLANT SITE EMISSION LIMITS

80. Applicable Requirement: The permittee must not cause or allow plant site emissions to exceed the following limits for any 12 consecutive calendar month period: [OAR 340-222-0035 through OAR 340-222-0041]

Pollutant	Plant Site Emission Limit (tons/yr)
PM	297
PM ₁₀	162
PM _{2.5}	69
SO ₂	39
NO _x	1,103
CO	1,259
VOC	62
GHG (CO ₂ e)	856,400
Lead	0.002

81. Testing Requirement: The permittee must conduct emission factor verification tests in accordance with DEQ's Source Sampling Manual using the following test methods and frequencies: The testing required in Conditions 19, 24, 49 may be used to satisfy this requirement in full or in part.

Monitoring Point	Pollutant	Test Method	Frequency
Main Kiln Stack	PM	EPA/DEQ Method 5	Annually or at frequency required in Condition 20.c.iii
	SO ₂	EPA Method 6 or 6C	Every 2 years
Clinker Cooler (471.BF1)	PM	EPA/DEQ Method 5	Annually
Finish Mill #2 (542.BF2)	PM	EPA/DEQ Method 5	Within 5 years of permit issuance
Finish Mill #2 (542.BF3)	PM	EPA/DEQ Method 5	Within 5 years of permit issuance

82. Monitoring Requirement: The permittee must determine compliance with the Plant Site Emission Limits established in Condition 80 by conducting monitoring and calculations for each 12-month period in accordance with the following procedures, except for GHGs: [OAR 340-218-0050(3)]

- 82.a. The permittee must calculate emissions using the following formula, process parameters, and emission factors:

$$E = (P_{eu} \times EF_{eu} \times K_1) + K_2$$

Where:

E	=	Pollutant emissions in lbs/month and tons/yr.
P _{eu}	=	Process parameter identified in the table below;
EF _{eu}	=	Emission factor identified for each emissions unit and pollutant in the table below;
K ₁	=	Conversion constant: 1 ton/2,000 lbs.
K ₂	=	Emission constant for emission units FU2, FU-CRUSH, FU4-A, FU4-B and AI.
	=	6.8 ton PM/month, 2.6 ton PM ₁₀ /month, 0.4 ton PM _{2.5} /month

Emission Unit	Process Parameter[Units]	Emission Factors (lb/throughput unit)							
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC	Pb
OA	Clinker Production [tons]	0.060	0.050	0.027	0.018	-- ^a	-- ^a	0.085	4.15E-06
OA 432.BF2	Operating Time [hours]	0.066	0.055	0.030	--	--	--	--	--
CM FM#3 Heater	Operating Time [hours]	-- ^b	-- ^b	-- ^b	0.004	0.671	0.563	0.037	3.35E-06

- a. Emissions of NO_x and CO are measured by Continuous Emission Monitoring System (CEMS)
- b. Exhaust from FM#3 heater goes to baghouse. Particulate emissions included in baghouse emission factor.

Emission Unit	Baghouse ID #	Process Parameter[Units]	Emission Factors (lb/throughput unit)			
			PM	PM ₁₀	PM _{2.5}	VOC
RM-A	341.BF1	Operating time [hours]	0.109	0.092	0.049	--
	351.BF2	Operating time [hours]	0.082	0.069	0.037	--
	351.BF3	Operating time [hours]	0.765	0.643	0.344	--
	351.BF4	Operating time [hours]	0.084	0.071	0.038	--
	371.BF1	Operating time [hours]	0.313	0.263	0.141	--
RM-B	331.BF1	Operating time [hours]	0.213	0.179	0.096	--
	331.BF2	Operating time [hours]	0.213	0.179	0.096	--
	341.BF2	Operating time [hours]	0.421	0.354	0.189	--
HO	411.BF1	Operating time [hours]	0.433	0.364	0.195	--
	411.BF2	Operating time [hours]	0.164	0.138	0.074	--
	411.BF3	Operating time [hours]	0.066	0.055	0.030	--
	421.BF3	Operating time [hours]	1.093	0.918	0.492	--
	421.BF2	Operating time [hours]	0.319	0.268	0.143	--
	421.BF1	Operating time [hours]	0.391	0.328	0.176	--
	431.BF2	Operating time [hours]	0.066	0.055	0.030	--
CC	471.BF1	Operating time [hours]	2.684	2.255	1.208	--
CH	476.BF1	Operating time [hours]	0.055	0.046	0.025	--
	476.BF2	Operating time [hours]	0.079	0.067	0.036	--
	476.BF4	Operating time [hours]	0.018	0.015	0.008	--
KG	521.BF1	Operating time [hours]	0.156	0.131	0.070	--
	521.BF2	Operating time [hours]	0.273	0.230	0.123	--
	521.BF3	Operating time [hours]	0.082	0.069	0.037	--
	521.BF5	Operating time [hours]	0.139	0.117	0.063	--
	521.BF6	Operating time [hours]	0.139	0.117	0.063	--
CM	542.BF2	Operating time [hours]	1.190	1.000	0.536	--
		Finish mill grind aid [tons]	--	--	--	0.20
	542.BF1	Operating time [hours]	0.383	0.321	0.172	--
	532.BF2	Operating time [hours]	0.082	0.069	0.037	--

Emission Unit	Baghouse ID #	Process Parameter[Units]	Emission Factors (lb/throughput unit)			
			PM	PM ₁₀	PM _{2.5}	VOC
CM	532.BF1	Operating time [hours]	0.066	0.055	0.030	--
	532.BF4	Operating time [hours]	0.082	0.069	0.037	--
	532.BF3	Operating time [hours]	0.066	0.055	0.030	--
	542.BF3	Operating time [hours]	4.900	4.116	2.205	--
	532.BF5	Operating time [hours]	0.109	0.092	0.049	--
	532.BF6	Operating time [hours]	0.859	0.722	0.387	--
	532.BF7	Operating time [hours]	0.098	0.082	0.044	--
	532.BF8	Operating time [hours]	0.098	0.082	0.044	--
	532.BF9	Operating time [hours]	0.098	0.082	0.044	--
	532.BFA	Operating time [hours]	0.098	0.082	0.044	--
	532.BFB	Operating time [hours]	0.098	0.082	0.044	--
	532.BFC	Operating time [hours]	0.098	0.082	0.044	--
	531.BF1	Operating time [hours]	0.430	0.361	0.193	--
	541.BF2	Operating time [hours]	0.328	0.276	0.148	--
	541.BF1	Operating time [hours]	3.19	2.677	1.434	--
	491.BF1	Operating time [hours]	1.367	1.148	0.615	--
	521.BF4	Operating time [hours]	0.082	0.069	0.037	--
	523.BF1	Operating time [hours]	0.117	0.098	0.053	--
	523.BF2	Operating time [hours]	0.328	0.276	0.148	--
	523.BF3	Operating time [hours]	0.139	0.117	0.063	--
	491.BF8	Operating time [hours]	0.156	0.131	0.070	--
	543.BF1	Operating time [hours]	3.19	2.676	1.434	--
	543.BF2	Operating time [hours]	0.300	0.252	0.135	--
	543.BF3	Operating time [hours]	0.076	0.064	0.034	--
CP	611.BF1	Operating time [hours]	0.129	0.108	0.058	--
	611.BF2	Operating time [hours]	0.129	0.108	0.058	--
	611.BF3	Operating time [hours]	0.129	0.108	0.058	--
	611.BF8	Operating time [hours]	0.273	0.230	0.123	--
	622.BF1	Operating time [hours]	0.066	0.055	0.030	--
	621.BF1	Operating time [hours]	0.066	0.055	0.030	--
	611.BF4	Operating time [hours]	0.195	0.164	0.088	--
	611.BF5	Operating time [hours]	0.397	0.333	0.179	--
FU3	--	Throughput [tons]	0.076	0.022	0.002	--
CRUSH	282.BF2	Operating time [hours]	0.188	0.158	0.085	--
	282.BF1	Operating time [hours]	0.255	0.215	0.115	--
	271.BF1	Operating time [hours]	0.140	0.118	0.063	--
	252.BF1	Operating time [hours]	0.140	0.118	0.063	--
TEMP-S	--	Throughput [tons]	0.025	0.009	0.001	--

- 82.b. The emissions factors listed in Condition 82.a are not enforceable limits unless otherwise specified in this permit. Compliance with PSELs must only be determined by the calculations contained in this condition.

EMISSION FEES

83. Emission fees will be based on the Plant Site Emissions Limits, unless permittee elects to report actual emissions (as defined in OAR 340-220-0120) for one or more permitted processes/pollutants. [OAR 340-220-0090]

GENERAL TESTING REQUIREMENTS

84. Unless otherwise specified in this permit, the permittee must conduct all testing in accordance with DEQ's Source Sampling Manual. [OAR 340-212-0120, 40 CFR 60.8]
 - 84.a. Unless otherwise specified by a state or federal regulation, the permittee must submit a source test plan to DEQ at least 30 days prior to the date of the test. The test plan must be prepared in accordance with the Source Sampling Manual and address any planned variations or alternatives to prescribed test methods. Permittee should be aware, if significant variations are requested, it may require more than 30 days for DEQ to grant approval and may require EPA approval in addition to approval by DEQ.
 - 84.b. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source test, which are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.
 - 84.c. Unless otherwise specified by permit condition or DEQ approved source test plan, all compliance source tests must be performed as follows:
 - 84.c.i. At least 90% of the design capacity for new or modified equipment;
 - 84.c.ii. At least 90% of the maximum operating rate for existing equipment; or
 - 84.c.iii. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average hourly operating rates during a 12 month period immediately preceding the source test. Data supporting the normal maximum operating rate must be included with the source test report.
 - 84.d. Each source test must consist of at least three (3) test runs and the emissions results must be reported as the arithmetic average of all valid test runs. If for reasons beyond the control of the permittee a test run is invalid, DEQ may accept two (2) test runs for demonstrating compliance with the emission limit or standard.
 - 84.e. Source test reports prepared in accordance with DEQ's Source Sampling Manual must be submitted to DEQ within 30 days of completing any required source test, unless a different time period is approved in the source test plan submitted prior to the source test.
 - 84.f. Within 60 days after the date of completing each performance evaluation or test, as defined in 40 CFR 63.2, conducted to demonstrate compliance with any standard covered by 40 CFR 63, Subpart LLL, the permittee must submit the relative accuracy test audit data and performance test data, except opacity data, to EPA by successfully submitting the data electronically to the EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT). Only RATA pollutants that can be documented with the ERT (as listed on the ERT website) are subject to this Condition. For any performance evaluations with no corresponding RATA pollutants listed on the ERT website, the permittee must submit the results of the performance evaluation to EPA at the address listed in Condition 98. [40 CFR 63.1349(d)(2), 1354(b)(9)]

GENERAL MONITORING AND RECORDKEEPING REQUIREMENTS

General Monitoring Requirements:

85. The permittee must not knowingly render inaccurate any required monitoring device or method. [OAR 340-218-0050(3)(a)(E)]
86. The permittee must use the same methods to determine compliance as those used to determine actual emissions for fee purposes and can be no less rigorous than the requirements of OAR 340-218-0080. [OAR 340-218-0050(3)(a)(F)]

87. The permittee must comply with the monitoring requirements on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(a)(G)]

General Recordkeeping Requirements

88. The permittee must maintain the following general records of testing and monitoring required by this permit: [OAR 340-218-0050(3)(b)(A)]
- 88.a. The date, place as defined in the permit, and time of sampling or measurements;
 - 88.b. The date(s) analyses were performed;
 - 88.c. The company or entity that performed the analyses;
 - 88.d. The analytical techniques or methods used;
 - 88.e. The results of such analyses;
 - 88.f. The operating conditions as existing at the time of sampling or measurement; and
 - 88.g. The records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibration drift checks).
89. Unless otherwise specified by permit condition, the permittee must make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage), the missing record(s) will not be considered a permit deviation provided the amount of data lost does not exceed 10% of the averaging periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering a required record is missing, the permittee must document the reason for the missing record. In addition, any missing record that can be recovered from other available information will not be considered a missing record. [OAR 340-214-0110, 340-214-0114, and 340-218-0050(3)(b)]
90. The permittee must comply with the recordkeeping requirements on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(b)(C)]
91. Unless otherwise specified, the permittee must retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings (or other original data) for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contaminant Discharge Permit or Oregon Title V Operating Permit must also be retained for five (5) years from the date of the monitoring sample, measurement, report or application. [OAR 340-218-0050(b)(B)]
92. The permittee must maintain records of any revisions made to the Dust Collector Preventative Maintenance Program. Revisions to the Dust Collector Preventative Maintenance Program take effect when submitted to DEQ. The most current version of the Dust Collector Preventative Maintenance Program must be submitted in any year where revisions occurred as required by Condition 99.b.xvi.
93. The permittee must keep the following records. The records shall be maintained in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). Records shall be maintained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum the most recent two years of data shall be retained on-site. The remaining three years of data may be electronically retained off-site. [40 CFR 63.1355(a)]
- 93.a. All documentation supporting initial notifications, notifications of compliance status, and applicability determinations; [40 CFR 63.1355(b)]
 - 93.b. All continuous monitoring system records required by 40 CFR 63.10(c); [40 CFR 63.1355(c)]
 - 93.c. Records of daily clinker production and kiln feed rates; [40 CFR 63.1355(e)]

- 93.d. Records of the date, time and duration of each startup or shutdown period, and the quantity of feed and fuel used during the startup period; [40 CFR 63.1355(f)];
- 93.e. Records of the date, time and duration of each malfunction that causes a source to fail to meet an applicable standard. Record the actions taken to minimize emissions in accordance with 40 CFR 63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; [40 CFR 63.1355(g)]

REPORTING REQUIREMENTS

General Reporting Requirements

- 94. Excess Emissions Reporting: The permittee must report all excess emissions as follows: [OAR 340-214-0300 through 340-214-0360]
 - 94.a. Immediately (not later than 9:00 AM on the first business day following the date on which the excess emission occurred) notify DEQ of an excess emission event by phone, email or facsimile; and,
 - 94.b. Within 15 days of the excess emissions event, submit a written report that contains the following information: [OAR 340-214-0340(1)]
 - 94.b.i. The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;
 - 94.b.ii. The date and time the permittee notified DEQ of the event;
 - 94.b.iii. The equipment involved;
 - 94.b.iv. Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction or emergency;
 - 94.b.v. Steps taken to mitigate emissions and corrective action taken, including whether the approved procedures for a planned startup, shutdown or maintenance activity were followed;
 - 94.b.vi. The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or best estimate (supported by operating data and calculations);
 - 94.b.vii. The final resolution of the cause of the excess emissions; and,
 - 94.b.viii. Where applicable, evidence supporting any claim that emissions in excess of technology-based limits were due to any emergency pursuant to OAR 340-214-0360.
 - 94.c. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends or holidays, the permittee must immediately notify DEQ by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.
 - 94.d. If startups, shutdowns or scheduled maintenance may result in excess emissions, the permittee must submit startup, shutdown or scheduled maintenance procedures used to minimize excess emissions to DEQ for prior authorization, as required in OAR 340-214-0310 and 340-214-0320. New or modified procedures must be received by DEQ in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee must abide by the approved procedures and have a copy available at all times.
 - 94.e. Once DEQ approves startup/shutdown procedures, the permittee must notify DEQ of planned startup/shutdown or scheduled maintenance events only if required by permit condition or if it results in excess emissions. When notice is required by this condition, it must be made in accordance with Conditions 94.a and 94.b.
 - 94.f. The permittee must continue to maintain a log of all excess emissions in accordance with OAR 340-214-0340(3). However, the permittee is not required to submit the detailed log with the semi-annual and annual monitoring reports. The permittee is only required to submit a brief summary listing the date, time, and the affected emissions units for each excess emission that occurred during the reporting period. [OAR 340-218-0050(3)(c)]

95. Permit Deviations Reporting: The permittee must promptly report deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" means within 15 days of the deviation. Deviations that cause excess emissions, as specified in OAR 340-214-0300 through 340-214-0360 must be reported in accordance with Condition 94.
96. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5). OAR 340-218-0050(3)(c)(D)]
97. Reporting requirements must commence on the date of permit issuance unless otherwise specified in the permit. [OAR 340-218-0050(3)(c)(E)]
98. Addresses of regulatory agencies are the following, unless otherwise instructed:

Submit all notices, reports and applications that do not include payment to:

DEQ – Eastern Region
475 NE Bellevue Dr. Ste. 110
Bend, OR 97701
541-388-6146

Submit payments for invoices, applications, and any other payments to:

DEQ – Air Quality Division
700 NE Multnomah St. Ste. 600
Portland, OR 97232-4100
503-229-5359

Submit all reports for EPA requirements to:

US Environmental Protection Agency
Enforcement and Compliance
Assurance Division
Region 10 (20-C04)
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

Semi-Annual and Annual Reports

99. The permittee must submit three (3) copies of reports of any required monitoring at least every 6 months, completed on forms approved by DEQ. Six month periods are January 1 to June 30, and July 1 to December 31. One copy of the report must be submitted to the EPA and two copies (one paper copy and one electronic copy) to the DEQ regional office. All instances of deviations from permit requirements must be clearly identified in such reports: [OAR 340-218-0050(3)(c)(A) and 340-218-0080(6)(d)]
 - 99.a. The first semi-annual report is due by **August 15** and must include the following:
 - 99.a.i. A semi-annual compliance certification, OAR 340-218-0080.
 - 99.a.ii. A report of all exceedances of the temperature limit established in Condition 33.a; [40 CFR 63.1354(b)(9)(i)]
 - 99.a.iii. A report of all failures to calibrate thermocouples as required in Condition 33; [40 CFR 63.1354(b)(9)(ii)]
 - 99.a.iv. The results of any combustion system component inspections conducted during the reporting period; [40 CFR 63.1354(b)(9)(iv)]
 - 99.a.v. All failures to comply with any provision of the operation and maintenance plan; [40 CFR 63.1354(b)(9)(v)]
 - 99.a.vi. All calculated 30-operating day rolling average values derived from the PM CPMS, Hg monitoring, and THC CEMS; [40 CFR 63.1354(b)(9)(vi)]
 - 99.a.vii. If the total continuous monitoring system downtime for any CEMS or continuous monitoring system for the reporting period is ten percent or greater of the total operating time for the reporting period, the permittee must submit an excess emissions and continuous monitoring system performance report along with the summary report. [40 CFR 63.1354(b)(10)]
 - 99.b. The annual report is due by **March 15** and must consist of the following:
 - 99.b.i. The type, amount and heating value of fuels used in the kiln;
 - 99.b.ii. The monthly sulfur content of fuels;
 - 99.b.iii. The monthly PCB content of used oil received from off-site; (State-only enforceable)

- 99.b.iv. The heating value of all fuels used during the year;
- 99.b.v. The type and amount of raw materials used to produce cement;
- 99.b.vi. The amount of clinker produced;
- 99.b.vii. The amount of cement produced;
- 99.b.viii. The emission fee report; [OAR 340-220-0100]
- 99.b.ix. A summary of the excess emissions upset log; [OAR 340-214-0340]
- 99.b.x. A report of all exceedances of the temperature limit established in Condition 33.a; [40 CFR 63.1354(b)(9)(i)]
- 99.b.xi. A report of all failures to calibrate thermocouples as required by Condition 33; [40 CFR 63.1354(b)(9)(ii)]
- 99.b.xii. A report of all failures to conduct any combustion system component inspections during the reporting period required by 40 CFR 63.1347(a)(3); [40 CFR 63.1354(b)(9)(iv)]
- 99.b.xiii. All failures to comply with any provision of the operation and maintenance plan; [40 CFR 63.1354(b)(9)(v)]
- 99.b.xiv. The second semi-annual compliance certification; [OAR 340-218-0080]
- 99.b.xv. The annual certification that the risk management plan is being properly implemented; [OAR 340-218-0080(7)]
- 99.b.xvi. Notice of revision to any of the following documents:
 - Dust Collector Preventative Maintenance Program
 - Continuous Opacity Monitoring System Operating Procedures
 - Continuous Emissions Monitoring System Quality Assurance Plan & Standard Operating Procedures Manual
- 99.c. The permittee must submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. If the reporting form specific to 40 CFR 63, Subpart LLL is not available in CEDRI at the time the report is due, the permittee must submit the report to EPA at the address listed in Condition 98. The report must contain the information specified in 40 CFR 63.10(e)(3)(vi) and 40 CFR 63.1354(b)(9)(i) through (vii). [40 CFR 63.1354(b)(9)]
- 100. The semi-annual compliance certification must include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]
 - 100.a. The identification of each term or condition of the permit that is the basis of the certification;
 - 100.b. The identification of the method(s) or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means must include, at a minimum, the methods and means required under OAR 340-218-0050(3). *Note: Certification of compliance with the monitoring conditions in the permit is sufficient to meet this requirement, except when the permittee must certify compliance with new applicable requirements that are incorporated by reference into the permit. When certifying compliance with new applicable requirements that are not yet in the permit, the permittee must provide the information required by this condition.* If necessary, the permittee must identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;
 - 100.c. The status of compliance with terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification must be based on the method or means designated in Condition 100.b. The certification must identify each deviation and take it into account in the compliance certification. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under OAR 340-200-0020, occurred; and
 - 100.d. Such other facts as DEQ may require to determine the compliance status of the source.

101. Greenhouse Gas Registration and Reporting: If the calendar year emission rate of greenhouse gases (CO₂e) is greater than or equal to 2,756 tons (2,500 metric tons), the permittee must register and report its greenhouse gas emissions with DEQ in accordance with OAR 340-215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340-218-0040(5).
102. Notwithstanding any other provision contained in any applicable requirement, the permittee may use monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]

NON-APPLICABLE REQUIREMENTS

103. At the time of permit issuance, the following State and Federal air quality requirements were not applicable to this facility for the reasons stated. [OAR 340-218-0110]

Rule Citation	Summary	Reason for Not Being Applicable
OAR 340-226-300 through 320	Particulate emissions from process equipment	Facility does not have listed process units
40 CFR 60, Subparts Cb, Ea, Eb, AAAA, BBBB	Emission guidelines for various municipal waste combustors	Facility does not burn municipal waste
40 CFR 60 Subparts Ce, Ec	Standards for hospital, medical, and infectious waste incinerators	Facility does not burn these types of waste
40 CFR 60 Subpart UUU	Standards for calciners and dryers	Facility is not a mineral processing plant as defined in 40 CFR 60.731
40 CFR 60 Subpart DDDD	Standard for commercial, industrial solid waste incinerator (CISWI)	Permit condition prohibiting solid waste feed (as defined in 40 CFR 241) has been added
40 CFR 63 Subpart EEE	Hazardous waste combustor NESHAP	Facility is not permitted to burn hazardous wastes

GENERAL CONDITIONS

G1. General Provision

Terms not otherwise defined in this permit have the meaning assigned to such terms in the referenced regulation.

G2. Reference materials

Where referenced in this permit, the versions of the following materials are effective as of the dates noted unless otherwise specified in this permit:

- a. Source Sampling Manual; November 15, 2018;
- b. Continuous Monitoring Manual; April 16, 2015 - State Implementation Plan Volume 3, Appendix A6; and
- c. All state and federal regulations as in effect on the date of issuance of this permit.

G3. Applicable Requirements [OAR 340-218-0010(3)(b)]

Oregon Title V Operating Permits do not replace requirements in Air Contaminant Discharge Permits (ACDP) issued to the source even if the ACDP(s) have expired. For a source operating under a Title V permit, requirements established in an earlier ACDP remain in effect notwithstanding expiration of the ACDP or Title V permit, unless a provision expires by its terms or unless a provision is modified or terminated following the procedures used to establish the requirement initially. Source specific requirements, including, but not limited to TACT, RACT, BACT, and LAER requirements, established in an ACDP must be incorporated into the Oregon Title V Operating Permit and any revisions to those requirements must follow the procedures used to establish the requirement initially.

G4. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

- a. The permittee must comply with all conditions of this permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance is supplemental to, and does not sanction noncompliance with the applicable requirements on which it is based.
- c. For applicable requirements that will become effective during the permit term, the source must meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G5. Masking Emissions:

The permittee must not install or use any device or other means designed to mask the emission of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement. [OAR 340-208-0400] This condition is enforceable only by the State.

G6. Credible Evidence:

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements. [OAR 340-214-0120]

G7. Certification [OAR 340-214-0110, 340-218-0040(5), 340-218-0050(3)(c)(D), and 340-218-0080(2)]

Any document submitted to DEQ or EPA pursuant to this permit must contain certification by a responsible official of truth, accuracy and completeness. All certifications must state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee must promptly, upon discovery, report to DEQ a material error or omission in these records, reports, plans, or other documents.

G8. Open Burning [OAR Chapter 340, Division 264]

The permittee is prohibited from conducting open burning, except as may be allowed by OAR 340-264-0020 through 340-264-0200.

- G9. Asbestos [40 CFR Part 61, Subpart M (federally enforceable), OAR Chapter 340-248-0005 through 340-248-0180 (state-only enforceable) and 340-248-0205 through 340-248-0280]

The permittee must comply with OAR Chapter 340, Division 248, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

- G10. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee must comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

- G11. Permit Shield [OAR 340-218-0110]

- a. Compliance with the conditions of the permit is deemed compliance with any applicable requirements as of the date of permit issuance provided that:
 - i. Such applicable requirements are included and are specifically identified in the permit, or
 - ii. DEQ, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- b. Nothing in this rule or in any federal operating permit alters or affects the following:
 - i. The provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);
 - ii. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - iii. The applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or
 - iv. The ability of DEQ to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).
- c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative amendment, as provided in OAR 340-218-0150(1)(h), significant permit modification, or reopening for cause by DEQ.

- G12. Inspection and Entry [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee must allow DEQ, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

- a. Enter upon the permittee's premises where an Oregon Title V Operating Permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. As authorized by the FCAA or state rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G13. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee must pay an annual base fee and an annual emission fee for particulates, sulfur dioxide, nitrogen oxides, and volatile organic compounds. The permittee must submit payment to the Department of Environmental Quality, Financial Services 700 NE Multnomah St., Suite 600, Portland, OR 97232, within 30 days of date DEQ mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes must be submitted in writing to DEQ. Payment must be made regardless of the dispute. User-based fees will be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G14. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

- a. The permittee must monitor for, and record, any off-permit change to the source that:
 - i. Is not addressed or prohibited by the permit;
 - ii. Is not a Title I modification;
 - iii. Is not subject to any requirements under Title IV of the FCAA;
 - iv. Meets all applicable requirements;
 - v. Does not violate any existing permit term or condition; and
 - vi. May result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in OAR 340-200-0020.
- b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), must be submitted to DEQ and the EPA.
- c. The permittee must keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.
- d. The permit shield of Condition G11 does not extend to off-permit changes.

G15. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

- a. The permittee must monitor for, and record, any section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:
 - i. Violate an applicable requirement;
 - ii. Contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or
 - iii. Be a Title I modification.
- b. A minimum 7-day advance notification must be submitted to DEQ and the EPA in accordance with OAR 340-218-0140(3)(b).
- c. The permit shield of Condition G11 does not extend to section 502(b)(10) changes.

G16. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit must be requested and granted in accordance with OAR 340-218-0150. The permittee must promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

- a. Legal change of the registered name of the company with the Oregon Corporations Division, or
- b. Sale or exchange of the activity or facility.

G17. Minor Permit Modification [OAR 340-218-0170]

The permittee must submit an application for a minor permit modification in accordance with OAR 340-218-0170.

G18. Significant Permit Modification [OAR 340-218-0180]

The permittee must submit an application for a significant permit modification in accordance with OAR 340-218-0180

G19. Staying Permit Conditions [OAR 340-218-0050(6)(c)]

Notwithstanding Conditions G16 and G17, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G20. Construction/Operation Modification [OAR 340-218-0190]

The permittee must obtain approval from DEQ prior to construction or modification of any stationary source or air pollution control equipment in accordance with OAR 340-210-0205 through OAR 340-210-0250.

G21. New Source Review Modification [OAR 340-224-0010]

The permittee may not begin construction of a major source or a major modification of any stationary source without having received an Air Contaminant Discharge Permit (ACDP) from DEQ and having satisfied the requirements of OAR 340, Division 224.

G22. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

The need to halt or reduce activity will not be a defense. It will 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.

G23. Duty to Provide Information [OAR 340-218-0050(6)(e) and OAR 340-214-0110]

The permittee must furnish to DEQ, within a reasonable time, any information that DEQ 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 must also furnish to DEQ copies of records required to be retained by the permit or, for information claimed to be confidential, the permittee may furnish such records to DEQ along with a claim of confidentiality.

G24. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

- a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by DEQ.
- b. A permit must be reopened and revised under any of the circumstances listed in OAR 340-218-0200(1)(a).
- c. Proceedings to reopen and reissue a permit must follow the same procedures as apply to initial permit issuance and affect only those parts of the permit for which cause to reopen exists.

G25. Severability Clause [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G26. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

- a. This permit expires at the end of its term, unless a timely and complete renewal application is submitted as described below. Permit expiration terminates the permittee's right to operate.
- b. Applications for renewal must be submitted at least 12 months before the expiration of this permit, unless DEQ requests an earlier submittal. If more than 12 months is required to process a permit renewal application, DEQ must provide no less than six (6) months for the owner or operator to prepare an application.
- c. Provided the permittee submits a timely and complete renewal application, this permit will remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G27. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

G28. Property Rights [OAR 340-200-0020 and 340-218-0050(6)(d)]

The permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G29. Permit Availability [OAR 340-200-0020 and 340-218-0120(2)]

The permittee must have available at facility at all times a copy of the Oregon Title V Operating Permit and must provide a copy of the permit to DEQ or an authorized representative upon request.

ALL INQUIRIES SHOULD BE DIRECTED TO:

DEQ – Eastern Region
475 NE Bellevue Dr. Suite 110
Bend, OR 97701
541-388-6146