

I Source Information

1. Product Description:

Gypsum, flyash, some clay and mill scale are purchased. The raw materials are dried and crushed into a fine powder, preheated and then added to the rotary kiln. The kiln is fired by coal and petroleum coke, which are milled and injected into the kiln in a fine powder form, tire derived fuel, No. 2 fuel oil (diesel) and natural gas as well as used and waste oils may also be utilized. The clinker is cooled with ambient air, and gypsum is added in the finishing mill process to form either Portland or masonry cements. The cement is either bagged or bulk-loaded onto trucks, rail cars or barges in the product handling or “shipping” process.

2. Process Description:

Company employs the use of barge unloading and transfer, limestone handling, raw material crushing, limestone storage/reclaim, silos, raw mills, kiln feed system, preheater/precalciner kiln with inline raw mill and coal mill, coal handling, coal mill system, clinker cooler, clinker handling and storage, finishing mills, lime slurry system, gasoline dispensing facility, rail/barge loading, truck loading, and cold solvents cleaner. In the rotary kiln combustion process, clinker is manufactured with a typical conversion rate of 57%.

3. Site Determination:

There are no other facilities that are contiguous or adjacent to this facility.

4. Emission Unit Summary:

Emission Unit	Equipment Description
U1	Barge Unloading and Transfer
U2/U3	Limestone Handling and Crushing
U4	Limestone Storage and Reclaim
U5	Raw Material Handling
U6	Raw Material Transfer- System
U8	Raw Mill A
U9	Raw Mill B
U11	Kiln Feed Silos
U12	Kiln Feed System
U7/U13	Raw Mill D, Preheater and Kiln
U16	Coal Handling and Coal Mill

Emission Unit	Equipment Description
U18	Clinker Cooler
U19	Clinker Handling
U20	Finish Mill #1
U21	Finish Mill #2
U22	Kosmos Mortar Mixing Mill
U24	Rail/Barge Loading
U25	Truck Loading
U26	Storage Silos & Packaging
U27	Paved and Unpaved Roads
U28	Storage Piles
U29	Gasoline Dispensing Facility
U30	Cold Solvent Metal Cleaners
U31	Finish Mill #4
UEngines	Engines
UTanks	Tanks

5. Fugitive Sources:

There are fugitive emissions from haul roads, conveyance, and material stock piles at this source.

6. Permit Revisions:

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
156-97-TV	10/22/2000	04/18/2001	Initial	Initial Permit Issuance
O-0060-19-V	4/14/2018	12/10/2019	Renewal	Permit renewal: Incorporation of Construction Permits listed below.
O-0060-19-V (R1)	7/01/2021	8/31/2021	Sig.	Incorporation of two construction permits, C-0060-1057-19-C and C-0060-1056-18-V; New TAC limits based on updated EA demo submitted 06/23/2021; Revised Monitoring, Record Keeping, and Reporting for TACs; Removal of CAM for Kiln, Clinker-Cooler, Silos K-360 and K-319;

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
				Revised calculation methodology
			Admin	Transfer of ownership and operational control. Operational Flexibility Requests for changes to the bags in 545 Baghouse.

7. Construction Permit History:

Permit No.	Effective Date	Description
309-75-C	4/14/1998	One (1) bag collector, make Amerex, model RP-14-272D6, for control of emissions from the clinker cooler. Collection eff. - 99.8%. Kosmos equip. Item # K924.
310-75-C	4/14/1998	One (1) clinker cooler & drag conveyor, make Humboldt Wedag, model PSC2-081.12, with 10 fans & dampers, plus heat exchanger (for upset conditions). Kosmos equip. K909, K910-1 thru K910-14 inclusive and K918.
311-75-C	4/14/1998	One (1) bag collector, make Wheelabrator, model 60KW92, consisting of 16 compartments, to control particulates from the kiln and ball mill. (Raw mill) Collection eff. - 99.8%. Kosmos Equipment #945.
312-75-C	4/14/1998	One (1) rotary kiln with four-stage preheater tower, a pre calciner tower, make Humboldt Wedag, model PR8250, and in-line ball mill (Raw mil), to grind kiln feed into a fine powder. Item K800
60-98-C	4/14/1998	One (1) finish material grinding mill, make Fuller Traylor, model # 4.6Mx13.5M, for continuous grinding clinker and gypsum into finished product - cement, one (1) separator, Sepax 450 classifier and elevator, Kosmos equipment # K1141.
62-98-C	4/14/1998	One (1) coal/coke mill make Raymond, model 943, with a dynamic classifier. Kosmos equipment # K855.
63-98-C	4/14/1998	Three (3) dust collectors, make Amerex, model RPC13-300D4, to control emissions from coal/coke mill system. Collection eff. - 99.8% Items K857-1, K857-2, and K857-3.
64-98-C	4/14/1998	One (1) dust collector, make Amerex, model RP-12525D6, and associated fans and ducting to control particulates from finish mill. Collection eff. - 99.8%. Item K1152.

Permit No.	Effective Date	Description
65-98-C	4/14/1998	Two (2) dust collectors, make Amerex, model RP-12-1040D6, and associated fans and ducting to control dust from separator and pneumatic pumps. Collection eff. - 99.8%. Kosmos equipment # K1160 & K1162.
67-98-C	4/14/1998	One (1) clinker bin (250 tons capacity) and one (1) gypsum bin (120 tons capacity). Kosmos equipment numbers K-1136 & K-1137.
68-98-C	4/14/1998	One (1) clinker bin dust collector, make IAC, model 72TB, and one (1) gypsum bin dust collector, make IAC, model 72TB, to control particulates from clinker and gypsum bins. Collection eff. - 99.8%. Kosmos equipment numbers K1136-2 and K-1316.
69-98-C	4/14/1998	One (1) dust collector, make IAC, model 120TB, for controlling emissions from cement storage silo. Collection eff. - 99.8%. Item K1321.
72-98-C	4/14/1998	Four (4) dust collectors, make IAC, model 72TB, for controlling particulates from six (6) belt conveyors for limestone transfer from river barges to storage. Collection eff. - 99.8%. Kosmos equipment numbers K133, K134, K136, and K145.
75-98-C	4/14/1998	Three (3) dust collectors, make Amerex, models RP-8-25, RP-8-36, and RP-8-16 respectively, at kiln feed transfer points. Kosmos equipment numbers K640, K642, and K647.
76-98-C	4/14/1998	Three (3) bin vent dust collectors, make IAC, model 72TB, to control emissions from raw meal handling conveyor system. Kosmos equipment numbers K559, K564, and K560-4.
77-98-C	4/14/1998	Two (2) dust collectors make IAC, model 72TB, at transfer points between clinker and gypsum bins and finish mill. Kosmos equipment numbers K1135 and K1317
78-98-C	4/14/1998	Three (3) dust collectors, make IAC, model 72TB, to control emissions from clinker conveyor between clinker cooler and clinker storage. Kosmos Equipment Numbers K961, K937, and K958.
84-98-C	4/14/1998	One (1) cement storage dome. Kosmos equipment # K1602.
85-98-C	4/14/1998	Four (4) dust collectors, make IAC, model 120TB, for controlling particulates from cement storage dome and at river loadout. Kosmos equipment numbers K-1601, K-1603, K-1628, and K-1629. Capacities are 15,000 acfm, 4250 acfm, 3000 acfm, and 3000 acfm.

Permit No.	Effective Date	Description
90-98-C	4/14/1998	One (1) coal/coke storage bin. Kosmos equipment # K902.
91-98-C	4/14/1998	One (1) dust collector, make Amerex, model RP-8-49, to control emissions from coal/coke storage bin. Kosmos equipment number K902-1.
140-00-C	7/12/2000	Two (2) bin vent dust collectors, make IAC, models 72TB and 26PE, for K406 and K434 bins (A/B finish mills feed). Kosmos equipment numbers K510 and K511.
141-00-C	7/12/2000	One (1) fine coal bin.
142-00-C	7/12/2000	Fine coal bin dust collector (250 cfm), make Aeropulse, model RB-14-5-N.
148-00-C	7/12/2000	Kiln feed conveying and handling system.
149-00-C	7/12/2000	Raw meal conveying and handling system.
150-00-C	7/12/2000	Clinker and gypsum conveying and handling system.
157-02-C	7/2/2002	Portable clinker crusher number TCC1 to process weathered clinker.
211-02-C	8/23/2002	Secondary crusher make Hazemag model # APSM-1320/S
212-02-C	8/23/2002	One (1) dust collector to control emissions from uncontrolled transfer point to secondary crusher and modification dust collectors (K-162 and K-158) make Norblo.
76-03-C	2/23/2003	Three (3) pulse-jet baghouses (E334a, K-334b, K-334c) to control emissions from three clay silos (K-315, K-316, K-317) in Emission Unit 5
260-03-C	7/25/2004	One (1) 6-pack cement silo withdrawal system and 16" high-capacity transport Claudius Peters Airslides. (Dome Bypass Project)
261-03-C	7/31/2004	One (1) pulse jet fabric filter/receiver (K-1635) with air-to-cloth ratio of 4:1 and an air flow of 13,200 cfm, to control particulates from load transfer operations. (Dome Bypass Project)
146-05-C	4/15/2005	Pilot plant test of Selective Non-Catalytic Reduction (SNCR) to control emissions from the kiln preheater (E-81)
53-04-C	4/30/2005	One (1) Finish mill (crusher) for crushing clinkers, one (1) screening operation, and one (1) conveyor transfer point.

Permit No.	Effective Date	Description
206-05-C	6/1/2005	One (1) Sand Storage Building with three (3) under pile feeders (50 tph each) (K-351, K-352, K-353), Sand Belt Conveyor (150 tph)(K-358), Sand Storage Bin (K-356) with weigh belt feeder (40 tph)(K-358), Fly Ash Air Slide (40 tph) (K-358) with fly ash metering system (K-375), and Fly Ash/Sand Conveyor (K-359)
207-05-C	6/1/2005	2 Fabric Filter dust collectors; 1 fabric filter (K-355) for the Sand Storage Building with 3 under pile feeders (K-351, K-352, K-353)(50 tph each) and 1 Fabric filter (K-357) for the Sand Belt Conveyor (K-354)(150 tph) with Weigh Belt feeder (K-358)(40 tph), Fly Ash Air slide (K-366)(40 tph), fly ash metering system (K-375) and Fly Ash/Sand Conveyor (K-359).
208-05-C	6/30/2005	One (1) Fly Ash Silo (K-360) with three (3) offloading blowers (K-367, K-368, K-359) (40 tph each) controlled by fly ash silo dust collector (K-392).
221-05-C	6/30/2005	One (1) Fabric Filter Dust Collector (K-392) controlling one (1) Fly Ash Silo (K-360) with three (3) offloading blowers (K-367, K-368, & K-369) (40 tph each).
184-06-C	6/30/2007	Four (4) Sand Screens (400 tph each) (F2, F3, F5, and F7) and three (3) Belt Conveyors (400 tph each) (F4, F6, and F8).
102-08-C	2/15/2008	Two (2) baghouses (K-454 and K-451) controlling Raw Mill "B" Separator (K-429).
425-06-C	3/31/2008	Two (2) dust collectors to control emissions from the sand belt conveyors.
59-07-C	3/31/2008	A modification for an existing Fuller dust collector (K-231) model 96-14-14,000, rated at 4500 acfm, to control emissions from the existing clay silos (K-317, K-318, K-316).
101-08-C	2/28/2009	Two (2) baghouses (K-421 and K-424) controlling Raw Mill "A" Separator (K-411).
185-06-C	3/31/2009	Selective Non-Catalytic Reduction (SNCR) to control emissions from the Kiln (K901) (E-81).
125-09-C	8/31/2009	Six (6) Clinker Feeders (K951-1 through K951-6) (100 tph each) transfer clinker on to the Conveyor Belt (K952) located in the enclosed Clinker Reclaim tunnel. Six Process Baghouses (K953 through K953-5) assist in the transfer by capturing the clinker fines in the feeders and placing them on the Conveyor Belt (K952) adjacent to the feeder discharge.

Permit No.	Effective Date	Description
7-09-C	1/31/2010	One (1) Gypsum Hopper (15 tph), one (1) Gypsum Feeder (15 tn/hr), and one (1) Gypsum Conveyor Belt (27 tph) (K-1140-X) in Unit U19.
8-09-C	1/31/2010	One (1) Coal Mill Feeder Belt (40 tph) (K850) in Unit U16.
195-04-C(R1)	10/1/2010	One (1) Baghouse (K974) to control the Clinker Storage Building (E-105a) and one (1) Baghouse (K915-4) to control the Hot Tank (E-101). Baghouse (K915-4) replaces Baghouse (C-37).
77-10-C	11/23/2010	One (1) Kiln (K901) revision to increase the Tire Derived Fuel (TDF) limit from 1.1 ton/hr to 6 ton/hr
29658-10-C	1/5/2011	One (1) pulse jet baghouse (K421), make ETA Engineering, model 4212X96, with an air flow rate of 45,000 acfm, controlling emissions from existing separator (K411), bucket elevator (K409) for Raw Mill A (U8).
31758-11-C(R1)	5/27/2011	Dust Collector for Clinker Handling (U19) (appl 11759) (DM 26356 cover, 26357 SOB, 26295 conditions), Modification of One (1) pulse jet baghouse (K949-5), make ETA Engineering, model 66X98 BV, with an air flow rate of 2,700 acfm at 275 degF, controlling the conveying of clinker from the existing elevator (K912) to the existing belt conveyor (K949). One (1) pulse jet baghouse (K949A), make ETA Engineering, model 44x39 BV, with an air flow rate of 1,500 acfm at 275 degF, controlling the conveying of clinker from the existing belt conveyor (K949) to the belt conveyor (K949-3). One (1) pulse jet baghouse (K949B), make ETA Engineering, model 44x39 BV, with an air flow rate of 1,500 acfm at 275 degF, controlling the conveying of clinker from the existing belt conveyor (K949-3) to the belt conveyor (K950).
36017-13-C	1/15/2014	Replacing South load spout (K1485) with new load spout with dedicated dust collection system. DM# 32712, revised application DM# 42149
76-07-C(R1)	6/19/2014	One (1) Sand and Bottom Ash Storage Building with three (3) under pile feeders (50 tph) (K-351, K-352, K-353), Sand and Bottom Ash Belt Conveyor (150 tph)(K-354), Sand and Bottom Ash Storage Bin (K-356) with Sand and Bottom Ash Belt Feeder (85 tpy) (K-358), Fly Ash Air Slide (40 tph) (K-366) with Fly Ash Metering System (K-375), Fly Ash/Sand/Bottom Ash Conveyor (K-359), and Pug Screw (125 tph)(K-386). This permit is to increase the feed rate of the Sand and Bottom Ash Storage Bin and Sand and Bottom Ash Belt Feeder as well as to allow for the use of Bottom Ash in the equipment as indicated.

Permit No.	Effective Date	Description
TV-13-1001-C	6/19/2014	One (1) existing Kiln (K901) with alternative fuel supply conveying operations to allow for the use of Refuse Derived Fuel (RDF) at a rate of up to 10 tons per hour and to increase the Tire Derived Fuel (TDF) limit from 6 tons per hour to 9 tons per hour. This equipment is designated as U13 - E82. One (1) E-AF Docking Station including 2 bays for trucks and loaders, One (1) E-AF 1 Conveyor to transfer material from Docking Station to Tower Elevator, One (1) E-AF ELEV for the transfer between conveyance systems, One (1) E-AF 2 Conveyor to transfer from conveyance system to Buffer Feed Bin, One (1) E-AF Bin the Buffer Feed Bin, One (1) E-AF 3 Conveyor to transfer from Feed Bin to Kiln, One (1) E-AF DC1 dust collector to control emissions from Docking Station, and One (1) E-AF DC2 dust collector to control emissions from Buffer Feed Bin
1-05-C(R1)	5/8/2015	One (1) Clinker Cooler (E-97) modification controlled by baghouse C-35 (K-924).
C-0060-1052-14-V	1/30/2015	Two (2) new Separators K-1008 in Unit 20 and K-1023 in Unit 21 to be controlled respectively by two (2) new replacement baghouses K-1014 and K-1030.
C-0060-1052-14-V(R1)	12/17/2015	Two (2) new Separators K-1008 in Unit 20 and K-1023 in Unit 21 to be controlled respectively by two (2) new replacement baghouses K-1014 and K-1030.
C-0060-1053-16-V	3/15/2016	One (1) airslide (U24: K-1468) to rail loading spout, make Vortex, model TBD, capacity 9,251 ft ³ /hr, 278 tons/hr. This airslide replaces existing airslide K-1468; One (1) rail loading spout (U24: K-1485) to rail car or truck, make Vortex, model TBD, capacity 400 ft ³ /hr, 720 tons/hr. This loading spout replaces existing rail loading spout K-1485; One (1) baghouse (U24: C-1487) controlling emissions from K-1468 and K-1485, make Vortex, model VFS-70-A-A-E77546. This baghouse replaces existing baghouse C-1487.
C-0060-1055-17-V	10/17/2017	Installation of Selective Non-Catalytic Reduction (SNCR) to control emissions from the Kiln (K-901) to comply with the Consent Decree, <i>United States District Court for the Eastern District of Tennessee at Knoxville</i> . The issuance of this construction permit does not invalidate any requirements contained in construction permit number TV-13-1001-C for the Kiln. The requirements in this permit are in addition to the requirements contained in construction permit number TV-13-1001-C.

Permit No.	Effective Date	Description
C-0060-1054-17-V	11/02/2017	Activated Carbon Injection (ACI) system for control of mercury emissions by injection of dry Powdered Activated Carbon (PAC) and/or other similar adsorbent materials into the kiln exhaust system prior to control by the baghouse. ACI system includes tubular steel support frame, electric chain hoist with trolley, bulk bag lifting adapter, volumetric feeder, feeder hopper, pneumatic blower & educator, pressure switches, and system control panel. The ACI system used to control mercury emissions is designated as control device C-ACI. The PAC material handling equipment is designated as equipment K-PAC (emission point E-PAC).
C-0060-1052-14-V(R2)	6/1/2018	Two (2) new Separators K-1008 in Unit 20 and K-1023 in Unit 21 to be controlled respectively by two (2) new replacement baghouses K-1014 and K-1030.
C-0060-1056-18-V	11/13/2018	One (1) new lime sorbent injection (LSI) system consists of one (1) hopper (K-1360) with capacity 4,000 lbs/hr controlled by a new baghouse (C-1362) and associated rotary feeder (K-1361) with capacity of 2,500 lbs/hr, pressure regulator, and gauge. One (1) new duplicate lime sorbent injection (LSI) system used as a backup system, consists of one (1) hopper (K-1363) with capacity 4,000 lbs/hr controlled by a new baghouse (C-1362) and associated rotary feeder (K-1364) with capacity of 2,500 lbs/hr, pressure regulator, and gauge.
C-0060-1057-19-V	4/3/2019	A new cement kiln dust (CKD) transfer system, consisting of rotary feeders, impact flowmeters, weigh hopper, rotary airlock, and screw conveyors. Removed equipment includes weigh feeders and feed screw. Equipment not in service includes CKD bin and weigh feeder.

8. Application and Related Documents

Document Number	Date	Description
4/1/2005	6178	Temp SNCR Test Application
5/11/2005	6179	Three DCs for Ash and Sand Application
6/30/2005	6180	Permanent SNCR Application
10/18/2005	6222	TV renewal application
2/28/2006	6181	Screening Application & PTE

Document Number	Date	Description
2/28/2006	6460	STAR Form 82 & Plot Plans HAND
4/18/2006	6461	STAR Category 1 SAM Form 81
8/23/2006	6182	Sand storage DC mod Application K-355
10/3/2006	6462	CO Revised STAR SAM Form 81
12/21/2006	6183	K-334 and K-231 DC mod Application
1/2/2007	6463	CO Revised STAR SAM Forms 82 HAND
1/2/2007	6474	CO STAR EA Demo 12-31-2006 MAIL
2/8/2007	6184	Additional Information P-185-06-C
4/16/2007	6464	CO Revision STAR CY 2005 SAM Form 81
7/3/2007	6475	CO STAR Revised EA Demo
7/23/2007	6185	Coal Mill Application to modify P-62-98-C
10/10/2007	87366	Dust collector operational flexibility
10/29/2007	6186	4 Raw Mill DC Application & PTE
11/15/2007	6477	CO Revised EA Demo MAIL
11/20/2007	6187	Effect of Coal Mill Throughput
3/11/2008	6465	STAR Revised EA Demo MAIL 3-10-2008
4/1/2008	6466	CO STAR Category 2 EA Demo 3-31-2008
9/26/2008	6470	APCD STAR Corresp Approval EA Demo
10/13/2008	6471	APCD STAR Corresp Approval
10/28/2008	6472	CO STAR Corresp 6-Month Extension MAIL
12/5/2008	6467	CO Revised Category 1 & 2 TAC EA Demo
12/5/2008	6473	APCD STAR Corresp Approval 6-Month Extension
12/5/2008	6476	STAR Revised EA Demo Attach A
12/15/2008	6188	Coal Mill Feeder Belt Application
2/27/2009	6541	STAR Stack Test Dec 9-11, 2008 & Protocol
3/12/2009	6296	RE Extension Request for Construction Permit
5/15/2009	6320	Dust Collector Application AP-0308 Generic Process

Document Number	Date	Description
5/20/2009	6192	Clinker Feeder DC K-953 1-5 (U19) Mail
5/29/2009	6193	K-974 Application Mail
6/8/2009	6294	Kosmos Permit Monitoring Revision Request
7/10/2009	6299	Corresp Email Mortar Mixing Mill System Process U22 Notification
7/13/2009	6207	Notification operation Change
5/3/2010	6194	Tire Derived Fuel Construction Application
5/3/2010	6444	Tire Derived Fuel Construction Application
9/21/2010	6195	Raw Mill A Separator DC Application K-421
10/12/2010	6196	Modification to Application Raw Mill A Separator
10/14/2010	6197	Revised Raw Mill Application
10/18/2010	6198	CO Request Change Language TAC Condition
1/11/2011	6208	Request Operation Flexibility Mail
1/18/2011	6204	Kosmos Revised O&M Plan
1/18/2011	6205	Revised Operation Maintenance Plan
1/27/2011	6199	Clinker DC Application K-949-5
2/1/2011	6209	CO Response Revised Operational Flexibility Notification
2/1/2011	6210	APCD Approval Response Proceed with Operation
2/1/2011	6211	APCD Response to Revised Operational Flexibility Notification
2/1/2011	6212	Operational Flexibility Notification Elec
2/1/2011	6214	FW Revised Kosmos Operational Flexibility Notification
2/3/2011	6213	Revised Operational Flexibility Mail
2/25/2011	27558	Plant Wide Operation & Maintenance Plan Rev 14
2/28/2011	6206	CO Revision 14 O&M Plan
4/4/2011	27559	Approval FW O&M Plan Rev14
4/20/2011	28468	Flow Diagram of U19-A
4/20/2011	28472	Revised PFD for Process U19 Clinker Handling and Reclaim

Document Number	Date	Description
7/23/2011	31245	156-97 TV Oil Water Injection
8/9/2011	31271	Oily Water Mixture
10/4/2011	32712	South Load Spout 1485 and DC 1487 application
10/4/2011	32717	Revised TV application
10/31/2011	33630	APCD Request Additional Application Information
11/4/2011	33881	CO Request Correction to P-31758-11-C
8/7/2012	42149	Revised So Load Spout 1485 and DC 1487 application
1/17/2013	53481	Co Notification Operational Flexibility -Tire Derived Fuel
1/18/2013	53518	RE Spout interface (closure) to vehicle hatch
1/30/2013	53724	Co Fuel System Port Installation Notification
6/17/2013	56236	TDF increase from 6tph to 9tph application
6/18/2013	56245	Process Change U13 Operational Flexibility
6/25/2013	56353	Co Notification IA- TDF Feed System and Storage
6/26/2013	56425	Cover Letter only Notification for Petroleum Products Residual
6/26/2013	56426	Tire Derived Fuel Operation Flexibility Notification
6/26/2013	57430	RE Proposed Residual Oil and Shredded Tire use
6/26/2013	58076	Proposed Residual Oil and Shredded Tire use
7/12/2013	57237	Application Refuse Derive Fuels
7/29/2013	58252	Application Sand - Bottom Ash
8/19/2013	58856	RDF Facility-Wide Cumulative Risk Comparison
9/19/2013	59247	APCD Response to 2007 Coal Mill Construction Application
9/19/2013	59248	Co Response to Withdraw 2007 Coal Mill Construction Application
9/23/2013	59360	RDF TDF permit STAR question
10/16/2013	60206	REVISED RDF TDF EA Demo info
11/1/2013	60520	Sand & Bottom Ash Questions
11/18/2013	60865	Summary of Meeting with EPA for MACT and NSPS questions

Document Number	Date	Description
12/4/2013	61069	Regulation 5 21 BAC Changes
12/4/2013	68119	Regulation 5 21 BAC Changes (7)
12/4/2013	68120	5 21 BAC Changes
1/31/2014	63514	Sand and Bottom Ash questions
2/7/2014	62275	Questions regarding Kosmos Title V application
3/13/2014	63513	Sand and Bottom Ash Application Follow Up
4/24/2014	64441	Co Response to APCD Questions
5/23/2014	65214	Updated TV forms Syn Gyp EP#s
5/23/2014	65215	Syn Gyp system application
6/25/2014	65682	Construction Application Deficiency
7/7/2014	65901	Notice of Deficiency Application AP-100A
7/10/2014	65937	Co Notification of Operational Flexibility
7/14/2014	66032	Sand Screening Operations Notification
7/15/2014	66031	Confidential Temporary Exemption Sand Screening Application
7/17/2014	66082	Operational Flexibility Notification
7/17/2014	66083	Construction Application AP-100A for Sand Screening
7/21/2014	66172	Construction PTE for SynGyp Project
7/30/2014	66207	2 03 DEFICIENCY
7/30/2014	66251	Construction Application SynGyp Project
7/30/2014	66252	Construction Deficiency Letter
7/31/2014	66301	Application Construction New HE Separators
8/4/2014	66331	Additional Info for SynGyp Application
8/4/2014	66333	Revised EA Demo 2014
8/5/2014	70097	Revised EAD and CD
8/6/2014	66361	Co Notice of Deficiency response
8/18/2014	66570	PTE Point Source Uncontrolled
8/19/2014	66913	Revised Plant-wide PTE and Title V application forms for High Efficiency separators U20 & 21

Document Number	Date	Description
8/20/2014	66604	[M]SDS for TAC <i>de minimis</i> Determination
8/22/2014	66670	Company Submitted Dust Control Plan
8/25/2014	70098	Revised EAD with CD
8/27/2014	66719	Revised EA Demo and CD
9/10/2014	66914	Company Response to SynGyp Questions
9/15/2014	66983	Co Response Regarding Synthetic Gypsum Project
9/22/2014	67363	Separator Construction Application Initial Review
9/30/2014	67364	High Efficiency Separator
10/1/2014	67386	Metcoke Operational Flexibility Notification
10/1/2014	67416	Metcoke Operational Flexibility Notification
10/3/2014	67475	High Efficiency Separator
10/17/2014	67609	DRAFT Response to APCD high efficiency separator questions
10/20/2014	67610	RE DRAFT Response to APCD high efficiency separator questions
10/21/2014	68605	Separator PTE information Cement speciation study
10/27/2014	67736	Co Notification Operational Flexibility Unit U-18 Baghouse K-94
10/28/2014	67769	Unit18 Baghouse K924 for LLL op flex notice
10/30/2014	67805	Raw Mill B Draft Line Modification
10/31/2014	67803	Revised app for High Efficiency Separators and DCs U20/21
10/31/2014	67813	U9 draft line mod op flex
11/3/2014	67798	K-924 operational flexibility modification
11/3/2014	67817	Revised app for High Efficiency Separators and DCs U20/21
11/14/2014	68629	Operational flexibility for Unit 9 and request for TV papers
11/14/2014	87386	Operational flexibility for Unit 9 email acceptance
12/17/2014	68426	Revised EA Demo and 100Ds for High Efficiency Separators
12/19/2014	75509	Unit 20,21 EA Demo Question
1/5/2015	68778	Co Request for Extension of LLL Compliance

Document Number	Date	Description
1/14/2015	69458	MACT LLL extension request
1/22/2015	69077	100A, K, L and 900 B for LLL extension app
1/27/2015	69135	MACT extension request
1/30/2015	69459	Extension request
2/10/2015	69327	CAM Plan Cooler Extension of Compliance 3L
2/20/2015	69460	40 CFR 63 Subpart LLL extension request
3/6/2015	69953	Extension of Compliance Cooler (EOC) Baghouse
4/20/2015	70825	Storage tank question
5/11/2015	71108	EA Demo question
5/27/2015	71920	Storage tank question
5/29/2015	71854	Extension of Compliance Reg
9/3/2015	73342	Additional information request for TV permit
9/14/2015	73432	Operation and Maintenance Plan
9/21/2015	73530	CAM and STAR Additional Information
11/17/2015	74358	Insignificant Activities
11/17/2015	74380	CAM plan for Kiln at stack 945
11/20/2015	74399	Response to District
12/8/2015	75177	Kosmos EMSL Analytical QC (project TRI Analysis 2015)
12/11/2015	74609	High Efficiency Separator renewal app
12/15/2015	74679	Operational Flexibility Notice and PTE Spread Sheet
12/17/2015	74692	STAR Clinker analysis 2012 2013
12/17/2015	75178	Kosmos Trace Metals Analysis
1/8/2016	74784	STAR analysis of Clinker reports 2015 2014 2013
1/8/2016	74785	STAR data Hg analysis and others 2015
1/11/2016	74812	Airslide 1468, Load Spout 1485 and DC 1487 app
1/18/2016	74907	Co Request to Update Application
1/21/2016	74972	Co Request South Loadout Spout Permit Application

Document Number	Date	Description
2/10/2016	75181	Request for KY Secretary Certificate
2/10/2016	75182	Company response KY Secretary Certificate
4/12/2016	76369	Co Response Re STAR Pollutants Reported 2014
8/26/2016	79121	Clinker Tunnel Fan Monitoring Procedures
9/9/2016	79374	Clinker Monitoring Procedures Update
10/13/2016	80028	Regulation 5.21 BAC Changes
12/2/2016	80712	APCD Response to Co Regarding CEMS data request
12/6/2016	80751	RO Change
12/9/2016	80782	Co Response to 5-21 BAC Change
12/12/2016	80797	Approved Plantwide PTE
12/20/2016	80924	Co NOF U-24 Airslide Replacement
12/22/2016	80990	APCD operational flexibility request
1/9/2017	81320	Info regarding operational flexibility request
1/25/2017	81455	Operational flexibility approval
5/22/2017	84367	Kosmos forms request
6/7/2017	84612	100A Form and info for Title V
6/8/2017	84636	Certificate of Authority verification request response
6/9/2017	84706	Request for Kosmos Meeting
6/15/2017	84809	SNCR application 2005 and PTE
6/19/2017	85043	Info request for crusher
6/23/2017	84929	Kosmos Cement Company LSI
6/26/2017	84978	Lime Silo routing change
6/27/2017	84996	Reply about lime routing
6/27/2017	84997	Response to reply about lime routing
6/27/2017	85000	Approval of Lime injection proposed routing change
6/28/2017	85042	Crusher for clinker construction permit 53-04-C
7/17/2017	85135	ACI PAC application

Document Number	Date	Description
7/21/2017	85376	Kosmos Notification of Raw Material Substitute.msg
7/24/2017	85407	Notification of Raw Material Substitution for Mill Scale
7/26/2017	85433	SNCR Construction Operating TV Application 100A
7/27/2017	85601	District Response to Raw Material Change Mill Scale
8/18/2017, 9/05/2017	86114, 86877	Draft permit sent to company for review
9/07/2017, 9/26/2017, 9/27/2017, 9/29/2017	87199, 87575, 87576, 87701	Company: Questions/Comments Regarding C-0060-1054-17-V
9/12/2017	87110	Company comments for Draft SNCR and consent decree review
10/10/2017	87970	District Questions regarding 7/13/2009 Operational Flexibility request for Mortar Mixing Mill System
10/11/2017	87971	Draft Title V for company review
10/12/2017	88020	Regulation 5 21 BAC Changes
11/06/17	88786	Waste Management Plan CISWI NESHAP
12/26/2017	89772	Company response to BAC changes
1/3/2018	89872	NESHAP applicability message
1/31/2018	90313	Company comments to draft Title V in Word
1/31/2018	90312	Company comments to draft Title V in PDF
2/1/2018	90347	NSPS OOO and F applicability
2/20/2018	90792	Operational Flexibility Denial
2/20/2018	90792	Operational Flexibility Denial
2/28/2018	90933	Withdraw of EA Demo
3/1/2018	90932	Request for CAM for Silos K-319 and K-360
3/6/2018	91033	Mill Scale Supplier Change
3/9/2018	91155	APCD response to Mill Scale Supplier Change
3/12/2018	91179	Co Mill Scale Supplier Change
3/15/2018	91170	Reply to March 15 Mill Scale Notice
3/16/2018	91206	Regarding Action Required by April 2, 2018 CAM Request

Document Number	Date	Description
3/16/2018	91212	Pre Draft Title V Comments
3/19/2018	91220	APCD Response Regulation 7.02 and 7.08 Standards
3/19/2018	91229	Example Fugitive Sources at other Title V Facilities
3/26/2018	91305	Company IA Form 3000 gal tank
4/2/2018	91369	CAM PLAN for Silos
4/5/2018	91430	IA Form 100P for tanks
5/14/2018	92003	Company Comments on public noticed TV permit
10/22/2019	122643	District Response to Formal Comments
6/27/2018	16417	Lime sorbent injection modification application
9/20/2018	16422	Company Comments on construction permit C-0060-1056-18-V
11/28/2018	20302	CKD transfer system application
12/14/2018	20613	Spreadsheet calculations for CKD application
2/5/2019, 2/7/2019 & 2/8/2019	21155, 21176, & 21185	Company Comments on construction permit C-0060-1057-19-V
1/9/2020	127733 & 127734	Company Petition
2/12/2020 2/17/2020	131072 131855	Operational Flexibility Request for 545 Baghouse changes and subsequent approval
1/8/2021 1/8/2021	181507 181629	2 nd Operational Flexibility Request for 545 Baghouse changes and subsequent approval
6/23/2021	230973	Revised EA Demo Category 1-4 TAC 2021
8/2/2021	242798	Company comments on draft Statement of Basis

9. Operational Flexibility Approvals

Document Number	Date Approved	Description of the Approved Request
6207	7/13/2009*	Mortar Mixing Mill System notification to switch bin used to feed cement into 1129 Mortar Mixing Mill from K-1114 "Mortar Bin" controlled by K-1113 to K-1105 "Lime Bin" controlled by K-1103
6208, 6209, 6210, 6211, 6212, 6213, 6214	2/3/2011**	U1 Barge Unloading and Transfer to begin unloading coal and pet coke using barge unloading and transfer system associated with limestone unloading using radial stacker K-142

Document Number	Date Approved	Description of the Approved Request
56245, 56425, 57429, 57430, 58076	6/26/2013**	Combustion of Residual Fuel Oil in the Kiln and handling equipment for tire shreds
65937, 66032, 66082	7/17/2014**	Temporary operation of a replacement for our primary sand screener
67386, 67416	10/1/2014**	Met coke Operational Flexibility Notification
67736, 67769, 67798	11/3/2014**	Operational Flexibility Notification for Planned Modification to Emission Unit U-18 Baghouse K-924
67813, 68629, 87386	11/14/2014**	Draft line configuration modification in U-9 from screw 438, modification of ducting of baghouses K-448 and K-454
80924, 80990, 81320, 81455	1/25/2017**	Operational Flexibility for Airslides K-1460, K-1462, K-1463, and K-1465 – equipment replacement
84072, 84164	5/15/2017**	Operational Flexibility for raw material substitution for hydrated lime
84929, 84978, 84996, 84997, 85000	6/27/2017**	Operational Flexibility for Lime – sorbent injection system alternative flow pathways
85042, 85043	6/28/2017**	Operational Flexibility for U19 Crusher – alternative raw materials
131072, 131855	2/12/2020**	Operational Flexibility Approval for Emission Unit U7/U13 Raw Mill D Baghouse C-545 (tubesheet replacement and change to bag filter length)
181629	1/8/2021**	2 nd Operational Flexibility Approval for Emission Unit U7/U13 Raw Mill D Baghouse C-545 (tubesheet replacement and change to bag filter length)

* No specific approval notice on file

** Approval notice document listed

10. Emission Summary

Pollutant	District Calculated Actual Emissions (tpy) 2019 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	513.2	Yes
NO _x	1270.3	Yes
SO ₂	278.6	Yes
PM ₁₀	127.0	Yes
VOC	37.3	Yes

Pollutant	District Calculated Actual Emissions (tpy) 2019 Data	Pollutant that triggered Major Source Status (based on PTE)
Total HAPs	5.68	Yes
Single HAP > 1 tpy		
Hydrochloric Acid	2.8	Yes

11. Applicable Requirements

- 40 CFR 60 SIP 40 CFR 63
- 40 CFR 61 District Origin Other

12. Referenced Federal Regulations:

- 40 CFR 60 Subpart F – Standards of Performance for Portland Cement Plants
- 40 CFR 60 Subpart Y – Standards of Performance for Coal Preparation and Processing Plants
- 40 CFR 60 Subpart OOO – Standards of Performance for Nonmettalic Mineral Processing Plants
- 40 CFR 60 Subpart DDDD – Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units
- 40 CFR 63, subpart LLL – National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry
- 40 CFR 63, subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

13. Non-Applicable Regulations:

Equipment ID	Regulation	Title	Reason for Non-applicability
K-319	40 CFR 64	Compliance Assurance Monitoring (CAM)	Dust collectors determined to be process devices
K-360			
K-900/901			Particulate matter limit to which CAM applied replaced by limit in another District Chapter 7 Regulation
K-909			

II Regulatory Analysis

1. Acid Rain Requirements:

Kosmos Cement Company LLC is not subject to the Acid Rain Program.

2. Stratospheric Ozone Protection Requirements:

Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. Kosmos Cement Company LLC does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

3. Prevention of Accidental Releases 112(r):

Kosmos Cement Company LLC does manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, Chemical Accident Prevention Provisions. The source accepted a limit for ammonia in order to be exempt from Regulation 5.15.

4. 40 CFR Part 64 Applicability Determination:

Kosmos Cement Company LLC is not subject to 40 CFR Part 64 - *Compliance Assurance Monitoring*.

5. Basis of Regulation Applicability

a. Applicable Regulations

Regulation	Title	Type
1.14	Control of Fugitive Particulate Emissions	SIP
2.05	Prevention of Significant Deterioration of Air Quality	SIP
5.00	Standards for Toxic Air Contaminants and Hazardous Air Pollutants	Local
5.01	General Provisions	SIP
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	Local
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	Local
5.21	Environmental Acceptability for Toxic Air Contaminants	Local
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	Local
5.23	Categories of Toxic Air Contaminants	Local
6.09	Standards of Performance for Existing Process Operations	SIP
6.10	Standard of Performance for Existing Process Gas Streams	SIP
6.14	Standard of Performance for Selected Existing Petroleum Refining Processes and Equipment	SIP
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	SIP

Regulation	Title	Type
6.42	Reasonably Available Control Technology Requirements for Major Volatile Organic Compound and Nitrogen Oxides Emitting Facilities	SIP
7.01	General Provisions (for <i>New Affected Facilities</i>)	SIP
7.02	Federal New Source Performance Standards Incorporated by Reference	Local
7.08	Standards of Performance for New Process Operations	SIP
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	SIP
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	SIP
40 CFR 60 Subpart A	General Provisions	Federal
40 CFR 60 Subpart F	Standards of Performance for Portland Cement Plants	Federal
40 CFR 60 Subpart Y	Standards of Performance for Coal Preparation and Processing Plants	Federal
40 CFR 60 Subpart OOO	Standards of Performance for Nonmettalic Mineral Processing Plants	Federal
40 CFR 60 Subpart DDDD	Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units	Federal
40 CFR 63 Subpart A	General Provisions	Federal
40 CFR 63 Subpart LLL	National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry	Federal
40 CFR 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Federal

b. Plantwide

- i. Kosmos Cement Company LLC is a major source for NO_x, CO, SO₂, VOC, PM₁₀, Total HAP, and Single HAP. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.
- ii. Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.
- iii. Regulation 5.21 sections 4.2 and 4.3 provide the authority for emission unit specific TAC limitations. Regulation 5.21 sections 4.2 and 4.3 provide the authority for maintaining TAC emissions below

respective *de minimis* values. Regulation 1.05 provides authority for operating standards to properly maintain control devices.

- iv. Kosmos Cement Company LLC submitted a TAC Environmental Acceptability Demonstration to the District on 6/23/2021. Compliance with the STAR EA Goals was demonstrated in the source’s EA Demonstration. Tier 4 methodology using AERMOD was performed to demonstrate environmental acceptability. The District reviewed the EA Demonstration submitted by the source. The following table demonstrates that the plantwide risk values presented in the source’s EA Demonstration comply with the STAR EA goals required in Regulation 5.21.

The Plantwide Risk and individual TAC risk are as follows:

	All P/PE		All New P/PE	
All TAC / All P/PE / Industrial Total Rc	8.36	< 75	1.80	< 38
All TAC / All new P/PE / Non-Ind. Total Rc	7.36	< 7.5	2.50	< 3.8

*See table below for individual Process Risk values for Individual TAC. EA Goal of Industrial Risk < 10, HQ < 3 and EA Goal of Non-Industrial Risk < 1.0, HQ < 1.0 are demonstrated based on the revised plantwide EAD submitted June 23, 2021

Environmental Acceptability Demonstration Summary Table								
Individual TAC // Individual P/PE – Max Rc & Max HQ (Regulation 5.21, Sections 3.1.1, 3.6.1, and 3.6.2)								
Individual TAC // All P/PE – Cumulative HQ (Regulation 5.21, Section 3.1.2 and 3.6.2)								
Ambient Air on Industrial Property or Public Roadways								
Process / Process Equipment (P/PE) ID	Existing or New/Mod	Emission Unit ID	Individual TAC	Category	Averaging Period	Rc Single TAC Single P/PE	HQ Single TAC Single P/PE	HQ Single TAC All P/PE
K-231 (K-216)	Existing	U5	Arsenic (As)	1	Annual	0.04	6.11E-04	5.44E-02
K-239	Existing	U5	Arsenic (As)	1	Annual	0.11	1.72E-03	
K-335	Existing	U5	Arsenic (As)	1	Annual	1.05	1.61E-02	
K-355	New/Mod	U5	Arsenic (As)	1	Annual	0.06	8.55E-04	
K-357	New/Mod	U5	Arsenic (As)	1	Annual	0.09	1.32E-03	
K-392	Existing	U5	Arsenic (As)	1	Annual	0.12	1.91E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Arsenic (As)	1	Annual	0.44	6.77E-03	
K-421	New/Mod	U8	Arsenic (As)	1	Annual	0.01	2.05E-04	
K-557	Existing	U11	Arsenic (As)	1	Annual	0.04	5.37E-04	
K-600	Existing	U11/U23	Arsenic (As)	1	Annual	0.04	6.83E-04	
K-857-1,2,3	Existing	U16	Arsenic (As)	1	Annual	0.05	8.33E-04	
K-915-4	New/Mod	U18	Arsenic (As)	1	Annual	0.02	3.77E-04	
K-924	New/Mod	U18	Arsenic (As)	1	Annual	0.05	7.51E-04	
K-974	Existing	U19	Arsenic (As)	1	Annual	0.04	6.03E-04	
E-CLINKER CRUSHER/ F-CLINKER CRUSHER	Existing	U19	Arsenic (As)	1	Annual	0.56	8.55E-03	
K-1012	Existing	U20	Arsenic (As)	1	Annual	0.04	5.47E-04	
K-1027	Existing	U21	Arsenic (As)	1	Annual	0.04	6.24E-04	
K-1321	Existing	U24	Arsenic (As)	1	Annual	0.04	6.81E-04	
K-1430	Existing	U24	Arsenic (As)	1	Annual	0.08	1.23E-03	
K-1431	Existing	U24	Arsenic (As)	1	Annual	0.08	1.23E-03	
K-1635	Existing	U24	Arsenic (As)	1	Annual	0.15	2.29E-03	
K-1601	Existing	U24/U25	Arsenic (As)	1	Annual	0.10	1.53E-03	

Environmental Acceptability Demonstration Summary Table								
Individual TAC // Individual P/PE – Max Rc & Max HQ (Regulation 5.21, Sections 3.1.1, 3.6.1, and 3.6.2)								
Individual TAC // All P/PE – Cumulative HQ (Regulation 5.21, Section 3.1.2 and 3.6.2)								
Ambient Air on Industrial Property or Public Roadways								
Process / Process Equipment (P/PE) ID	Existing or New/Mod	Emission Unit ID	Individual TAC	Category	Averaging Period	Rc Single TAC Single P/PE	HQ Single TAC Single P/PE	HQ Single TAC All P/PE
K-1243	Existing	U26	Arsenic (As)	1	Annual	0.01	1.65E-04	
K-1244	Existing	U26	Arsenic (As)	1	Annual	7.39E-03	1.13E-04	
K-1245	Existing	U26	Arsenic (As)	1	Annual	0.05	7.40E-04	
K-1246	Existing	U26	Arsenic (As)	1	Annual	0.06	8.67E-04	
K-1247	Existing	U26	Arsenic (As)	1	Annual	0.07	1.07E-03	
K-1152	Existing	U31	Arsenic (As)	1	Annual	0.06	8.70E-04	
K-1160 & K-1162	Existing	U31	Arsenic (As)	1	Annual	0.05	6.91E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Benzene	1	Annual	0.02	2.45E-04	2.81E-04
K-857-1,2,3	Existing	U16	Benzene	1	Annual	2.40E-03	3.59E-05	
K-231 (K-216)	Existing	U5	Cadmium (Ca)	1	Annual	0.01	2.86E-04	1.51E-03
K-945 & K-545 (K-541)	New/Mod	U7/U13	Cadmium (Ca)	1	Annual	0.03	9.09E-04	
K-857-1,2,3	Existing	U16	Cadmium (Ca)	1	Annual	4.04E-03	1.13E-04	
K-924	New/Mod	U18	Cadmium (Ca)	1	Annual	7.27E-03	2.04E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Chromium Trivalent (Cr ³⁺)	1	8-Hour	N/A	9.72E-03	9.72E-03
K-162	Existing	U3	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.03	3.56E-04	8.46E-02
K-231 (K-216)	Existing	U5	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	6.99E-03	7.25E-05	
K-335	Existing	U5	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.20	2.09E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.14	1.43E-03	
K-421	New/Mod	U8	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.02	1.68E-04	
K-557	Existing	U11	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	4.41E-04	
K-600	Existing	U11/U23	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.05	5.61E-04	
K-857-1,2,3	Existing	U16	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.02	1.78E-04	
K-915-4	New/Mod	U18	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.02	2.30E-04	
K-924	New/Mod	U18	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	4.58E-04	
K-974	Existing	U19	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	3.69E-04	
E-CLINKER CRUSHER/ F-CLINKER CRUSHER	Existing	U19	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.50	5.22E-03	
K-1012	Existing	U20	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.21	2.17E-03	
K-1014	New/Mod	U20	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.07	7.25E-04	
K-1027	Existing	U21	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.24	2.48E-03	
K-1030	New/Mod	U21	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	4.48E-04	
K-1128	Existing	U22	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	3.95E-04	
K-1321	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.26	2.70E-03	
K-1430	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.47	4.86E-03	
K-1431	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.47	4.86E-03	
K-1450	New/Mod	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.16	1.70E-03	
K-1452	New/Mod	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.17	1.73E-03	
K-1454	New/Mod	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.17	1.73E-03	
K-1487	New/Mod	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.14	1.45E-03	
K-1491	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.13	1.31E-03	
K-1601	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.59	6.08E-03	
K-1603	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.34	3.54E-03	
K-1628	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.06	6.28E-04	
K-1629	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.23	2.41E-03	
K-1635	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.88	9.10E-03	
K-1400	Existing	U25	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.08	8.55E-04	
K-1408	Existing	U25	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.09	9.14E-04	
K-1412	Existing	U25	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.10	1.05E-03	
K-1420	Existing	U25	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.18	1.89E-03	

Environmental Acceptability Demonstration Summary Table								
Individual TAC // Individual P/PE – Max Rc & Max HQ (Regulation 5.21, Sections 3.1.1, 3.6.1, and 3.6.2)								
Individual TAC // All P/PE – Cumulative HQ (Regulation 5.21, Section 3.1.2 and 3.6.2)								
Ambient Air on Industrial Property or Public Roadways								
Process / Process Equipment (P/PE) ID	Existing or New/Mod	Emission Unit ID	Individual TAC	Category	Averaging Period	Rc Single TAC Single P/PE	HQ Single TAC Single P/PE	HQ Single TAC All P/PE
K-1425	Existing	U25	Chromium ^{trivalent} (Cr ³⁺)	1	Annual	0.15	1.56E-03	
K-ELS	Existing	U25	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.08	8.36E-04	
K-1243	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.06	6.53E-04	
K-1244	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.04	4.50E-04	
K-1245	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.28	2.94E-03	
K-1246	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.15	1.59E-03	
K-1247	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.41	4.23E-03	
K-1135	Existing	U31	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.12	1.22E-03	
K-1136-2	Existing	U31	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.03	3.30E-04	
K-1152	Existing	U31	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.33	3.45E-03	
K-1160 & K-1162	Existing	U31	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.26	2.74E-03	
K-231 (K-216)	Existing	U5	Formaldehyde	1	Annual	0.18	1.51E-03	4.52E-03
K-421	New/Mod	U8	Formaldehyde	1	Annual	0.07	5.71E-04	
K-454	New/Mod	U9	Formaldehyde	1	Annual	0.05	4.55E-04	
K-451	New/Mod	U9	Formaldehyde	1	Annual	0.07	5.63E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Formaldehyde	1	Annual	0.14	1.24E-03	
K-857-1,2,3	Existing	U16	Formaldehyde	1	Annual	0.02	1.82E-04	
K-239	Existing	U5	Nickel (Ni)	1	Annual	0.14	0.04	3.08E-01
K-231 (K-216)	Existing	U5	Nickel (Ni)	1	Annual	0.05	0.01	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Nickel (Ni)	1	Annual	0.22	0.06	
K-857-1,2,3	Existing	U16	Nickel (Ni)	1	Annual	0.03	8.18E-03	
K-924	New/Mod	U18	Nickel (Ni)	1	Annual	0.01	2.78E-03	
K-974	Existing	U19	Nickel (Ni)	1	Annual	8.24E-03	2.24E-03	
E-CLINKER CRUSHER/ F-CLINKER CRUSHER	Existing	U19	Nickel (Ni)	1	Annual	0.67	0.18	
K-1160 & K-1162	Existing	U31	Nickel (Ni)	1	Annual	9.79E-03	2.66E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Aluminum (Al)	2	8-Hour	N/A	0.10	2.15E-01
K-857-1,2,3	Existing	U16	Aluminum (Al)	2	8-Hour	N/A	5.66E-03	
K-924	New/Mod	U18	Aluminum (Al)	2	8-Hour	N/A	0.04	
K-974	Existing	U19	Aluminum (Al)	2	8-Hour	N/A	0.02	
K-1012	Existing	U20	Aluminum (Al)	2	8-Hour	N/A	0.01	
K-1027	Existing	U21	Aluminum (Al)	2	8-Hour	N/A	0.01	
K-1152	Existing	U31	Aluminum (Al)	2	8-Hour	N/A	0.02	
K-1160 & K-1162	Existing	U31	Aluminum (Al)	2	8-Hour	N/A	0.02	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Ammonia (NH ₃)	2	Annual	N/A	2.05E-03	2.05E-03
K-231 (K-216)	Existing	U5	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	1.62E-03	7.11E-02
K-239	Existing	U5	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.08	4.24E-03	
K-335	Existing	U5	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.08	4.52E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.08	8.25E-03	
K-857-1,2,3	Existing	U16	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	9.80E-03	4.72E-04	
K-915-4	New/Mod	U18	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.02	5.48E-04	
K-924	New/Mod	U18	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	3.28E-03	
K-974	Existing	U19	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.02	1.63E-03	
E-CLINKER CRUSHER/ F-CLINKER CRUSHER	Existing	U19	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.35	0.03	

Environmental Acceptability Demonstration Summary Table								
Individual TAC // Individual P/PE – Max Rc & Max HQ (Regulation 5.21, Sections 3.1.1, 3.6.1, and 3.6.2)								
Individual TAC // All P/PE – Cumulative HQ (Regulation 5.21, Section 3.1.2 and 3.6.2)								
Ambient Air on Industrial Property or Public Roadways								
Process / Process Equipment (P/PE) ID	Existing or New/Mod	Emission Unit ID	Individual TAC	Category	Averaging Period	Rc Single TAC Single P/PE	HQ Single TAC Single P/PE	HQ Single TAC All P/PE
K-1012	Existing	U20	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.02	8.71E-04	
K-1027	Existing	U21	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.02	9.40E-04	
K-1430	Existing	U24	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.05	7.32E-03	
K-1431	Existing	U24	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.05	6.86E-03	
K-1152	Existing	U31	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	1.32E-03	
K-1160 & K-1162	Existing	U31	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	1.34E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Hydrochloric Acid (HCl)	2	Annual	N/A	0.01	1.27E-02
K-857-1,2,3	Existing	U16	Hydrochloric Acid (HCl)	2	Annual	N/A	1.62E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Lead (Pb)	2	Annual	7.25E-03	N/A	N/A
K-239	Existing	U5	Manganese (Mn)	2	Annual	N/A	0.20	8.99E-01
E-CLAY 2 / F-CLAY 2	Existing	U5	Manganese (Mn)	2	Annual	N/A	0.61	
K-231 (K-216)	Existing	U5	Manganese (Mn)	2	Annual	N/A	0.07	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Manganese (Mn)	2	Annual	N/A	8.45E-03	
K-924	New/Mod	U18	Manganese (Mn)	2	Annual	N/A	5.85E-03	
K-231 (K-216)	Existing	U5	Naphthalene	2	Annual	0.02	2.22E-04	8.25E-04
K-945 & K-545 (K-541)	New/Mod	U7/U13	Naphthalene	2	Annual	0.05	5.25E-04	
K-857-1,2,3	Existing	U16	Naphthalene	2	Annual	7.97E-03	7.70E-05	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Beryllium (Be)	3	Annual	0.02	4.44E-04	5.43E-04
K-924	New/Mod	U18	Beryllium (Be)	3	Annual	4.74E-03	9.95E-05	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Dibenz[a,h]anthracene [POM]	3	Annual	4.60E-03	9.55E-05	9.55E-05
K-945 & K-545 (K-541)	New/Mod	U7/U13	Phenanthrene [POM]	3	Annual	N/A	0.02	2.36E-02
K-945 & K-545 (K-541)	New/Mod	U7/U13	2,3,7,8-Tetrachlorodibenzo-p-dioxin	4	Annual	0.05	3.33E-05	3.33E-05

Environmental Acceptability Demonstration Summary Table								
Individual TAC // Individual P/PE – Max Rc & Max HQ (Regulation 5.21, Section 3.1.1)								
Individual TAC // All P/PE – Cumulative HQ (Regulation 5.21, Section 3.1.2)								
Ambient Air on Non-Industrial Property excluding Public Roadways								
Process / Process Equipment (P/PE) ID	Existing or New/Mod	Emission Unit ID	Individual TAC	Category	Averaging Period	Rc Single TAC Single P/PE	HQ Single TAC Single P/PE	HQ Single TAC All P/PE
K-231 (K-216)	Existing	U5	Arsenic (As)	1	Annual	0.03	5.22E-04	4.38E-02
K-239	Existing	U5	Arsenic (As)	1	Annual	0.07	1.06E-03	
K-335	Existing	U5	Arsenic (As)	1	Annual	0.40	6.11E-03	
K-355	New/Mod	U5	Arsenic (As)	1	Annual	0.05	7.45E-04	
K-357	New/Mod	U5	Arsenic (As)	1	Annual	0.04	5.38E-04	
K-392	Existing	U5	Arsenic (As)	1	Annual	0.05	7.76E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Arsenic (As)	1	Annual	0.65	9.90E-03	
K-421	New/Mod	U8	Arsenic (As)	1	Annual	0.01	1.75E-04	
K-557	Existing	U11	Arsenic (As)	1	Annual	0.03	3.92E-04	
K-600	Existing	U11/U23	Arsenic (As)	1	Annual	0.03	4.64E-04	
K-857-1,2,3	Existing	U16	Arsenic (As)	1	Annual	0.07	1.07E-03	
K-915-4	New/Mod	U18	Arsenic (As)	1	Annual	0.02	2.81E-04	

Environmental Acceptability Demonstration Summary Table								
Individual TAC // Individual P/PE – Max Rc & Max HQ (Regulation 5.21, Section 3.1.1)								
Individual TAC // All P/PE – Cumulative HQ (Regulation 5.21, Section 3.1.2)								
Ambient Air on Non-Industrial Property excluding Public Roadways								
Process / Process Equipment (P/PE) ID	Existing or New/Mod	Emission Unit ID	Individual TAC	Category	Averaging Period	Rc Single TAC Single P/PE	HQ Single TAC Single P/PE	HQ Single TAC All P/PE
K-924	New/Mod	U18	Arsenic (As)	1	Annual	0.05	7.19E-04	
K-974	Existing	U19	Arsenic (As)	1	Annual	0.04	6.39E-04	
E-CLINKER CRUSHER/ F-CLINKER CRUSHER	Existing	U19	Arsenic (As)	1	Annual	0.69	0.01	
K-1012	Existing	U20	Arsenic (As)	1	Annual	0.03	3.87E-04	
K-1027	Existing	U21	Arsenic (As)	1	Annual	0.03	5.11E-04	
K-1321	Existing	U24	Arsenic (As)	1	Annual	0.01	2.10E-04	
K-1430	Existing	U24	Arsenic (As)	1	Annual	0.08	1.30E-03	
K-1431	Existing	U24	Arsenic (As)	1	Annual	0.09	1.30E-03	
K-1635	Existing	U24	Arsenic (As)	1	Annual	0.05	7.43E-04	
K-1601	Existing	U24/U25	Arsenic (As)	1	Annual	0.04	5.75E-04	
K-1243	Existing	U26	Arsenic (As)	1	Annual	0.02	3.77E-04	
K-1244	Existing	U26	Arsenic (As)	1	Annual	9.39E-03	1.44E-04	
K-1245	Existing	U26	Arsenic (As)	1	Annual	0.07	1.11E-03	
K-1246	Existing	U26	Arsenic (As)	1	Annual	0.07	1.01E-03	
K-1247	Existing	U26	Arsenic (As)	1	Annual	0.04	6.77E-04	
K-1152	Existing	U31	Arsenic (As)	1	Annual	0.05	7.51E-04	
K-1160 & K-1162	Existing	U31	Arsenic (As)	1	Annual	0.05	7.23E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Benzene	1	Annual	0.03	4.02E-04	4.48E-04
K-857-1,2,3	Existing	U16	Benzene	1	Annual	3.11E-03	4.67E-05	
K-231 (K-216)	Existing	U5	Cadmium (Ca)	1	Annual	8.71E-03	2.44E-04	1.91E-03
K-945 & K-545 (K-541)	New/Mod	U7/U13	Cadmium (Ca)	1	Annual	0.05	1.33E-03	
K-857-1,2,3	Existing	U16	Cadmium (Ca)	1	Annual	5.20E-03	1.46E-04	
K-924	New/Mod	U18	Cadmium (Ca)	1	Annual	6.96E-03	1.95E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Chromium Trivalent (Cr ³⁺)	1	8-Hour	N/A	0.01	1.44E-02
K-162	Existing	U3	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.03	2.81E-04	6.60E-02
K-231 (K-216)	Existing	U5	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	6.02E-03	6.25E-05	
K-335	Existing	U5	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.08	7.95E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.20	2.08E-03	
K-421	New/Mod	U8	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.01	1.44E-04	
K-557	Existing	U11	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.03	3.23E-04	
K-600	Existing	U11/U23	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	3.81E-04	
K-857-1,2,3	Existing	U16	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.02	2.30E-04	
K-915-4	New/Mod	U18	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.02	1.71E-04	
K-924	New/Mod	U18	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	4.39E-04	
K-974	Existing	U19	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	3.90E-04	
E-CLINKER CRUSHER/ F-CLINKER CRUSHER	Existing	U19	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.62	6.46E-03	
K-1012	Existing	U20	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.15	1.54E-03	
K-1014	New/Mod	U20	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.05	5.70E-04	
K-1027	Existing	U21	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.20	2.03E-03	
K-1030	New/Mod	U21	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.04	3.74E-04	
K-1128	Existing	U22	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.03	3.25E-04	
K-1321	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.08	8.33E-04	
K-1430	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.50	5.16E-03	
K-1431	Existing	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.50	5.17E-03	
K-1450	New/Mod	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.07	7.26E-04	
K-1452	New/Mod	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.08	8.71E-04	
K-1454	New/Mod	U24	Chromium Hexavalent (Cr ⁶⁺)	1	Annual	0.06	6.55E-04	

Environmental Acceptability Demonstration Summary Table								
Individual TAC // Individual P/PE – Max Rc & Max HQ (Regulation 5.21, Section 3.1.1)								
Individual TAC // All P/PE – Cumulative HQ (Regulation 5.21, Section 3.1.2)								
Ambient Air on Non-Industrial Property excluding Public Roadways								
Process / Process Equipment (P/PE) ID	Existing or New/Mod	Emission Unit ID	Individual TAC	Category	Averaging Period	Rc Single TAC Single P/PE	HQ Single TAC Single P/PE	HQ Single TAC All P/PE
K-1487	New/Mod	U24	Chromium ^{trivalent} (Cr ³⁺)	1	Annual	0.08	8.53E-04	
K-1491	Existing	U24	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.08	8.64E-04	
K-1601	Existing	U24	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.22	2.28E-03	
K-1603	Existing	U24	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.11	1.09E-03	
K-1628	Existing	U24	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.06	6.23E-04	
K-1629	Existing	U24	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.06	6.34E-04	
K-1635	Existing	U24	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.28	2.94E-03	
K-1400	Existing	U25	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.02	1.70E-04	
K-1408	Existing	U25	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.14	1.50E-03	
K-1412	Existing	U25	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.22	2.24E-03	
K-1420	Existing	U25	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.12	1.28E-03	
K-1425	Existing	U25	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.19	1.94E-03	
K-ELS	Existing	U25	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.13	1.39E-03	
K-1243	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.14	1.50E-03	
K-1244	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.06	5.73E-04	
K-1245	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.42	4.40E-03	
K-1246	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.18	1.86E-03	
K-1247	Existing	U26	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.26	2.69E-03	
K-1135	Existing	U31	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.10	1.09E-03	
K-1136-2	Existing	U31	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.03	3.08E-04	
K-1152	Existing	U31	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.29	2.98E-03	
K-1160 & K-1162	Existing	U31	Chromium ^{hexavalent} (Cr ⁶⁺)	1	Annual	0.28	2.87E-03	
K-231 (K-216)	Existing	U5	Formaldehyde	1	Annual	0.16	1.34E-03	4.62E-03
K-421	New/Mod	U8	Formaldehyde	1	Annual	0.06	5.07E-04	
K-454	New/Mod	U9	Formaldehyde	1	Annual	0.03	2.19E-04	
K-451	New/Mod	U9	Formaldehyde	1	Annual	0.03	2.80E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Formaldehyde	1	Annual	0.24	2.03E-03	
K-857-1,2,3	Existing	U16	Formaldehyde	1	Annual	0.03	2.36E-04	
K-239	Existing	U5	Nickel (Ni)	1	Annual	0.08	0.02	3.65E-01
K-231 (K-216)	Existing	U5	Nickel (Ni)	1	Annual	0.04	0.01	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Nickel (Ni)	1	Annual	0.32	0.09	
K-857-1,2,3	Existing	U16	Nickel (Ni)	1	Annual	0.04	0.01	
K-924	New/Mod	U18	Nickel (Ni)	1	Annual	9.82E-03	2.66E-03	
K-974	Existing	U19	Nickel (Ni)	1	Annual	8.73E-03	2.37E-03	
E-CLINKER CRUSHER/ F-CLINKER CRUSHER	Existing	U19	Nickel (Ni)	1	Annual	0.83	0.23	
K-1160 & K-1162	Existing	U31	Nickel (Ni)	1	Annual	8.73E-03	2.78E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Aluminum (Al)	2	8-Hour	N/A	0.14	2.57E-01
K-857-1,2,3	Existing	U16	Aluminum (Al)	2	8-Hour	N/A	8.12E-03	
K-924	New/Mod	U18	Aluminum (Al)	2	8-Hour	N/A	0.04	
K-974	Existing	U19	Aluminum (Al)	2	8-Hour	N/A	0.02	
K-1012	Existing	U20	Aluminum (Al)	2	8-Hour	N/A	9.61E-03	
K-1027	Existing	U21	Aluminum (Al)	2	8-Hour	N/A	6.65E-03	
K-1152	Existing	U31	Aluminum (Al)	2	8-Hour	N/A	0.01	
K-1160 & K-1162	Existing	U31	Aluminum (Al)	2	8-Hour	N/A	0.01	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Ammonia (NH ₃)	2	Annual	N/A	3.36E-03	3.36E-03
K-231 (K-216)	Existing	U5	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.02	2.21E-03	9.03E-02
K-239	Existing	U5	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.05	2.58E-03	

Environmental Acceptability Demonstration Summary Table								
Individual TAC // Individual P/PE – Max Rc & Max HQ (Regulation 5.21, Section 3.1.1)								
Individual TAC // All P/PE – Cumulative HQ (Regulation 5.21, Section 3.1.2)								
Ambient Air on Non-Industrial Property excluding Public Roadways								
Process / Process Equipment (P/PE) ID	Existing or New/Mod	Emission Unit ID	Individual TAC	Category	Averaging Period	R_c Single TAC Single P/PE	HQ Single TAC Single P/PE	HQ Single TAC All P/PE
K-335	Existing	U5	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	1.39E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.12	1.22E-02	
K-857-1,2,3	Existing	U16	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.01	6.77E-04	
K-915-4	New/Mod	U18	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.01	3.36E-04	
K-924	New/Mod	U18	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	3.56E-03	
K-974	Existing	U19	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	1.43E-03	
E-CLINKER CRUSHER/ F-CLINKER CRUSHER	Existing	U19	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.43	4.84E-02	
K-1012	Existing	U20	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.01	7.84E-04	
K-1027	Existing	U21	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.02	7.87E-04	
K-1430	Existing	U24	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.05	6.89E-03	
K-1431	Existing	U24	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.05	6.87E-03	
K-1152	Existing	U31	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	9.84E-04	
K-1160 & K-1162	Existing	U31	Cobalt (Co)	2	Annual (Rc) / 8-Hour (HQ)	0.03	1.22E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Hydrochloric Acid (HCl)	2	Annual	N/A	0.02	2.02E-02
K-857-1,2,3	Existing	U16	Hydrochloric Acid (HCl)	2	Annual	N/A	2.10E-03	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Lead (Pb)	2	Annual	0.01	N/A	N/A
K-239	Existing	U5	Manganese (Mn)	2	Annual	N/A	0.12	4.96E-01
E-CLAY 2 / F-CLAY 2	Existing	U5	Manganese (Mn)	2	Annual	N/A	0.29	
K-231 (K-216)	Existing	U5	Manganese (Mn)	2	Annual	N/A	0.06	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Manganese (Mn)	2	Annual	N/A	0.01	
K-924	New/Mod	U18	Manganese (Mn)	2	Annual	N/A	5.60E-03	
K-231 (K-216)	Existing	U5	Naphthalene	2	Annual	0.02	1.97E-04	1.16E-03
K-945 & K-545 (K-541)	New/Mod	U7/U13	Naphthalene	2	Annual	0.09	8.61E-04	
K-857-1,2,3	Existing	U16	Naphthalene	2	Annual	0.01	1.00E-04	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Beryllium (Be)	3	Annual	0.03	6.48E-04	7.43E-04
K-924	New/Mod	U18	Beryllium (Be)	3	Annual	4.52E-03	9.50E-05	
K-945 & K-545 (K-541)	New/Mod	U7/U13	Dibenz[a,h]anthracene [POM]	3	Annual	7.53E-03	1.56E-04	1.56E-04
K-945 & K-545 (K-541)	New/Mod	U7/U13	Phenanthrene [POM]	3	Annual	N/A	0.04	3.87E-02
K-945 & K-545 (K-541)	New/Mod	U7/U13	2,3,7,8-Tetrachlorodibenzo-p-dioxin	4	Annual	0.08	5.45E-05	5.45E-05

- v. Regulation 2.16, section 4.1.9.1 and 4.1.9.2 require monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the District upon request.
- vi. Regulation 2.16, section 4.3.5, requires stationary sources for which a Title V is issued shall submit an annual compliance certification by April 15 of the following calendar year. In addition, as required

by Regulation 2.16, section 4.1.9.3, the source shall submit compliance reports at least every six months to show compliance with the permit. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

vii. Standards

(1) Opacity

- (a) Regulation 1.14 sections 2.3 and 2.4, Regulation 6.09 section 3.1, and Regulation 7.08 section 3.1.1 establishes opacity standards of less than 20%.

(2) TAC

- (a) See 5.00 5.20, 5.21, and 5.23 (STAR Program) above.

c. Emission Unit U1 – Barge Unloading and Transfer

Equipment ID	Emission Point ID	Description	Applicable Regulation¹	Control ID	Release ID
K-Barge	E-Barge	Barge to Clam Shell Unloader (Capacity: 620 TPH)	1.14, STAR*	NA	F-Barge
K-ClamShell	E-Clam Shell	Clam Shell Unloader to Hopper K-100 (Capacity: 620 TPH)	1.14, STAR*	NA	F-Clam Shell
K-100	E-100	Hopper K-100 to Belt K-101 (Capacity: 620 TPH)	1.14, STAR*	NA	F-100
K-101	E-101	Belt K-101 to Belt K-102 (Make: Barber Greene; Capacity: 620 TPH; Installed: 1961)	1.14, STAR*	NA	F-101
K-102	E-102	Belt K-102 to Belt K-103 (Make: Barber Greene; Model: 72; Capacity: 620 TPH; Installed: 1961)	1.14, STAR*	NA	F-102
K-103	E-103	Belt K-103 to Belt K-104 (Make: Barber Greene; Model: Unknown; Capacity: 620 TPH; Installed: 1961)	1.14, STAR*	NA	F-103
K-104	E-104	Belt K-104 to Belt K-137 (Make: Barber Greene; Model: Unknown; Capacity: 620 TPH; Installed: 1971)	2.05, 6.09, STAR*	C-133	S-133

¹ 40 CFR 60 Subpart OOO applies to equipment listed in 40 CFR 60.670(a)(1) constructed or modified after August 31, 1983 as referenced in 40 CFR 60.670(e).

Equipment ID	Emission Point ID	Description	Applicable Regulation ¹	Control ID	Release ID
K-137	E-137	Belt K-137 to Diverter K-137-1 (Make: Barber Greene; Model: Unknown; Capacity: 620 TPH; Installed: 1971)	1.14, STAR*	NA	F-137
K-137-1	E-137-1a	Diverter K-137-1 to Stack K-142 (Capacity: 620 TPH; Installed: 1998)	2.05, 7.02, 7.08, STAR*, 40CFR60-000	C-145	S-145
	E-137-1b	Diverter K-137-1 to Belt K-140 (Capacity: 620 TPH; Installed: 1998)		C-136	S-136
K-142	E-142	Belt Stack K-142 to Limestone Pile (outside) to U2/3 Feeder Belt K-143 (Capacity: 350 TPH)	1.14, 7.02, STAR*, 40CFR60-000	NA	F-142
K-140	E-140	Belt K-140 to Indoor Pile (Make: Rexnord; Capacity: 620 TPH; Installed: 1973) (total enclosure no emissions)	1.14, STAR*	NA	NA
K-inlspile	E-In LS Pile	Indoor Pile to MIAG Feeder K-144	7.08, STAR*	NA	F-In LS Pile
K-144	E-144	MIAG Feeder K-144 to Belt K-146		NA	F-144
K-146	E-146	Belt K-146 to Belt K-148 (Capacity: 350 TPH)	2.05, 7.08, STAR*	C-134	S-134
K-148	E-148	Belt K-148 to Belt K-167 (total enclosure no emissions)	7.08, STAR*	NA	NA

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U1 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-133/K-133	Pulse jet baghouses (Make: IAC; Model: 72 TB; Capacity: 2,000 acfm each)	VEs	S-133
C-145/K-145			S-145
C-136/K-136			S-136
C-134/K-134			S-134

i. Standards

(1) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart OOO, section 60.672 establishes standards for opacity.

- (c) By demonstrating compliance with the opacity standards in 40 CFR 60 Subpart OOO, this also demonstrates compliance with the 20% opacity standards in Regulations 1.14, 6.09, and 7.08, where applicable.
- (2) PM
 - (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$
 - (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (c) PM standards (12 consecutive months, combined) are established by District Regulation 2.05 and 72-98-C for K-104, K-137-1, and K-146.
- (3) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) Opacity
 - (a) See Plantwide and Regulation 2.16.
- iii. Reporting
 - (1) Opacity
 - (a) See Plantwide and Regulation 2.16.

d. Emission Unit U-2/U-3: Limestone Handling and Crushing

Equipment ID	Emission Point ID	Description	Applicable Regulation ²	Control ID	Release ID
K-143	E-143	Feeder Belt K-143 to Belt K-149 (Capacity: 400 TPH; Installed: 1961)	1.14, STAR*	NA	F-143
K-167	E-167	Belt K-167 to Belt K-149 (Capacity: 500 TPH)	1.14, 7.02, STAR*, 40CFR60-OOO	NA	F-167

² 40 CFR 60 Subpart OOO applies to equipment listed in 40 CFR 60.670(a)(1) constructed or modified after August 31, 1983 as referenced in 40 CFR 60.670(e).

Equipment ID	Emission Point ID	Description	Applicable Regulation²	Control ID	Release ID
K-149	E-149	Belt K-149 to Box K-150 (Capacity: 620 TPH; Installed: 1974)	6.09, STAR*	C-162	S-162
K-150	E-150a	Box K-150 to Screen K-152 (Capacity: 500 TPH)	1.14, 7.02, STAR*, 40 CFR 60-000	NA	F-150a
	E-150b	Box K-150 to Screen K-151 (Capacity: 500 TPH)		NA	F-150b
K-151	E-151	Screen K-151 to Belts K-165 & 159 or Stone Box K-153 (Make: Link-Belt; Model: VP-138- E; Capacity: 500 TPH; Installed: 1961)	6.09, STAR*	C-162	S-162
K-152	E-152	Screen K-152 to Belts K-165 & 159 or Stone Box K-153 (Make: Link-Belt; Model: VP-138- E; Capacity: 500 TPH; Installed: 1961)	6.09, STAR*	C-162	S-162
K-159	E-159	Belt K-159 to Spillage Screw K159-1 (Make: Bakler-Bohnert; Model: 36"; Capacity: 600 TPH; Installed: 1981)	7.08, STAR*	C-162	S-162
K-159-1	E-159-1	Spillage Screw K159-1 to Belt K- 160 (Capacity: 500 TPH)	7.02, 7.08, STAR*, 40CFR60-000	C-162	S-162
K-160	E-160	Belt K-160 to Crushed Limestone Pile to U-4 (K309-312)/U-6 (K- 517) Feeders (Capacity: 500 TPH)	1.14, 7.02, STAR*, 40CFR60-000	NA	F-160
K-LS-Loader	E-LS OVERS	Limestone Loader (Capacity: 500 TPH)	1.14, STAR*	NA	F-LS- OVERS
K-153	E-153	Stone Box K-153 to Secondary Crusher K-156 (Capacity: 500)	7.02, 7.08, STAR*, 40CFR60-000	C-162	S-162
K-156	E-156	Limestone Secondary Crusher K- 156 to Belt K-157 (Make: Hazemag; Model: APSM 1320/S; Capacity: 500 TPH; Installed: 2003)	7.02, 7.08, STAR*, 40CFR60-000	C-162	S-162

Equipment ID	Emission Point ID	Description	Applicable Regulation ²	Control ID	Release ID
K-157	E-157	Belt K-157 to Belt K-149 (Make: Unknown; Model: 30"; Capacity: 600 TPH; Installed: 1961)	6.09, STAR*	C-158	S-158
K-165	E-165	Belt K-165 to Limestone Overs Pile to Outdoor Limestone Pile U- 1 (Capacity: 500 TPH)	1.14, 7.02, STAR*, 40CFR60-OOO	NA	F-165

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)
U2/U3 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-158/K-158	Pulse jet baghouse (Make: Norblo; Capacity: 2,000 DSCFM)	VEs	S-158
C-162/K-162	Pulse jet baghouse (Make: Norblo; Model: 648A; Capacity: 23,000 DSCFM)	VEs	S-162

i. Standards

(1) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart OOO, section 60.672 establishes standards for opacity.
- (c) By demonstrating compliance with the opacity standards in 40 CFR 60 Subpart OOO, this also demonstrates compliance with the 20% opacity standards in Regulations 1.14, 6.09, and 7.08, where applicable.

(2) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

- (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

(3) TAC

- (a) See Plantwide

- ii. Monitoring and Recordkeeping
 - (1) Opacity
 - (a) See Plantwide and Regulation 2.16.
- iii. Reporting
 - (1) Opacity
 - (a) See Plantwide and Regulation 2.16.

e. Emission Unit U4 – Limestone Storage and Reclaim

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-309-312	E-309	Weigh Feeder E-309 to Belt E-313	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-309
K-313	E-313	Belt K-313 to Limestone Silo K-314 (Make: Rexnord; Model: 30"; Capacity: 201.6 TPH; Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-332	S-332
K-314	E-314	Limestone Silo K-314 to Feeder K-320 (Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-332	S-332
K-320	E-320	Feeder K-320 to Belt K-401	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-332	S-332

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U4 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-332/K-332	Pulse jet baghouse (Make: Norblo; Model: 160AS Capacity: 2,500 DSCFM)	VEs	S-332

- i. Standards
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.
 - (2) Opacity

- (a) See Plantwide
 - (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
 - (c) By demonstrating compliance with the 10% opacity standards in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.
 - (3) PM
 - (a) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:
$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (4) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iv. Testing
 - (1) HAP

- (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
- (2) Opacity
- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

f. Emission Unit U5 – Raw Material Handling

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-Clay Loader	E-Clay Loader	Clay Loader	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-Clay Loader
	E-Clay 2			NA	F-Clay 2
K-201	E-201	Clay Hopper K-201 to Feeder K-202 (Make: Service Fabrication; Capacity: 100 TPH; Installed: 1994)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-201
K-202	E-202	Feeder K-202 to Belt K-209 (Make: Stephen-Adamson; Model: AD; Capacity: 100 TPH; Installed: 1961)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-202
K-210	E-210a	Clay Handling Screen K-210 to Belt K-209 (Make: FMC, Model: 62; Capacity: 201.6 TPH; Installed: 1961)	5.02, 7.02, 6.09, STAR*, 40CFR60-F, 40CFR63-LLL	C-210-1	S-210-1
	E-210b	Screen K-210 to Screw K-208 (Make: FMC; Model: 62; Capacity: 201.6 TPY; Installed: 1961)		C-239	S-239
K-209	E-209	Belt K-209 to Crusher K-203 (Capacity: 100 TPH)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-209
K-203	E-203	Crusher K-203 to Belt K-204 (Make: Williams; Model: #230 Type S; Capacity: 100 TPH)	7.02, 7.08, STAR*, 40CFR60-F	C-239	S-239

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-204	E-204	Belt K-204 to Belt K-205 (Make: Merrick; Capacity: 100 TPH; Installed: 1961)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-204
	E-204b	Belt K-204 to Belt K-250		NA	F-204
K-205	E-205	Belt K-205 to Dryer K-206 (Make: Stephen-Adamson; Model: 24"; Capacity: 100 TPH; Installed: 1961)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-205
K-206	E-ClayDry	Dryer K-206 to Elevator K-207 (Make: Combustion Equip.; Model: 65MKB; Capacity: 65 TPH; Installed: 1971)	5.02, 6.09, 6.10, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-231	S-231
	E-206			C-216 / C-231	S-231
K-207	E-207	Elevator K-207 to Screen K-210 (Make: Rexnord; Model: 2118-01; Capacity: 100 TPH; Installed: 1975)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-239	S-239
K-208	E-208	Screw K-208 to Elevator K-213	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-239	S-239
K-213	E-213	Elevator K-213 to Screw K-215 (Make: Rex Chainbelt; Model: 2116-02; Capacity: 100 TPH; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-231	S-231
K-250	E-250	Belt K-250 to Belt K-520	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-401-4	S-401-4
K-315	E-215a	Raw material Silo 2 K-315 unloading from Screw K-215	5.02, 7.02, 7.08 STAR*, 40CFR60-F, 40CFR63-LLL	C-231	S-231
	E-315			C-402	S-402
K-317	E-215b	Raw material Silo 3 K-317 unloading from Screw K-215	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-231	S-231
	E-317			C-402	S-402
K-316	E-217a	Raw material Silo 3 (limestone) K-316 unloading from Screw K-217	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-231	S-231
	E-316			C-402	S-402

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-318	E-217b	Raw material Silo 4 (limestone) K-318 unloading from Screw K-217	5.02, 7.02, 7.08 STAR*, 40CFR60-F, 40CFR63-LLL	C-231	S-231
	E-318			C-402	S-402
K-354	E-351	Belt K-354 from Sand Building Feeders K-351 through K-353 (installed 2007)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-355	S-355
K-356	E-356	Sand and Bottom Ash bin K-356 to Belt Feeder (85 tph)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-356
K-359	E-386	Fly Ash/Sand/Bottom Ash Conveyor (K-359)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-357	S-357
K-375	E-366	Fly Ash Metering System (K-375)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-357	S-357
K-366	E-360	Fly Ash Air Slide (40 tph) (K-366) (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-360	E-Fly Ash Load	Flyash Silo K-360	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-392	S-392
K-319	E-319	Hydrated Lime Silo K-319 with Rotary Feeder K-329 (Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-335	S-335

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-215	E-215	Screw (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-217	E-217	Screw (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-351-353	E-Sand	Sand Building Feeders K-351 through K-353 to Belt K-354 (Capacity: 50 TPH (each); Installed: 2007) (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-358-1	E-358-1	Feeder (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-386	E-375	Pug Screw (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-329	E-329	Rotary Feeder and hopper (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-324	E-324	Drag Feeder 3 K-324 (Capacity: 760 ton; Installed: 1961)	5.02, 6.09, 7.02 STAR*, 40CFR60-F, 40CFR63-LLL	C-402	S-402
K-322	E-322	Drag Feeder 2 K-322 (Capacity: 760 ton; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-402	S-402
K-321	E-321	Drag Feeder 1 K-321 (Capacity: 760 ton; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-402	S-402
K-323	E-323	Weigh Feeder K-323	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-401-2	S-401-2

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-325	E-325	Weigh Feeder K-325	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-402	S-402
K-327	E-327	Silo 4 Weigh Feeder K-327	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-401-2	S-401-2
K-401	E-401	Belt K-401 to Belt K-520 (Capacity: 201.6 TPH; Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-401-4	S-401-4
K-1360	E-1360	Hydrated lime to weigh hopper K-1360 from silo K-319 (Sorbent Injection Specialist, WH-3-3-60) 4,000 lb/hr	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1362	S-1362
K-1363	E-1363	Hydrated lime to weigh hopper K-1363 from silo K-319 (Sorbent Injection Specialist, WH-3-3-60) 4,000 lb/hr	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1365	S-1365
K-1361	E-1361	K-1361 Rotary Feeder/Airlock to K-900, K-944, K-645 via 4" SCH 40 piping and injection lances. (total enclosure no emissions) 2,500 lb/hr	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1364	E-1364	K-1364 Rotary Feeder/Airlock to K-900, K-944, K-645 via 4" SCH 40 piping and injection lances. (total enclosure no emissions) 2,500 lb/hr	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U5 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-210-1/K210-1	Cartridge dust collector capturing emissions from K-210 screen to the K-209 belt (Make: Wheelabrator; Model: 32 WCC MOD36PULSE; Capacity: 400 DSCFM)	VEs	S-210-1
C-239/K-239	Dust collector capturing emissions from elevator (K-213), screw (K-208), crusher (K-203), and the transfer of material from the (K-207) elevator to the (K-210) screen (Make: Norblo; Model: 324-A; Capacity: 7,000 DSCFM)	VEs	S-239
C-401-2/K-401-2	Dust collector capturing emissions from weigh feeder (K-227) and belt (K-401) (Make: WFI; Capacity: 2,500 DSCFM)	VEs	S-401-2
C-401-4/K-401-4	Dust collector capturing emissions from belt (K-401) to belt (K-520) (Make: WFI; Capacity: 2,500 DSCFM)	VEs	S-401-4
C-402/K-402	Dust collector capturing emissions from various feeders in the raw material handling process (Make: WFI; Capacity: 4,000 DSCFM)	VEs	S-402
C-216/K-216	Cyclone utilized to separate fines from the clay dryer. Smaller fines, not returned to the process are subsequently captured by baghouse C-231 and exhausted through the clay dryer stack. (Make: Buell; Model: 6 series 43A)	VEs	S-231
C-231/K-231	Dust collector capturing emission from various screws and the clay dryer and associated cyclone (Make: Fuller; Model: 96-14-14000; Capacity: 37,760 DSCFM)	VEs	S-231
C-335/K-335	Dust collector capturing emissions from trucks transferring lime to the hydrated lime silo (K-319) (Make: Fuller; Model: 24; Capacity: 18,000 DSCFM)	VEs	S-335
C-355/K-355	Dust collector capturing emissions from feeders (K-351 through K-353) (Capacity: 1,500 DSCFM)	VEs	S-355
C-392/K-392	Dust collector capturing emissions from trucks unloading into fly ash silo (K-360) (Capacity: 6,305 DSCFM)	VEs	S-392
C-357/K-357	Dust collector capturing emissions from the fly ash meter and pug screw (Capacity: 5,000 DSCFM)	VEs	S-357
C-1362/K-1362	Baghouse, Tiffin Environmental Products, Model: N3-IMBV-42 (Capacity: 60 DSCFM)	VEs	S-1362
C-1365/K-1365	Baghouse, Tiffin Environmental Products, Model: N3-IMBV-42 (Capacity: 60 DSCFM; backup baghouse for C-1362)	VEs	S-1365

- i. Standards
 - (1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, and 1347 establish HAP standards for this equipment.
 - (2) Opacity
 - (a) See Plantwide
 - (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
 - (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.
 - (3) PM
 - (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$
 - (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (c) For K-360 standards for 12 consecutive month PM and PM₁₀ emissions are established by District Regulation 2.05.
 - (4) SO₂
 - (a) For E-ClayDry Regulation 6.10, establishes a limit for SO₂.
 - (5) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60

Subpart F) to be demonstrated by compliance with the more stringent requirement.

iii. Reporting

(1) HAP

(a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.

(2) Opacity

(a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

iv. Testing

(1) HAP

(a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.

(2) Opacity

(a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

g. Emission Unit U6 – Raw Material Transfer

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-519	E-519	Fly Ash Transfer Belt K-519 to Diverter Gate K-405 (Make: Rexnord; Model: 36"; Capacity: 300 TPH; Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-510	S-510
K-520-1	E-520a	Diverter Gate K-520-1 to Belt K-519 (Make: Rexnord; Model: 36"; Capacity: 500 TPH; Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-522	S-522
	E-520b	Diverter Gate K-520-1 to Belt K-521 (Installed: 1987)		C-522	S-522
K-520	E-520	Belt K-520	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-511	S-511

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-Raw Loader	E-Raw Loader	Loader to Hopper K-516	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-Raw Loader
K-516	E-516	Hopper K-516 to Feeder K-517 (Capacity: 500 TPH; Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-522	S-522
K-517	E-517	Feeder K-517 to Elevator K-518 (Make: Syntron; Model: MF-200-B; Capacity: 500 TPH; Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-522	S-522
K-518	E-518	Elevator K-518 to Belt K-521 (Make: Rexnord; Model: 1600; Capacity: 500 TPH; Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-522	S-522

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U6 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-510/K-510	Pulse jet collector used to control particulates form Belt K-519 (Make: IAC; Model: 72 TB; Capacity: 2,000 DSCFM)	VEs	S-510
C-511/K-511	Pulse jet collector used to control particulates form Belt K-520 (Make: IAC; Model: 26 PE; Capacity: 2,000 DSCFM)	VEs	S-511
C-522/K-522	Pulse jet collector used to control particulates form Belt K-521 (Make: WFI; Model: Jet III 1064BA; Capacity: 6,000 DSCFM)	VEs	S-522

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63

Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

- (3) PM
 - (a) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:
$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
- (4) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

h. Emission Unit U8 – Raw Mill “A”

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-406	E-406	Bin K-406 to Feeder K-407 (Installed: before 9/1/1976)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-415	S-415
K-407	E-407	Feeder K-407 to Elevator K-408 (Make: Ramsey; Model: 32”; Capacity: 450 TPH; Installed: 1964)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-415	S-415
K-408	E-408	Elevator K-408 to Belt K-409 (Make: Rex; Model: ES 856; Capacity: 350 TPH; Installed: 1964)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-421	S-421
K-409	E-409	Conveyor Belt K-409 to Separator K-411 (Make: Continental; Model: 36”); Capacity: 350 TPH; Installed: 1971)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-421	S-421
K-411	E-411	Separator K-411 with, 20 MMBtu Direct-Fired Furnace (Dryer A) (Make: Raymond; Model: 16’ S.W.; Capacity: 350 TPH; Installed: 1961)	5.02, 6.09, 6.10, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-421	S-421
K-412	E-412	Screw (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-413	E-413	Mill "A" K-413 to Elevator K-408 (Make: Allis Chalmers; Model: 11’6”); Capacity: 100.8 TPH; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-415	S-415
K-414	E-414	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-428	E-428	Airslide S-945 (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U8 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-415/K-415	A three (3) compartment dust controlling particulates from the Raw Mill "A". (Make: Norblo; Model: 423-A Series 54-9; Capacity 6,000 DSCFM)	VEs	S-415
C-421/K-421	A one (1) compartment dust collector controlling particulates from the Raw Mill "A" separator and furnace. (Make: ETA Engineering; Model: 4212X96; Capacity: 27,500 DSCFM; Installed: 2010)	VEs	S-421

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

(3) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

- (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

- (c) District Construction Permit 102-08-C provides the authority for the PM standard for K-411.
- (4) SO₂
 - (a) For K-DryerA Regulation 6.10, establishes a limit for SO₂ that applies to petroleum refineries, by-product coke plants, and any other processes which were in being or under construction before April 19, 1972.
- (5) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

i. Emission Unit U9 – Raw Mill “B”

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-429	E-429	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-430	E-430	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-434	E-434	Bin K-434 to Feeder K-435 (Installed: “before 9/1/1976”)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-448	S-448
K-435	E-435	Feeder K-435 to Elevator K-436 (Make: Ramsey; Model: 32”; Capacity: 450 TPH; Installed: 1964)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-448	S-448
K-436	E-436	Elevator K-436 to Belt K-437 (Make: Rex; Model: ES 856; Capacity: 350 TPH; Installed: 1964)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-448	S-448
K-437	E-437	Conveyor Belt K-437 to Separator K-439 (Make: Continental; Model: 36”; Capacity: 350 TPH; Installed: 1971)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-448	S-448
K-439	E-439	Separator K-439 with, 20 MMBtu Direct-Fired Furnace (Dryer B) (Make: Raymond; Model: 16’ S.W.; Capacity: 350 TPH; Installed: 1961)	5.02, 6.09, 6.10, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-454/ C-451	S-454/ S-451

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-440	E-440	Screw (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-441	E-441	Mill "B" K-441 to Elevator K-436 (Make: Allis Chalmers; Model: 11'6"; Capacity: 100.8 TPH; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-445	S-445
K-442	E-442	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U9 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-445/K-445	A dust collector controlling particulates from the Raw Mill "B". (Make: Norblo; Model: 324-A Series 54-9; Capacity 6,000 DSCFM)	VEs	S-445
C-448/K-448	A dust collector controlling particulates from the Raw Mill "B" K-434 bin, K-435 feeder, K-436 elevator, and K-437 belt. (Make: AAF International; Capacity: 6,000 DSCFM)	VEs	S-448
C-451/K-451	A six (6) compartment dust collector controlling particulates from the Raw Mill "B" separator (K-439) and furnace. (Make: AAF International; Capacity: 15,000 DSCFM; Installed: 2008)	VEs	S-451
C-454/K-454	A six (6) compartment dust collector controlling particulates from the Raw Mill "B" separator (K-439) and furnace. (Make: AAF International; Capacity: 15,000 DSCFM; Installed: 2008)	VEs	S-451

- i. Standards
 - (1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, and 1347 establish HAP standards for this equipment.
- (2) Opacity
 - (a) See Plantwide
 - (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
 - (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.
- (3) PM
 - (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:
$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$
 - (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:
$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (c) District Construction Permit 101-08-C provides the authority for the PM standard for K-439.
- (4) SO₂
 - (a) For K-439 (DryerB) Regulation 6.10, establishes a limit for SO₂ that applies to petroleum refineries, by-product coke plants, and any other processes which existed or were under construction before April 19, 1972.
- (5) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

j. Emission Unit U11 – Kiln Feed Silos

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-601W	E-443a / E-625d	Pump K-443 or Pump K-625 to West Kiln Feed Silo K-601W (Capacity: 500 TPH; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-600	S-600
K-602E	E-443b / E-625c	Pump K-443 or Pump K-625 to East Kiln Feed Silo K-602E (Capacity: 500 TPH; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-600	S-600

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-601	E-601	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-602	E-602	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-554	E-625a	Pump K-625 to North Silo K-554 (Capacity: 500 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-557	S-557
	E-554	North Silo K-554 to Truck Loadout (Capacity: 500 TPH; Installed: 1974)		C-557	S-557
K-555	E-625b	Pump K-625 to Center Silo K-555 (Capacity: 500 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-557	S-557
	E-555	Center Silo K-555 to Truck Loadout (Capacity: 500 TPH; Installed: 1974)		C-557	S-557
K-556	E-625c	Pump K-625 to South Silo K-556 (Capacity: 500 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-557	S-557
	E-556	South Silo K-556 to Truck Loadout (Capacity: 500 TPH; Installed: 1974)		C-557	S-557

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U11 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-600/K-600	This is a single compartment pulse jet dust collector serving blending silos (K-601W and K-602E) (Make: Wheelabrator; Model: 132 Series 6P; Capacity 22,000 DSCFM)	VEs	S-600

ID	Description	Performance Indicator	Stack ID
C-557/K-557	One hundred sixty-nine (169) compartment baghouse controlling emissions from the North, Center, and South slurry silos. (Make: Wheelabrator; Model: Jet III; Capacity: 18,000 DSCFM)	VEs	S-557

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

(3) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

- (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

(4) TAC

- (a) See Plantwide

ii. Monitoring and Recordkeeping

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.

(2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

k. Emission Unit U12 – Kiln Feed System

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Stack ID
K-616	E-616	South Kiln Feed Silos K-616 to Airslide K-621-3 (Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-618	S-618
K-561	E-561	Airslide K-561 to South Kiln Feed Silo K-616 (Capacity: 360 TPH; Installed: 1974)	2.05, 5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-564	S-564

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Stack ID
K-560	E-560	Elevator K-560 to Airslide K-561 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-564	S-564
K-560-7	E-560-7	Screw conveyor K-992/Airslide K-560-7 to Elevator K-560 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-559	S-559
K-560-2	E-560-2	Airslide K-560-2 to Airslide K-560-7 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-560-4	S-560-4
	E-541B	Cyclone K-541 (U7/U13) to Airslide K-560-2 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-560-4	S-560-4
K-617	E-617	North Kiln Feed Silo K-617 to Airslide K-621-3 (Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-618-3	S-618-3
K-562	E-562	Airslide K-562 to North Kiln Feed Silo K-617 (Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-564	S-564
K-621-3	E-621-3	Baghouse K-945 (U7/U13) via Screw K-945-30 to Level bin K-623 (Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-627	S-627
K-623	E-623	Level bin K-623 to Airslide K-623-3 (Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-627	S-627
K-623-3	E-623-3	Airslide K-623-3 to Weigh feeder K-624 (Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-627	S-627
K-624	E-624	Weigh feeder K-624 to Pump K-625 (Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-627	S-627

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Stack ID
K-622	E-622	Airslide (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-328-1	E-328-1	Rotary Feeder from Hydrated Lime Silo K-319 (U5) to Elevator K-645 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-640	S-640
K-645	E-645	Elevator K-645 to Airslide K-639 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-640	S-640
K-639	E-639	Airslide K-639 to Level bin K-637 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-642	S-642
K-637	E-637	Level bin K-637 to Elevator K-648 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-642	S-642
K-648	E-648	Elevator K-648 to Airslide K-651 (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-647	S-647
K-651	E-651	Airslide K-651 to Preheat Tower K-900 (U7/U13) (Capacity: 360 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-647	S-647

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U12 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-618/K-618	A three (3) compartment baghouse serving the south kiln feed silo (K-616) (Make: Wheelabrator; Model: 72-108; Capacity: 5,100 DSCFM)	VEs	S-618
C-564/K-564	A pulse jet dust collector that controls emissions associated with the kiln feed raw meal handling system (Make: IAC; Model: 72 TB; Capacity: 2,000 DSCFM)	VEs	S-564

ID	Description	Performance Indicator	Stack ID
C-559/K-559	A pulse jet dust collector that controls emissions associated with the kiln feed raw meal handling system (Make: IAC; Model: 72 TB; Capacity: 2,000 DSCFM)	VEs	S-559
C-560-4/K-560-4	A pulse jet dust collector that controls emissions associated with the kiln feed raw meal handling system (Make: IAC; Model: 72 TB; Capacity: 2,000 DSCFM)	VEs	S-560-4
C-618-3/K-618-3	A pulse jet dust collector serving the north kiln feed silo (K-617) (Make: Wheelabrator; Model: 72-108; Capacity: 5,100 DSCFM)	VEs	S-618-3
C-627/K-627	A pulse jet dust collector, with 32 bags, serving various transfer points in the kiln feed system (Make: WFI; Capacity: 3,000 DSCFM)	VEs	S-627
C-640/K-640	A nuisance dust collector serving various transfer pints in the kiln feed system (Make: Amerex; Model: RP-8-25; Capacity: 1,500 DSCFM)	VEs	S-640
C-642/K-642	A nuisance dust collector serving various transfer pints in the kiln feed system (Make: Amerex; Model: RP-8-36; Capacity: 2,200 DSCFM)	VEs	S-642
C-647/K-647	A nuisance dust collector serving various transfer pints in the kiln feed system (Make: Amerex; Model: RP-8-16; Capacity: 870 DSCFM)	VEs	S-647

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

- (3) PM
 - (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:
$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 55.0(P)^{0.11-40} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:
$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (c) For K-328-1, K-645, K-639, K-637, K-648, and K-651 standards for PM emissions (12 consecutive months, combined) are established by Regulation 2.05 and District permit 75-98-C.
 - (d) For K-561, K-560, K-560-7, K-560-2, and K-541B standards for PM emissions (12 consecutive months, combined) are established by Regulation 2.05 and District permit 76-98-C.
- (4) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another

regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

iv. Testing

(1) HAP

(a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.

(2) Opacity

(a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

I. Emission Unit U7/13 – Raw Mill “D” and Preheater/Kiln

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-521	E-521	Belt K-521 to Belt K-523	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-541, C-545	S-945
K-523	E-523	Belt K-523 to Feeder Belt K524	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-541, C-545	S-945
K-524	E-524	Feeder Belt K-524 to Raw Mill “D” K-526 (Make: Merrick; Model: 465; Capacity: 400 TPH; Installed: 1987)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-541, C-545	S-945
K-526	E-526	Raw Mill “D” K-526 to Elevator K-536 (Make: F.L. Smidth; Model: 16’; Capacity: 310 TPH; Installed: 1987)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-541, C-545	S-945
K-536	E-536	Elevator	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-541, C-545	S-945
K-538	E-538	Separator K-538 to Cyclone K-541 (Make: O-Sepa; Model: N-4000; Capacity: 580 TPY; Installed: 1987)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-541, C-545	S-945

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-541	E-541	Cyclone K-541 to Airslide K-560-2 (Capacity: 400 TPH)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-545	S-945
K-945-27	E-945-27	Dust Tank K-945-27 to Baghouse K-945-32/Cyclone K-541 (Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-945-32	S-945-32
K-540-1	E-540-1	Separator transfer back to Raw Mill D (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-560-2	E-560-2	Airslide from K-541 Cyclone (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-945-29	E-945-29	Screw to K-945-30 screw (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-945-30	E-945-30	Screw to Unit 12 K-622 (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-990	E-990	Screw Conveyor from Spray Tower K-840 (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-992	E-992	Screw Conveyor to Unit 12 Elevator K-560 (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-900/901	E-900	Preheat Tower K-900 to Kiln K-901 to Clinker cooler K-909 (Make: Humboldt Wedag; Model: PR8250; Capacity: 400 TPH; Installed: 2000)	2.05, 5.02, 6.42, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR60-DDDD, 40CFR63-LLL	C-945 & SNCR	S-945
	E-901a				
	E-901b				

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-AF 4	E-AF 4	Loader	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-AF 4
K-AF 5	E-AF 5	Hopper/Feeder	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC1	S-AF-DC1
K-AF 6	E-AF 6	Conveyance	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC1	S-AF-DC1
K-AF 7	E- AF 7	Elevator	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC1	S-AF-DC1
K-AF 8	E- AF 8	Conveyance	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC2	S-AF-DC2
K-AF 9	E- AF 9	Feed Bin	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC2	S-AF-DC2
K-AF 1	E-AF 1	Loader	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-AF 1
K-AF DS	E-AF DS	AF Docking Station	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC1	S-AF-DC1
K-AF 2	E-AF 2	Conveyance	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC1	S-AF-DC1
K-AF ELEV	E-AF ELEV	Bucket Elevator	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC1	S-AF-DC1

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-AF 3	E-AF 3	Conveyance	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC2	S-AF-DC2
K-AF Bin	E-AF Bin	Buffer Bin	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-AF-DC2	S-AF-DC2
K-PAC	E-PAC	PAC Material Handling Equipment consisting of: ACI system includes tubular steel support frame, electric chain hoist with trolley, bulk bag lifting adapter, volumetric feeder, feeder hopper, pneumatic blower & educator, pressure switches, and system control panel.	7.08, STAR*	NA	NA-

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U7/U13 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-541/K-541	Cyclone	VEs	S-945
C-545/K-545	An eighteen compartment reverse air baghouse, following cyclone K-541, serving Raw Mill "D". Exhaust from this baghouse exits through the main kiln stack. (Make: Fuller; Model: 18 Module 7500; Capacity: 182,400 DSCFM)	PM CPMS	S-945
C-SNCR	Selective non-catalytic reduction (SNCR), utilizing an ammonia solution to control NOx emissions from the cement kiln when deemed necessary under normal operating conditions. Injection points are located at the pre-heat tower	CEMs	S-945
C-945/K-945	Sixteen (16) compartment bag collector controlling particulates from the kiln and Raw Mill "D". Exhaust exits the main kiln stack. (Make: Wheelabrator; Model: 60KW92; Capacity: 217,500 DSCFM)	PM CPMS	S-945
C-945-32/K-945-32	A twenty-five (25) compartment baghouse serving dust tank K-945-27. (Make: Wheelabrator-Frye; Model: Jet III 1083 M; Capacity: 1,700 DSCFM)	VEs	S-945-32

ID	Description	Performance Indicator	Stack ID
C-AF-DC1/K-AF-DC1	Alternate fuel DC 1 (Flow rate 3000 DSCFM,)	VEs	S-AF-DC1
C-AF-DC2/K-AF-DC2	Alternate fuel DC 2 (Flow rate 3000 DSCFM,)	VEs	S-AF-DC2
C-ACI/K-ACI	Activated Carbon Injection (ACI) system for control of mercury emissions by injection of dry Powdered Activated Carbon (PAC) and/or other similar adsorbent materials	Sorbent trap based monitoring system	S-945

i. Standards

(1) CO

- (a) For the Kiln with preheat tower (K-900/901) CO emission limits (30 day rolling average, 12 consecutive month total) are established per Regulation 2.05 and District Construction Permit 312-75-C.
- (b) If the Company utilizes the option to operate under the CISWI regulation (40 CFR 60 Subpart DDDD) then the limit is 790 ppmvd corrected to seven percent oxygen.

(2) Fuel

- (a) For the Kiln with preheat tower (K-900/901) standards for fuel composition and type are established in District permits 312-75-C, 77-10-C, and TV-13-1001-C.
- (b) If the Company utilizes the option to operate under the CISWI regulation (40 CFR 60 Subpart DDDD) and plans to start the utilization of solid waste then a waste-to-fuel switch is to be implemented.

(3) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, 1346, and 1347 establish HAP standards for this equipment.
- (b) 40 CFR 63 Subpart LLL, section 1343(b) establishes limits on HAP emissions by regulating surrogates PM, Opacity, and THC and directly limits Mercury, HCl, Dioxins, and Furans.
- (c) 40 CFR 63 Subpart LLL, sections 1347 establishes operation and maintenance plan requirements for affected facilities.

(4) NO_x

- (a) For the Kiln with preheat tower (K-900/K-901) NO_x emission limits (30 day rolling average, 12 consecutive month total, pound per ton clinker) are established per Regulation 6.42, 2.05 and District Construction Permit 312-75-C.
- (b) If the Company utilizes the option to operate under the CISWI regulation (40 CFR 60 Subpart DDDD) then the limit is 630 ppmvd corrected to seven percent oxygen.
- (c) The Consent Decree filed on 11/29/2016 establishes NO_x emission standards. See District Construction Permit C-0060-1055-17-V.

(5) Opacity

- (a) See Plantwide for K-PAC and K-900/901. Regulation 1.14 establishes an opacity standard for K-AF-1 and K-AF-2; and Regulation 7.08 establishes an opacity standard for the kiln with preheat tower, K-900/K-901 and K-PAC. Regulation 6.09 establishes an opacity standard for K-945-27.
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standards in Regulations 1.14, 6.09, and 7.08, where applicable.

(6) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

- (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

- (c) For K-526, and K-538 standards for 12 consecutive month combined PM and PM₁₀ emissions are established by District Regulation 2.05.
- (d) If the Company utilizes the option to operate under the CISWI regulation (40 CFR 60 Subpart DDDD)

- then the limit is 13.5 mg/dscm corrected to seven percent oxygen.
- (e) For K-900/901, standards for 12 consecutive month PM emissions are established by District Regulation 2.05 and District Construction Permit 312-75-C.
 - (f) 40 CFR 60 Subpart F, section 60.62 establishes the authority for standards of PM emissions from the kiln with preheat tower (k-900/901).
- (7) Regulation 5.15 (Risk Management Plan 112(r))
- (a) District Construction Permits 185-06-C and TV-13-1001-C establishes limits on the ammonia concentration of the reducing agent in order to be exempt from Regulation 5.15.
- (8) SO₂
- (a) If the Company utilizes the option to operate under the CISWI regulation (40 CFR 60 Subpart DDDD) then the limit is 600 ppmvd corrected to seven percent oxygen.
 - (b) For the Kiln with preheat tower (K-900/K-901) SO₂ emission limits are established per Regulation 2.05 and District Construction Permit 312-75-C.
 - (c) The Consent Decree filed on 11/29/2016 establishes SO₂ emission standards. See District Construction Permit C-0060-1055-17-V.
- (9) TAC
- (a) See Plantwide
- (10) Unit Operation
- (a) For the Kiln with preheat tower (K-900/901) limits for hours of operation are established per District Regulation 2.05 and District Construction Permit TV-13-1001-C.
 - (b) If the Company utilizes the option to operate under the CISWI regulation (40 CFR 60 Subpart DDDD) then the owner or operator must have a fully trained and qualified CISWI unit operator accessible, either at the facility or at a location within 1 hour of the facility during operation of the kiln under CISWI operating scenario. Operator training and qualification must be obtained through a State approved program as described in 40 CFR 60.2635(b) or by completing a course containing the elements listed in 40 CFR 60.2635(c).

- (11) VOC and THC
 - (a) For the Kiln with preheat tower (K-900/901) VOC emission limits are established per Regulation 2.05 and District Construction Permits 312-75-C and TV-13-1001-C.
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) NO_x
 - (a) The Consent Decree filed on 11/29/2016 and District Regulation 6.42 RACT Plan Amendment 2 establishes NO_x monitoring and record keeping requirements.
 - (3) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
 - (4) SO₂
 - (a) The Consent Decree filed on 11/29/2016 establishes SO₂ monitoring and record keeping requirements.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) NO_x
 - (a) The Consent Decree filed on 11/29/2016 and District 6.42 RACT Plan Amendment 2 establishes NO_x reporting requirements.
 - (3) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
 - (4) SO₂

- (a) The Consent Decree filed on 11/29/2016 establishes SO₂ reporting requirements.
- iv. Testing
- (1) HAP
- (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
- (2) Opacity
- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- (3) PM
- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

m. Emission Unit U16 – Coal Handling and Coal Mill

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-Coal2	E-Coal2	Coal Pile to Hopper K-1302	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-Coal2
K-PC2	E-PC2	Pet Coke Pile to Hopper K-1302	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-PC2
K-1302a	E-1302a	Hopper K-1302 to Feeder K-1302-1 (Installed: 1974)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-1302a
K-1302b	E-1302b	Hopper K-1302 to Feeder K-1302-2 (Installed: 1974)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-1302b
K-1302-1	E-1302-1	Feeder K-1302-1 to Belt K-1303 (Installed: 1974)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-1302-1
K-1302-2	E-1302-2	Feeder K-1302-2 to Belt K-1303 (Installed: 1974)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-1302-2

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1303	E-1303	Belt K-1303 to Radial Stacker K-1304-1 (Installed: 1974)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-1303
K-1304-1	E-1304-1	Radial Stacker K-1304-1 to Pile (Capacity: 300 TPH; Installed: 1974)	1.14, 7.02, STAR*, 40CFR60-F	NA	F-1304-1
K-1306-1	E-1306-1	Feeder K-1306-1 to Belt K-1307 (Installed: 1974)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-1306-1
K-1307	E-1307	Belt K-1307 to Belt K-1309 (Installed: 1974)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-1307
K-1309	E-1309	Belt K-1309 to Raw Coal Bin K-902 (Installed: 1974)	6.09, 7.02, STAR*, 40CFR60-Y	C-902-1	S-902-1
K-902	E-902	Raw Coal Bin K-902 to Belt K-849 (Capacity: 360 TPH; Installed: 2000)	2.05, 7.02, 7.08, STAR*, 40CFR60-Y	C-902-1	S-902-1
K-849	E-849	Belt K-849 to Belt K-850 (Installed: 2000)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-849
K-850	E-850	Belt K-850 to Posimetric Feeder (Capacity: 40 TPH; Installed: 2000)	1.14, 7.02, STAR*, 40CFR60-Y	NA	F-850
K-855	E-855	Coal Mill, Raw Coal Bin & Fine Coal Bin: Coal Mill K-855 to Capacity: 30 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-857-1, 2, 3	S-857-1, 2, 3
K-857-1,2,3	E-857	Baghouse K-857-1,2,3 to Fine Coal Bin K-865 (Make: Amerex; Model: RPC13-300D4; Installed: 2000)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-865-5	S-865-5
K-865	E-865	Fine Coal Bin K-865 to Kiln K-901 (Capacity: 110 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-865-5	S-865-5

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U16 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-865-5/K-865-5	A twenty (20) compartment baghouse controlling emissions from the fine coal bin. (Make: Aeropulse; Model: RB-14-5-N; Capacity: 250 DSCFM)	VEs	S-865-5
C-857-1, 2, 3/K-857-1,2, 3	Three dust collectors, venting to one stack, controlling emissions from the coal mill. (Make: Amerex; Model: RPC13-300D4; Capacity: 35,364 DSCFM)	VEs	S-857-1,2,3
C-902-1/K-902-1	One forty-nine (49) compartment baghouse controlling emissions from the coal/pet coke raw storage bin. (Make: Amerex; Model: RP-8-49; Capacity: 3,000 DSCFM)	VEs	S-902-1

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart Y, section 60.254(a) establishes opacity standards.
- (c) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (d) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

(3) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

- (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

- (c) For K-902, K-855, and K-856, standards for 12 consecutive month PM emissions are established by District Regulation 2.05 and District Construction Permits 63-98-C, 91-98-C, and 142-00-C.
 - (4) TAC
 - (a) See Plantwide
 - ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
 - iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
 - iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

n. Emission Unit U18 – Clinker Cooler

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-909	E-909a	Clinker Cooler K-909 to Drag Chains K-911 and K-911-1 (Make: Humbolt Wedag; Model: PSC2-081.12; Capacity: 225 TPH; Installed: 2001)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-924	S-924
	E-909b			C-924	S-924
K-909-4	E-909-4	Drag Chain K-909-4 to Elevators K-912 and K-913 (Make: Allis Chalmers; Model: 22-115-791-801; Installed: 1974) (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-911	E-911	Drag Chain K-911 to Elevators K-912 and K-913 (Make: Louise; Model: LF10892; Capacity: 175 TPH; Installed: 2001) (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-911-1	E-911-1	Drag Chain K-911 to Elevator K-912 (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40 CFR 60 F, 40 CFR 63 LLL	NA	NA
K-912	E-912	Elevator K-912 to Drag Chain K-914 and Belt K-949 (U-19) (Make: Rexnord; Model: 4118-01; Capacity: 170 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-924	S-924
	E-912a			C-949-5 see U-19	S-949-5 see U-19
	E-912b			C-915-4	S-915-4
K-913	E-913	Elevator K-913 to Drag Chain K-914 and Belt K-949 (U-19) (Make: Rexnord; Model: 4118-01; Capacity: 170 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-924	S-924
	E-913a			C-949-5 see U-19	S-949-5 see U-19
	E-913b			C-915-4	S-915-4
K-914	E-914	Drag Chain K-914 to Hot Tank K-915 (Make: Louise; Model: LF10891; Capacity: 320 TPH; Installed: 2001)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-915-4	S-915-4
K-915	E-915	Hot Tank K-915 to Truck (Capacity: 240 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-915-4	S-915-4

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U18 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-924/K-924	One bag collector for control of emissions from the clinker cooler (K-909) and associated equipment. Emissions are exhausted through the clinker cooler stack. (Make: Amerex; Model: RP-14-272D6; Capacity: 171,082 DSCFM)	VEs	S-924
C-915-4/K-915-4	One (1) 64-compartment bag collector to control emissions from the clinker hot tank (K-915) and associated equipment. (Make: IAC; Model: 144TB-BHT-100; S6; Capacity: 12,125 DSCFM)	VEs	S-915-4

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

(3) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

- (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

- (c) For the Clinker Cooler (K-909), standards for 12 consecutive month PM emissions are established by Regulation 2.05 and District permit 309-75-C.
 - (d) For the Clinker Cooler (K-909), limits for hours of operation are established pursuant to District Regulation 2.05.
 - (e) 40 CFR 63 Subpart F, section 60.62(b)(1)(iii) establishes PM standards for the Clinker Cooler (K-909).
 - (4) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 63.1349 establishes testing requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another

regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

(3) PM

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

o. Emission Unit U19 – Clinker Handling/Storage/Reclaim

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-949	E-949a	Belt K-949 to Belt K-949-3 (Make: Rexnord; Model: 36"; Capacity: 250 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-949A	S-949A
	E-949b	Belt K-949 to Belt K-964 (Make: Rexnord; Model: 36"; Capacity: 250 TPH; Installed: 1974)		C-958	S-958
K-949-3	E-949-3	Belt K-949-3 to Belt K-950 (Make: Rexnord; Model: 36"; Capacity: 250 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-949B	S-949B
K-950	E-950	Belt K-950 to Indoor Clinker Storage Pile (Make: Rexnord; Model: 36"; Capacity: 250 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-974	S-974
K-Clinker Loader	E-Clinker Loader	Portable Clinker Loader to Crusher (Capacity: 90 TPH; Installed: 2004)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-Clinker Loader
K-Clinker Crusher	E-Clinker Crusher	Portable Clinker Crusher to Screen (Capacity: 90 TPH; Installed: 2004)	1.14, 7.02, STAR*, 40CFR60-F	NA	F-Clinker Crusher
K-Clinker Screen		Portable Clinker Screen to Belt (Capacity: 90 TPH; Installed: 2004)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-Clinker Belt		Portable Clinker Crusher Belt to 6 Feeders K-951-1-6 (Capacity: 90 TPH; Installed: 2004)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	
K-951-1-6	E-951	Feeders K-951-1 through K-951-6 to Belt K-952 & Dust Collectors C-953/954 (Make: Jeffrey; Model: 40 DTH; Capacity: 175 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-953/954	S-954
K-952	E-952	Belt K-952 & DC C-953/954 to Elevator K-955 (Make: Rexnord; Model: 24"; Capacity: 250 TPH; Installed: 1974)	2.05, 5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-961	S-961
K-955	E-955a, E-955b	Elevator K-955 to Belt K-956 (Make: Rexnord; Model: 4124-01; Capacity: 250 TPH; Installed: 1974)	2.05, 5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-938	S-938
K-956	E-956A	Belt K-956 to Belt K-964 (Make: Rexnord; Model: 24"; Capacity: 250 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-958	S-958
	E-956B	Belt K-956 to Clinker Bin K-1001 (Make: Rexnord; Model: 24"; Capacity: 250 TPH; Installed: 1974)		C-958	S-958
	E-956C	Belt K-956 to Clinker Bin K-1015 (Make: Rexnord; Model: 24"; Capacity: 250 TPH; Installed: 1974)		C-958	S-958
K-975	E-975	K-975 Belt to Emergency Shutdown Clinker Storage Building (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-Limestone Loader	E-Limestone Loader	Limestone Loader	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-Limestone Loader

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-Gyp Loader	E-Gyp Loader	Gypsum Loader (Capacity: 100 TPH)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-Gyp Loader
K-1311	E-Gyp Hopper	Drag Feeder K-1311 to Elevator K-1312 (Make: Stamler; Model: BF-7Q-0-43S; (Capacity: 100; Installed: 2000)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-Gyp Hopper
K-1312	E-1312a	Elevator K-1312 to Belt K-1314 and Gypsum Bin K-1137 (Make: Rexnord; Model: 1626-2008B; Capacity: 100 TPH; Installed: 2000)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1316	S-1316
	E-1312b			C-1316	S-1316
K-1314	E-1314a	Belt K-1314 to Gypsum Bins K-1000 and K-1016 (Capacity: 250 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1317	S-1317
	E-1314b			C-1317	S-1317
K-Syngyp Loader	E-Syngyp Loader 1	Loader to Hopper K-1318-1 & K-1318 (Capacity: 15 TPH)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-Syngyp Loader 1
	E-Syngyp Loader 2	Loader to Hopper K-1350-1 & K-1351 (Capacity: 15 TPH)		NA	F-Syngyp Loader 2
	E-Syngyp Loader 3	Loader to Hopper K-1350-2 & K-1353 (Capacity: 15 TPH)		NA	F-Syngyp Loader 3
K-1318/1318-1	E-1318	Hopper Feeder to Belt K-1352 (Make: JC Steele & Sons SSI or Spomin Metals; Model: 88E; Capacity: 50 TPH; Installed: 2010)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-1318
K-1319	E-1319	Belt K-1319 to K-1141 Mill Gypsum Belt (Make: Various; Model: Various; Capacity: 27 TPH; Installed: 2010)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-1319

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1351/1350-1	E-1350-1	Hopper Feeder to Belt K-1354 (Make: Imperial Technologies hoppers each attached to separate JC Steele feeders, model 88E EVEN, each with a capacity of 10 tons/hour)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-1350-1
K-1352	E-1352	Belt K-1352 to K-1002 Finish Mill #1 Drag (Make: Various; Model: Various; Capacity: 27 TPH; Installed: 2015)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-1352
K-1353/1350-2	E-1350-2	Hopper Feeder to Belt K-1354 (Make: Imperial Technologies hoppers each attached to separate JC Steele feeders, model 88E EVEN, each with a capacity of 10 tons/hour)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-1350-2
K-1354	E-1354	Belt K-1352 to K-1002 Finish Mill #1 Drag (Make: Various; Model: Various; Capacity: 27 TPH; Installed: 2015)	1.14, 5.02, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	F-1354

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U19 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-1316/K-1316	A pulse jet dust collector controlling particulates from gypsum handling and the K-1137 gypsum bin. (Make: IAC; Model: 72TB; Capacity: 3,000 DSCFM)	VEs	S-1316
C-1317/K1317	A dust collector controlling particulates from gypsum bins (K-1000 and K-1016) (Make: IAC; Model: 72TB; Capacity: 27,500 DSCFM)	VEs	S-1317
C-949-5/K-949-5	A one compartment dust collector utilized to collect particulates from the discharge of the K-912 and K-913 bucket elevators onto the K-949 belt. (Make: ETA Engineering; Model: 66X98 BV; Capacity: 2,168 DSCFM)	VEs	S-949-5

ID	Description	Performance Indicator	Stack ID
C-958/K-958	A three-compartment dust collector used to control particulates from clinker bins (K-1015 and K-1001) and transfers to belt K-964 and from belts K-949 and K-956) (Make: Wheelabrator; Model: 118-108; Capacity: 8,500 DSCFM)	VEs	S-958
C-974/K-974	A dust collector utilized to collect particulate emissions form the Clinker Storage Barn. (Make: IAC; Model: BHT-672: S6; Capacity: 77,600 DSCFM)	VEs	S-974
C-961/K-961	A dust collector utilized to collect particulates from the transfer belt K-952 to the K-955 bucket elevator. (Make: IAC; Model: 72B; Capacity: 2,000 DSCFM)	VEs	S-961
C-953/954/K-953/954	The C-954 dust collector vents the Clinker Storage Barn tunnel, controlling dust from the transfer of clinker from the K-951 feeders and the C-953 process dust collectors. (Make: Mikropulsaire; Model: 485-1 ½-30; Capacity: 6000 DSCFM) (Make: Wheelabrator; Model: 90-108; Capacity: 6,000 DSCFM)	VEs	S-954
C-938/K-938	A dust collector controlling particulates form the K-955 elevator and from the transfer from the K-955 elevator onto the K-956 belt. (Make: IAC; Model: 72 TB; Capacity: 6,000 DSCFM)	VEs	S-938
C-949A/K-949A	A one compartment forced air dust collector controlling particulates from belts K-949 and K-949-3. (Make: ETA Engineering; Model: ETA 44x49 BV; Capacity: 1,500 DSCFM)	VEs	S-949A
C-949B/K-949B	A one compartment forced air dust collector controlling particulates from belts K-949-3 and K-950. (Make: ETA Engineering; Model: ETA 44x49 BV; Capacity: 1,500 DSCFM)	VEs	S-949B

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide

- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
 - (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.
 - (3) PM
 - (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:
$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$
 - (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:
$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (c) For K-952 and K-955, PM standards for 12 consecutive months (combined) are established by Regulation 2.05 and District Construction Permit 78-98-C.
 - (d) For K-1314, PM standards for 12 consecutive months are established by Regulation 2.05 and District Construction Permit 77-98-C.
 - (4) TAC
 - (a) See Plantwide
 - ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
 - iii. Reporting
 - (1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
- (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

p. Emission Unit U20 – Finish Mill #1

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1000	E-1000a	Gypsum Bin K-1000 (U-19-2) to Weigh Feeder K-1000-1 (Capacity: 250 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1000-1	E-1000-1	Weigh Feeder K-1000-1 to Drag Conv. K-1002 (Make: Ramsey; Model: 40-17 (24”); Capacity: 10 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1001	E-1001	Clinker Bin K-1001 to Weigh Feeder K-1001-1 (Make: N/A; Model: N/A; Capacity: 250 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1001-1	E-1001-1	Weigh Feeder K-1001-1 to Drag Conv. K-1002 (Make: Ramsey; Model: 40-17 (24”); Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1002	E-1002	Drag Conv. K-1002 to Finish Mill 1 K-1003 (Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02 STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1003	E-1003	Finish Mill 1 K-1003 to Airslide K-1005 (Make: Allis Chalmers; Model: Ball; Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1012	S-1012
K-1005	E-1005	Airslide K-1005 to Elevator K-1006 (Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1012	S-1012
K-1006	E-1006	Elevator K-1006 to Airslide K-1007 (Make: Rexnord; Model: 4118-01; Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1012	S-1012
K-1007	E-1007	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1008	E-1008	Separator K-1008 to Airslide K-1009 (to cement silos) (Make: FL Smidth; Model: O-Sepa; Capacity: 65 TPH; Installed: 2015)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1009	E-1009	Airslide K-1009 to Airslide K-1037	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1009-1	E-1009-1	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1037	E-1037	Airslide K-1037 to Surge Bin K-1035 (U-21)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1036b	E-1036b	Screw K-1036 to Pump K-1011	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1070	E-1070	Airslide K-1070 to Pump K-1011 (Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1011	E-1011	Pump K-1011 to Cement Silos (Make: Fuller; Model: 8" H-2; Capacity: 100 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-2kgrind (See IA list)	E-2kgrind	Storage Tank - 2,000 gal (grinding aid) installed 1974	7.12, STAR***	NA	S-2kgrind
K-12kgrind (See IA list)	E-12kgrind	Storage Tank -12,000 gal (grinding aid) installed 1974	7.12, STAR***	NA	S-12kgrind
K-12kair (See IA list)	E-12kair	Storage Tank - 12,000 gal (air entraining agent) installed 1974	7.12, STAR***	NA	S-12kair
K-1002-1	E-1002-1	Rotary feeder (Make: Schenck; Model: WRRAM10; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1002-4	E-1002-4	Impact flowmeter (Make: Schenck; Model: Multistream B80; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1002-2	E-1002-2	Screw conveyor (Make: Model: Martin; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014
K-1002-3	E-1002-3	Screw conveyor (Make: Model: Martin; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1014	S-1014

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

** This equipment is considered an insignificant activity and *de minimis* for STAR by definition.

U20 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-1012/K-1012	Reverse air baghouse controlling particulates from Finish Mill #1 (K-1003), Elevator (K-1006), and Airslide (K-1005) (Make: Norblo; Model: 648 AMT; Capacity: 17,500 DSCFM)	VEs	S-1012

ID	Description	Performance Indicator	Stack ID
C-1014/K-1014	Jet pulse baghouse controlling particulates from multiple emission points within Finish Mill #1 process, including finish mill Separator (K-1008). (Make: FL Smidth; Model: UC/PJ/704; Capacity: 36,021 ACFM)	VEs	S-1014

i. Standards

(1) HAP

(a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

(a) See Plantwide

(b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.

(c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

(3) PM

(a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

(b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

(c) For K-1008 throughput standards for PM emissions are established by Regulation 2.05 and District permit C-0060-1052-14-V (R2).

(4) TAC

(a) See Plantwide

(5) VOC

- (a) For K-2kgrind, K-12kgrind, and K-12kair limits for emissions of VOC are established by District Regulation 7.12.
 - ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
 - iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
 - iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

q. Emission Unit U21 – Limestone Storage and Reclaim

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Stack ID
K-1015	E-1015	Clinker bin K-1015 (U-19-1) to Weigh Feeder K-1015-1 (Capacity: 250 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1015-1	E-1015-1	Weigh Feeder K-1015-1 to Drag Conveyor K-1017 (Make: Ramsey; Model: 40-17 (24"); Capacity: 10 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1016	E-1016	Gypsum Bin K-1016 (U-19) to Weigh Feeder K-1016-1 (Capacity: 250 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1016-1	E-1016-1	Weigh Feeder K-1016-1 to Drag Conveyor K-1017 (Make: Ramsey; Model: 40-17 (24"); Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1017	E-1017	Drag Conveyor K-1017 to Finish Mill #2 K-1018 (Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1017-1	E-1017-1	Rotary feeder (Make: Schenck; Model: WRRAM10; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1017-3	E-1017-3	Impact flowmeter (Make: Schenck; Model: Multistream B80; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1017-2	E-1017-2	Screw conveyor (Make: Martin; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1018	E-1018	Finish Mill #2 K-1018 to Airslide K-1020 (Make: Allis Chalmers; Model: Ball; Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1027	S-1027
K-1020	E-1020	Airslide K-1020 to Elevator K-1021 (Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1027	S-1027

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Stack ID
K-1021	E-1021	Elevator K-1021 to Airslide K-1022 (Make: Rexnord; Model: 4118-01; Capacity: 360 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1027	S-1027
K-1021-1	E-1021-1	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1022	E-1022	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1023	E-1023	Separator K-1023 to Airslide K-1024 (to Cement Silo) (Make: FL Smidth; Model: O-Sepa; Capacity: 65 TPH; Installed: 2015)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1024	E-1024	Airslide K-1024 to Airslide K-1032	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1024-1	E-1024-1	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1025	E-1025	Cement Cooler (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1030-23	E-1030-23	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1038	E-1038	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1032	E-1032	Airslide K-1032 to Surge Bin K-1035	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Stack ID
K-1035	E-1035	Surge Bin K-1035 to Screw K-1036	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1036	E-1036a	Screw K-1036 to Pump K-1026	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1071	E-1071	Airslide K-1071 to Pump K-1026 (Capacity: 65 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030
K-1026	E-1026	Pump K-1026 to Cement Silos (Make: Fuller; Model: 8" H-2; Capacity: 100 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1030	S-1030

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U21 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-1027/K1027	Reverse air baghouse controlling particulates from Finish Mill #2 (K-1018), Elevator (K-1021), and Airslide (K-1020) (Make: Norblo; Model: 648 AMT; Capacity: 17,500 DSCFM)	VEs	S-1027
C-1030/K-1030	Jet pulse baghouse controlling particulates from multiple emission points within Finish Mill #2 process, including finish mill Separator (K-1023). (Make: FL Smidth; Model: UC/PJ/704; Capacity: 36,021 ACFM)	VEs	S-1030

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.

- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.
- (3) PM
 - (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:
$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$
 - (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:
$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (c) For K-1023 throughput standards for PM emissions are established by Regulation 2.05 and District permit C-0060-1052-14-V (R2).
- (4) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60

Subpart F) to be demonstrated by compliance with the more stringent requirement.

iv. Testing

(1) HAP

(a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.

(2) Opacity

(a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

r. Emission Unit U22 – Mortar Mixing Mill

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1105	E-1585	Mortar Cement Feed Bin K-1105 (Capacity: 140 Ton; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1103	S-1103
K-1116	E-1585	CKD Bin K-1116 (Capacity: 140 Ton; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1115	S-1115
K-1129	E-1127	Mortar Mill K-1129 (Make: Allis Chambers; Model: 5.5' x 21'; Capacity: 20 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1128	S-1128
K-1130	E-1129	Feed Screw K-1130	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1128	S-1128
K-1133	E-1130	Pump Hopper K-1133	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1128	S-1128
K-1114	E-LIME TRUCK	Lime Bin K-1114 (Capacity: 200 Ton; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1113	S-1113

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U22 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-1128/K-1128	This is a two (2) compartment unit that captures material from the Kosmortar Cement Feed Bin (K-1105), CKD Bin (K-1116), Mortar Mill (K-1129), Feed Screw (K-1130), and the Lime Bin (K-1114). (Make: Buell/Norblo; Model: 216 AMT; Capacity: 4,000 DSCFM)	VEs	S-1128
C-1103/K-1103	This is a single (1) compartment unit that collects particulates from Kosmortar Cement Feed Bin (K-1105) (Make: Wheelabrator; Model: 36-108; Capacity: 2,500 DSCFM)	VEs	S-1103
C-1113/K1113	This is a single (1) compartment unit that vents the Lime Bin (K-1114) (Make: Wheelabrator; Model: 18-108; Capacity: 1,500 DSCFM)	VEs	S-1113
C-1115/K-1115	This is a single (1) compartment unit used to vent the CKD Bin (K-1116). (Make: Wheelabrator; Model: 18-108; Capacity: 1,500 DSCFM)	VEs	S-1115

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

(3) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

(4) TAC

- (a) See Plantwide

- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

s. Emission Unit U24 – Rail and Barge Loading

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1320	E-1175b	Silo Alleviator K-1320 (Make: Fuller; Model: 8" H-2; Capacity: 100 TPH; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1321	S-1321
K-1322	E-1320	Airslides/Distribution Box K-1322 (Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1321	S-1321
K-Silo 6 and 9	E-1322a	Cement Silos 6&9 from Airslides/Distribution Box K-1322 (Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1450	S-1450
K-Silo 5 and 8	E-1322b	Cement Silos 5&8 Airslides/Distribution Box K-1322 (Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1452	S-1452
K-Silo 4 and 7	E-1322c	Cement Silos 4&7 Airslides/Distribution Box K-1322 (Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1454	S-1454
K-1468	E-1468	Airslide K-1468 to Rail Loading Spout K-1485 (Make Vortex, Model TBD, Capacity 9,251 ft ³ /hr, 278 tons/hr)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1487	S-1487
K-1485	E-1485	Rail Loading Spout K-1485 (Make: Vortex; Capacity: 720 TPH; Installed: 2016)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1487	S-1487
K-1478	E-1478	Airslide K-1478 to Diversion Bin K-1490 (Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1491	S-1491
K-1490	E-1490a	Diversion Bin K-1490 to Pump K- 1493 and Pump K-144 (Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1491	S-1491
	E-1490b			C-1491	S-1491
K-1443	E-1443	Pump K-1443 to Barge Surge Bin K-1433 (Make: Fuller Kenyon; Capacity: 350 TPH; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1431	S-1431

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1493	E-1493	Pump K-1493 (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1433	E-1433	Barge Surge Bin K-1433 to Pump K-1438 (Installed: 2000)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1431	S-1431
K-1438	E-1438	Pump K-1438 to Pneumatic Barge Loading (Make: Fuller Kenyon; Model: 12" Type M; Capacity: 350 TPH; Installed: 1961)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1430	S-1430
K-1600	E-1600	Target box K-1600 to Cement Dome K-1602 (Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1601	S-1601
K-1602	E-1602	Cement dome K-1602 to De-dusting chamber K-1611-2 (Capacity: 100,000 tons; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1603	S-1603
K-1604	E-1604	Airslide (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1611	E-1611	Airslide K-1611 to Mini Dome K-1611-2 (Installed: 2003)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1629	S-1629
K-1611-2	E-1611-2	Mini Dome K-1611-2 to Belt K-1627 (Installed: 2003)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1629	S-1629
K-1627	E-1627	Belt K-1627 to Hopper Barge Load Spout K-1631 (Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1628	S-1628
K-1631	E-1631	Hopper Barge Load Spout K-1631 to Hopper Barges (Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1628	S-1628

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-Dome Bypass	E-Dome Bypass	Dome Bypass Alleviator to Mini Dome K-1611-2 (Make: 16" Claudius Peters airslides; Capacity: 400 TPH; Installed: 2003)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1635	S-1635
K-Silo 10	E-Silo 10	Masonry Silo 10 (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	S-MSilo 10
K-Silo 11	E-Silo 11	Masonry Silo 11 (total enclosure no emissions)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	NA	S-MSilo 11

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U24 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-1450/K-1450	Dust collector capturing emissions from the distribution box / airslides (K-1322) and cement silos 6 & 9. (Make: Norblo; Model: 260 AMT; Capacity: 3,000 DSCFM)	VEs	S-1450
C-1321/K-1321	Dust collector capturing emissions from pump (K-1011, K-1026, K-1175) and silo alleviator (K-1320). (Capacity: 12,200 DSCFM)	VEs	S-1321
C-1452/K-1452	Dust collector capturing emissions from the distribution box / airslides (K-1322) and cement silos 5, 8, & 4. (Make: Norblo; Model: 260 AMT; Capacity: 3,000 DSCFM)	VEs	S-1452
C-1454/K-1454	Dust collector capturing emissions from the distribution box / airslides (K-1322) and cement silos 4 & 7. (Make: Norblo; Model: 260 AMT; Capacity: 3,000 DSCFM)	VEs	S-1454
C-1487/K-1487	Dust collector capturing emissions from the airslide (K-1468) and Load Spout (K-1485) (Vortex, model VFS-70-A-A-E77546)	VEs	S-1487
C-1491/K-1491	Dust collector capturing emissions from the diversion bin (K-1490) and pumps (K-1443 and 1493) (Make: Norblo; Model: 260 AMT; Capacity: 3,000 DSCFM)	VEs	S-1491

ID	Description	Performance Indicator	Stack ID
C-1431/K-1431	Dust collector capturing emission from the barge surge bin (K-1433) and pump (K-1438). (Make: Fuller; Model: 304 C12; Capacity: 20,000 DSCFM)	VEs	S-1431
C-1430/K-1430	Dust collector capturing emission from barge loading operations. (Make: Fuller; Model: 304 C12; Capacity: 20,000 DSCFM)	VEs	S-1430
C-1601/K-1601	Dust collector capturing emissions from the cement dome (K-1601). (Make: IAC; Model: 120 TB; Capacity: 15,000 DSCFM)	VEs	S-1601
C-1603/K-1603	Dust collector capturing emissions from airslide (K-1602) and the de-dusting chamber. (Make: IAC; Model 120 TB; Capacity: 4,250 DSCFM)	VEs	S-1603
C-1635/K-1635	Dust collector capturing emissions from the dome bypass alleviator. (Capacity: 13,200 DSCFM)	VEs	S-1635
C-1629/K-1629	Dust collector capturing emissions from the cement mini-dome and airslide (K-1611). (Make: IAC; Model: 120 TB; Capacity: 3,000 DSCFM)	VEs	S-1629
C-1628/K-1628	Dust collector capturing emissions from belt (K-1627) and the hopper barge load spout (K-1631). (Make: IAC; Model: 120 TB; Capacity: 3,000 DSCFM)	VEs	S-1628

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

(3) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11}-40 \quad \text{if } P > 30 \text{ tons/hr}$$

- (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:

$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

- (c) For K-Dome Bypass, standards for 12 consecutive months PM and PM₁₀ emissions are established by Regulation 2.05 and District permit 260-03-C
- (d) For K-1600, K-1602, K-1611, K-1611-2, K-1627, and K-1631, standards for combined 12 consecutive months PM emissions are established by Regulation 2.05 and District permit 85-98-C.

(4) TAC

- (a) See Plantwide

ii. Monitoring and Recordkeeping

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.

(2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

iii. Reporting

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.

(2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

iv. Testing

(1) HAP

- (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
- (2) Opacity
- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

t. Emission Unit U25 – Truck Loading

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1499	E-SILO 13b, 14b, 16b	Pump Hopper K-1499 (Capacity: 100 TPH; Installed: 1998)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1499-2	S-1499-2
K-Silo 12	E-1499b	Cement Silo 12	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1420	S-1420
K-1424/1427	E-CS-1,2,3	Pump Hopper K-1424 & FK Pump K-1427	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1425	S-1425
	E-Silo12			C-1425	S1425
K-Silo 1-3	E-OFM	Cement Silos 1, 2, and 3	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1400	S-1400
	E-1499			C-1400	S-1400
K-1410	E-1410	East Loadout to Trucks K-1410 (Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-ELS	S-ELS
K-1403	E-CSilo 3	Cement Silo 3 load out (Capacity: 12,765 tons; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1408	S-1408
K-1403-1	E-CSilo 1	Cement Silo 1 load out (Capacity: 12,765 tons; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1408	S-1408
K-1404	E-CSilo 2			C-1412	S-1412

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
	E-1404	Cement Silo 2 load out (Capacity: 12,765 tons; Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1412	S-1412
K-1403-2	E-1403	Airslide K-1403-2 to North Loadout Spout K-1406	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1408	S-1408
	E-1403-2				
K-1406	E-1406	North Loadout Spout K-1406 to Trucks (Installed: 1974)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1408	S-1408

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U25 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-1408/K-1408	Dust collector capturing emissions from the cement silos 1 and 3, the north loadout spout (K-1406), airslides (K-1403-1, K-1403-2, K-1403). (Make: Norblo; Model: 112 ME; Capacity: 3,800 DSCFM)	VEs	S-1408
C-1400/K-1400	Dust collector capturing emissions from Cement Silos 1, 2 and 3 (Make: Fuller; Model: Type 3; Capacity: 3,800 DSCFM)	VEs	S-1400
C-1412/K-1412	Dust collector capturing emissions from cement silo 2. (Make: Norblo; Model: 112 ME; Capacity: 4,000 DSCFM)	VEs	S-1412
C-1420/K-1420	Dust collector capturing emissions from cement silo 12. (Make: Fuller; Capacity: 3,000 DSCFM)	VEs	S-1420
C-1425/K-1425	Dust collector capturing emissions from cement silos 1, 2, and 3. (Make: Norblo; Model: 120 AMS; Capacity: 3,000 DSCFM)	VEs	S-1425
C-1499-2/K-1499-2	Dust collector capturing emissions form cement silos 14 and 16. (Capacity: 1,000 DSCFM)	VEs	S-1499-2
C-ELS/K-ELS	Dust collector capturing emissions form east load spout. (Capacity: 1,500 DSCFM)	VEs	S-ELS

- i. Standards
 - (1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.
- (2) Opacity
 - (a) See Plantwide
 - (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
 - (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.
- (3) PM
 - (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:
$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 55.0(P)^{0.11}-40 \quad \text{if } P > 30 \text{ tons/hr}$$
 - (b) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:
$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
- (4) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.
- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.

(2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

iv. Testing

(1) HAP

- (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.

(2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

u. Emission Unit U26 – Storage Silos and Packaging

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K- SILO 13	E-SILO 13a	Pump Hoppers K-1011 & K-1026 to Cement Silo 13	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1243	S-1243
K- SILO 16	E-SILO 16	Pump Hoppers K-1011 & K-1026 to Cement Silo 16	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1243	S-1243
K- SILO 17	E-SILO 17	Pump Hopper K-1133 to Masonry Silo 17	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1243	S-1243
K- SILO 15	E-SILO 15a	Pump Hopper K-1133 to Masonry Silo 15	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1244	S-1244
K- SILO 14	E-SILO 14a	Pump Hoppers K-1011 & K-1026 to Cement Silo 14	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1244	S-1244

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1229	E-SILO 13b	Elevator K-1229 from Cement Silo 13	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1246	S-1246
K-1230	E-1229	Elevator K-1229 to Bin "A"	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1245	S-1245
K-1206	E-SILO 15b	Belt K-1204 to Elevator K-1206 from Masonry Silo 15&17	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1246	S-1246
K-1207	E-1206	Elevator K-1206 to Belt K-1207 from Masonry Silo 17	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1246	S-1246
K-1212	E-1210	Bin "B" from Masonry Silo 17	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1246	S-1246
K-1211	E-1209	Bin "C" K-1211 from Masonry Silo 15	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1247	S-1247
K-1215	E-1215	Surge Bin "C" (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1218	E-1218	East Packer "C" K-1218 to Belt K-1219 from Masonry Silo 15 (Make: St. Regis; Model: 150FC)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1247	S-1247
K-1204	E-1204	Conveyance (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1217	E-1217	mid packer "B"	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1246	S-1246

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1220	E-1220	Belt K-1220	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1245	S-1245
K-1232	E-1231	Bin "A" K-1232	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	C-1245	S-1245
K-1237-1	NA	Flattner (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1209	E-1209	Airslide K-1209 (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1210	E-1210	Screw K-1210 (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1219	E-1219	Belt (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1233-1	E-1233-1	Surge Bin "A" (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1231	E-1231	Screw K-1231 (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1235	E-1235	West Packer "A" K-1235 to Flattener K-1237-1 from Cement Silo 13 (Make: St. Regis; Model: 150FC) (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1237	E-1237	Belt (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1237-2	E-1237-2	Belt (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1238	E-1238	Palletizer (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1238-1	E-1238-1	Belt (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1241	E-1241	Belt (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA
K-1226	E-1226	Belt (total enclosure no emissions)	5.02, 6.09, 7.02, STAR*, 40CFR60-F, 40CFR63-LLL	NA	NA

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U26 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-1243/K-1243	Dust collector capturing emissions from Cement Silos 13 and 16 and Masonry Silo 17. (Make: Wheelabrator; Model: 112-108; Capacity: 9,500 DSCFM)	VEs	S-1243
C-1244/K-1244	Dust collector capturing emissions from Cement Silo 14 and Masonry Silo 15. (Make: Wheelabrator; Model: 112-108; Capacity: 9,500 DSCFM)	VEs	S-1244
C-1245/K-1245	Dust collector capturing emissions from Cement screw (K-1231), elevator (K-1229) and the West Packer "A" (K-1235). (Make: Wheelabrator; Model: 112-108; Capacity: 11,520 DSCFM)	VEs	S-1245
C-1246/K-1246	Dust collector capturing emissions from belt (K-1204), elevator (K-1206), and screw (K-1210). (Make: Wheelabrator; Model: 112-108; Capacity: 11,520 DSCFM)	VEs	S-1246

ID	Description	Performance Indicator	Stack ID
C-1247/K-1247	Dust collector capturing emissions from airslide (K-1209) and East packer "C". (Make: Wheelabrator; Model: 112-108; Capacity: 11,520 DSCFM)	VEs	S-1247

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1345, and 1347 establish HAP standards for this equipment.

(2) Opacity

- (a) See Plantwide
- (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
- (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.

(3) PM

- (a) In accordance with Regulation 6.09, Table 1, PM standards are determined by the following equations:

$$E = 4.10(P)^{0.67} \quad \text{if } P \leq 30 \text{ tons/hr}$$

$$E = 55.0(P)^{0.11} - 40 \quad \text{if } P > 30 \text{ tons/hr}$$

(4) TAC

- (a) See Plantwide

ii. Monitoring and Recordkeeping

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.

(2) Opacity

- (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

iii. Reporting

- (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
- (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

iv. Testing

- (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
- (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

v. **Emission Unit U27 – Paved and Unpaved Roads**

Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
E-A	Paved segment of road with limestone, coal/coke, gypsum, flyash, millscale (delivery), and clinker (alternate) fugitives.	1.14, STAR*	C-ST	F-A
E-B	Paved segment of road with clinker (alternate) fugitives.	1.14, STAR*	C-ST	F-B
E-C	Paved segment of road with limestone, coal/coke, gypsum, flyash, millscale (delivery), and clinker (alternate) fugitives	1.14, STAR*	C-ST	F-C
E-D	Paved segment of road with limestone, coal/coke, gypsum, flyash, millscale (delivery), and clinker (alternate) fugitives	1.14, STAR*	C-ST	F-D
E-E	Unpaved segment of rad with limestone, flyash, millscale (process) fugitives.	1.14, STAR*	C-WS	F-E
E-F	Paved segment of road with flyash and millscale (process) fugitives.	1.14, STAR*	C-ST	F-F

Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
E-G	Unpaved segment of road with coal/coke, gypsum, clinker (alternate), and sand fugitives.	1.14, STAR*	C-WS	F-G
E-H1	Paved segment of road with cement (bagged, bulk) and masonry (bagged, bulk) fugitives.	1.14, STAR*	C-ST	F-H1
E-H2	Paved segment of road with cement (bagged, bulk) and masonry (bagged, bulk) fugitives.	1.14, STAR*	C-ST	F-H2
E-I	Paved segment of road with bagged cement and masonry fugitives	1.14, STAR*	C-ST	F-I
E-J	Paved segment of road with bulk cement and masonry fugitives.	1.14, STAR*	C-ST	F-J
E-K	Unpaved segment of road with clinker, coal/coke, gypsum, clinker (alternate), and clinker (outside) fugitives.	1.14, STAR*	C-WS	F-K
E-L	Heavy equipment moving limestone around the plant.	1.14, STAR*	C-ST/C-WS	F-L
E-LA	Heavy equipment moving overs limestone around the plant.	1.14, STAR*	C-ST/C-WS	F-LA
E-M	Heavy equipment moving coal/coke around the plant.	1.14, STAR*	C-ST/C-WS	F-M
E-N	Heavy equipment moving gypsum (delivery) around the plant.	1.14, STAR*	C-WS	F-N
E-NA	Heavy equipment moving gypsum (1141 Mill System) around the plant.	1.14, STAR*	C-ST/C-WS	F-NA
E-O	Heavy equipment moving clay around the plant.	1.14, STAR*	C-ST/C-WS	F-O
E-P	Unpaved segment of road with gypsum fugitives.	1.14, STAR*	C-WS	F-P
E-Q	Paved segment of road with clinker hot tank.	1.14, STAR*	C-ST	F-Q
E-R	Paved segment of road with clinker (alternate) and clinker (outside) fugitives.	1.14, STAR*	C-WS	F-R
E-S	Unpaved segment with gypsum fugitives.	1.14, STAR*	C-WS	F-S
E-T	Road not typically utilized at plant.	1.14, STAR*	NA	F-T
E-U	Heavy equipment moving sand around the plant.	1.14, STAR*	C-ST/C-WS	F-U

Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
E-V	Unpaved segment of road with coal/coke, clinker (outside), sand and gypsum fugitives.	1.14, STAR*	C-WS	F-V
E-VA	Heavy equipment moving clinker (outside), sand and gypsum fugitives.	1.14, STAR*	C-ST/C-WS	F-VA
E-W	Unpaved segment of road with gypsum.	1.14, STAR*	C-ST/C-WS	F-W
E-WA	Heavy equipment moving coal/coke around the plant.	1.14, STAR*	C-ST/C-WS	F-WA
E-X	Unpaved segment of road with gypsum, coal/coke and sand.	1.14, STAR*	C-WS	F-X
E-Y	Unpaved segment of road with gypsum and sand.	1.14, STAR*	C-WS	F-Y
E-Z	Unpaved segment of road with sand fugitives.	1.14, STAR*	C-WS	F-Z

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U27 Control Devices:

ID	Description	Performance Indicator	Efficiency
C-ST	Sweeper Truck	VE	75%
C-WS	Water Suppression	VE	75%
C-ST/WS	Sweeper Truck and Water suppression	VE	75%

i. Standards

(1) Opacity

(a) See Plantwide

(2) PM

(a) Regulation 1.14, section 2.1 establishes work practice standards to prevent particulate matter from becoming airborne beyond the work site.

(3) TAC

(a) See Plantwide

w. Emission Unit U28 – Storage Piles

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
P-1	P-1	7 acres Limestone	1.14, STAR*	NA	F-1
P-2	P-2	1 acres Limestone overs	1.14, STAR*	NA	F-2
P-3	P-3a	3 acres Coal/Coke Main drop point	1.14, STAR*	NA	F-3a
	P-3b	3 acres Coal/Coke Main wind erosion		NA	F-3b
P-4	P-4	5.48 acres Sand	1.14, STAR*	NA	F-4
P-5	P-5	2.5 acres Clay	1.14, STAR*	NA	F-5
P-6	P-6	3.0 acres Clinker Outside	1.14, 5.02, 7.02, STAR*, 40 CFR60-F, 40CFR63-LLL	C-Tarp	F-6
P-7	P-7	1 acre Rock Gypsum	1.14, STAR*	NA	F-7
P-8	P-8	0.29 acres Covered Gypsum	1.14, STAR*	NA	F-8
P-9	P-9	0.54 acres Clinker inside	1.14, STAR*	NA	F-9
P-10	P-10	1 acre Limestone crushed	1.14, STAR*	NA	F-10
P-11	P-11a	3 acres Coal/Coke Temporary Unloading drop point	1.14, STAR*	NA	F-11a
	P-11b	3 acres Coal/Coke Temporary Unloading wind erosion		NA	F-11b
P-12	P-12a	2.4 acres Cole/Coke Secondary drop point	1.14, STAR*	NA	F-12a
	P-12b	2.4 acres Cole/Coke Secondary wind erosion		NA	F-12b
P-13	P-13a	0.4 acres Millscale	1.14, STAR*	NA	F-13a
	P-13b	0.4 acres Millscale		NA	F-13b
P-14	P-14a	0.7 Clinker acres MIAG building drop point	1.14, STAR*	NA	F-14a
	P-14b	0.7 Clinker acres MIAG building wind erosion		NA	F-14b
P-15	P-15a	0.17 acres Shreds/Tire Components drop point	1.14, STAR*	NA	F-15a

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
	P-15b	0.17 acres Shreds/Tire Components wind erosion		NA	F-15b
P-16	P-16a	0.1 acres Synthetic Gypsum drop point	1.14, STAR*	NA	F-16a
	P-16b	0.1 acres Synthetic Gypsum wind erosion		NA	F-16b
P-17	P-17a	0.1 acres Large AF drop point	1.14, STAR*	NA	F-17a
	P-17b	0.1 acres Large AF wind erosion		NA	F-17b
P-18	P-18a	0.11 acres RDF drop point	1.14, STAR*	NA	F-18a
	P-18b	0.11 acres RDF wind erosion		NA	F-4b

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U28 Control Devices:

ID	Description	Performance Indicator	Efficiency
C-Tarp	Tarp used to cover outdoor clinker pile	VE	70%

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, section 1342, 1343, 1345, and 1347 establish HAP standards for outdoor storage of clinker (P-6).

(2) Opacity

- (a) See Plantwide

(3) PM

- (a) Regulation 1.14, section 2.1 establishes work practice standards to prevent particulate matter from becoming airborne beyond the work site.

(4) TAC

- (a) See Plantwide

x. Emission Unit U29 – Gasoline Dispensing Facility

Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
E-GDS	4,000 Gallon Gasoline Underground Storage Tank & Dispensing Facility	7.15, STAR*	Stage I	F-GDS

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U29 Control Devices:

ID	Description	Performance Indicator	Range	Efficiency	Stack ID
NA	Stage I	NA	NA	NA	NA

i. Standards

(1) TAC

(a) See Plantwide

(2) VOC

(a) Regulation 7.15 establishes work practice standards for the gasoline storage tank.

(b) The storage tanks under this unit meet the definition of insignificant activities per Regulation 2.16, section 1.23. However, Regulation 7.15 applies to gasoline storage vessels. These tanks shall meet the requirements under Regulation 7.15.

y. Emission Unit U30 – Cold Solvent Metal Cleaners

Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
E-Parts Washer (See IA list)	One Non-halogenated cold solvent metal cleaning tank, rated capacity of 30 gallons, installed in 1994 without secondary reservoir	6.18, STAR*	NA	F-Parts Washer

U30 Control Devices:

There are no control devices associated with this unit.

i. Standards

(1) TAC

(a) See Plantwide

(2) VOC

- (a) Regulation 6.18 establishes standards for cold cleaner that use VOCs to remove soluble impurities from metal surfaces.
- (b) The parts washers under this unit meet the definition of insignificant activities per Regulation 2.16, section 1.23. However, Regulation 6.18 applies to each cold cleaner that use VOC to remove soluble impurities from metal surfaces. These parts washers shall meet the requirements under Regulation 6.18.

ii. Monitoring and Recordkeeping

(1) VOC

- (a) Regulation 6.18, section 4.4 establishes record keeping requirements for cold cleaners

z. Emission Unit U31 – Finish Mill

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-964	E-964	Belt K-964 (U-19) to Clinker Bin K-1136 (Capacity: 250 TPH; Installed: 2000)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1136-2	S-1136-2
K-1136	E-1136	Clinker Bin K-1136 to Weigh Feeder K-1139 (Capacity: 250 Tons; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1135	S-1135
K-1137	E-1137	Gypsum Bin K-1137 to Weigh Feeder K-1138 (Capacity: 120 Tons; Installed: 2000)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1135	S-1135
K-1138	E-1138	Weigh Feeder K-1138 to Belt K-1140 (Capacity: 250 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1135	S-1135
K-1139	E-1139	Weigh Feeder K-1139 to Belt K-1140 (Capacity: 250 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1135	S-1135
K-1140	E-1140	Belt K-1140 to Finish Mill #3 K-1141 (Capacity: 250 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1135	S-1135

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1141	E-1141	Finish Mill #3 K-1141 to Airslide K-1148 (Make: Fuller Traylor; Model: 4.6 M x 13.5 M; Capacity: 150 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1152	S-1152
K-1143	E-1143	Rotary feeder (Make: Schenck; Model: WRRAM10; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1143-2	S-1143-2
K-1143-8	E-1143-8	Impact flowmeter (Make: Schenck; Model: Multistream B80; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1143-2	S-1143-2
K-1143-4	E-1143-4	Weigh hopper (Make: Schenck; Model: 5X2 Work Bin; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1143-2	S-1143-2
K-1143-5	E-1143-5	Rotary airlock (Make: Schenck; Model: RAM10; Capacity: 5 TPH; Installed: TBD)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1160/1162	S-1160/1162
				C-1135	S-1135
K-1148	E-1148	Airslide K-1148 to Elevator K-1150 (Capacity: 150 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1152	S-1152
K-1150	E-1150	Elevator K-1150 to Airslide K-1155 (Make: Sepax 450; Capacity: 150 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1152	S-1152
K-1155	E-1155	Airslide K-1155 to Separator K-1181 (Capacity: 150 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1152	S-1152
K-1181	E-1181a	Separator K-1181 to Pump Hopper K-1175 (Make: Sepax 450; Capacity: 150 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1160/1162	S-1160/1162
	E-1181b	Separator K-1181 to Airslide K-1185 (Make: Sepax 450; Capacity: 150 TPH; Installed: 2000)		C-1135	S-1135

Equipment ID	Emission Point ID	Description	Applicable Regulation	Control ID	Release ID
K-1185	E-1185	Airslide K-1185 to Finish Mill #3 K-1141 (Capacity: 250 TPH; Installed: 2000)	5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1135	S-1135
K-1175	E-1175	Pump Hopper K-1175 to Screw Pump K-1175 (Capacity: 150 TPH; Installed: 2000)	2.05, 5.02, 7.02, 7.08, STAR*, 40CFR60-F, 40CFR63-LLL	C-1152	S-1152

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

U31 Control Devices:

ID	Description	Performance Indicator	Stack ID
C-1152/K-1152	Pulse Jet baghouse controlling particulates from Finish Mill #3 (K-1141), Airslide (K-1148), Elevator (K-1150), Airslide (K-115), and Pump Hopper (K-1175). (Make: Amerex; Model: RP-12525D6; Capacity: 31,000 DSCFM)	VEs	S-1152
C-1136-2/ K-1136-2	Pulse Jet baghouse controlling particulates from Belt (K-964) to Clinker Bin (K-1136). (Make: IAC; Model: 72 TB; Capacity: 1,500 DSCFM)	VEs	S-1136-2
C-1135/K-1135	Pulse Jet baghouse controlling particulates from Clinker Bin (K-1136), Gypsum Bin (K-1137), Weigh Feeder (K-1139), Weigh Feeder (K-1138), Belt (K-1140), Air Slide (K-1185), Separator (K-1181) (Make: IAC; Model: 72 TB; Capacity: 5,000 DSCFM)	VEs	S-1135
C-1160/1162/ K-1160/1162	Pulse Jet baghouse controlling particulates from Separator (K-1181). (Make: Amerex; Model: RP-12-1040D6; Capacity: 65,500 DSCFM)	VEs	S-1160/1162
C-1143-2/ K-1143-2	Bin Vent filter controlling particulates from Weigh Hopper K-1143-4. (Make: Schenck; Model: 36AVR7-II; Capacity: 270 acfm)	VEs	S-1143-2

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart LLL, sections 1342, 1343, 1345, and 1347 establish HAP standards for this equipment.

- (2) Opacity
 - (a) See Plantwide
 - (b) 40 CFR 60 Subpart F, section 60.62 establishes an opacity standard of less than 10%.
 - (c) By demonstrating compliance with the 10% opacity standard in 40 CFR 60, Subpart F and 40 CFR 63 Subpart LLL, this also demonstrates compliance with the 20% opacity standard in Regulations 1.14, 6.09, and 7.08, where applicable.
- (3) PM
 - (a) In accordance with Regulation 7.08, Table 1, PM standards are determined by the following equations:
$$E = 3.59(P)^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31(P)^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$
 - (b) For K-1141, K-1148, K-1150, K-1155, and K-1175 standards for PM emissions (12 consecutive months, combined) are established by Regulation 2.05 and District permit 64-98-C
 - (c) For K-1181 standards for PM emissions (12 consecutive months) are established by Regulation 2.05 and District permit 65-98-C.
 - (d) For K-1136 standards for PM emissions (12 consecutive months) are established by Regulation 2.05 and District permit 68-98-C.
 - (e) For K-1138, K-1139, and K-1140 standards for PM emissions (12 consecutive months) are established by Regulation 2.05 and District permit 77-98-C.
- (4) TAC
 - (a) See Plantwide
- ii. Monitoring and Recordkeeping
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1348, 1350, and 1355 establish monitoring and record keeping requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

- iii. Reporting
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, sections 1353 and 1354 establish reporting requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

- iv. Testing
 - (1) HAP
 - (a) 40 CFR 63 Subpart LLL, section 1349 establishes testing requirements for this equipment.
 - (2) Opacity
 - (a) 40 CFR 63 Subpart LLL, section 1356 allows for compliance of the same pollutant under another regulation in title 40 of this chapter (40 CFR 60 Subpart F) to be demonstrated by compliance with the more stringent requirement.

aa. Emission Unit - Engines

Emission Point ID**	Description	Applicable Regulation
E-Rice 1	Sand Screener Engine Diesel, 75 hp, installed 2000	STAR*
E-Rice 2 (See IA list)	Caterpillar Model D343 Emergency Generator Diesel, 350 hp, installed 1973	STAR*, 40CFR63-ZZZZ
E-Rice 3 (See IA list)	Azco with Detroit Engine Model 4/71 Emergency Generator Diesel, 127 hp, Installed 1999	STAR*, 40CFR63-ZZZZ
E-Rice 4 (See IA list)	Caterpillar Emergency Generator Diesel, 587 hp, installed 1999	STAR*, 40CFR63-ZZZZ
E-Rice 5	Barge Auto Standby Barge Generator: 2013, 140 Hp	STAR*

Emission Point ID**	Description	Applicable Regulation
E-Rice 6	Portable Crusher: Kolberg-Pioneer M- 4250 Cummings Inc. Engine, 2007, 400Hp, Tier 3	STAR*

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

** All engines in this emission unit are Compression Ignition (CI) not subject to the NSPS IIII due to the installation dates and are not Spark Ignition (SI) therefore not subject to the NSPS JJJJ.

Engines Control Devices:

There are no control devices associated with this unit.

i. Standards

(1) HAP

- (a) 40 CFR 63 Subpart ZZZZ establishes limits on HAP emissions by regulating work practice standards and unit operation.

(2) TAC

- (a) See Plantwide

ii. Monitoring and Recordkeeping

(1) HAP

- (a) 40 CFR 63 Subpart ZZZZ establish monitoring and record keeping requirements for this equipment.

bb. Emission Unit – Tanks

Emission Point ID**	Description	Applicable Regulation
K-AG500EG	Above-Ground Fuel Oil Storage Tank 500 gal Diesel for Emergency Generator	STAR*
K-AG500MIAG	Above-Ground Fuel Oil Storage Tank 500 Diesel fuel	STAR*
K-550	Above-Ground Fuel Oil Storage Tank 550 Kerosene fuel	STAR*
KAG3000	Above-Ground Fuel Oil Storage Tank 3,000 Diesel fuel	STAR*
K-AG10000a	Above-Ground Fuel Oil Storage Tank 10,000 Diesel fuel	STAR*
K-AG10000b	Above-Ground Fuel Oil Storage Tank 10,000 Diesel fuel	STAR*
K-AG10000c	Above-Ground Fuel Oil Storage Tank 10,000 oily water	STAR*
K-UST20000	UST 20,000 gals Diesel fuel	STAR*

Emission Point ID**	Description	Applicable Regulation
K-Port275	Portable Diesel/Gasoline Storage Tanks 275 gal diesel	7.12, STAR*
K-Port50a	Portable Diesel/Gasoline Storage Tanks 50 gal oil	STAR*
K-Port50b	Portable Diesel/Gasoline Storage Tanks 50 gal oil	STAR*
K-Port50c	Portable Diesel/Gasoline Storage Tanks 50 gal oil	STAR*
K-Port90	Portable Diesel/Gasoline Storage Tanks 90 gal used oil	STAR*

* Strategic Toxic Air Reduction (Includes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, & 5.23)

** These VOC Storage Tanks are not subject to Federal Regulation 40 CFR 60 Subpart Kb because they have a capacity less than 75 cubic meters (19,813 gallons) or are greater than 75 cubic meters (19,813 gallons) but store liquid with a maximum true vapor pressure less than 15.0 kPa (2.18 psia).

Tanks Control Devices:

There are no control devices associated with this unit.

- i. Standards
 - (1) TAC
 - (a) See Plantwide
 - (2) VOC
 - (a) Regulation 7.12 establishes equipment requirements for storage tanks.

6. Temporary Sources:

The source did not request to operate any temporary facilities.

7. Short Term Activities:

The source did not report any short term activities.

8. Emissions Trading:

The source is not subject to emission trading.

9. Alternative Operating Scenarios:

The source has two alternative operating scenarios described below:

The kiln at Kosmos may operate under one of two operating scenarios as defined by PCMACT regulations or CISWI regulations, depending upon whether or not solid waste, as defined under Non-Hazardous Secondary Materials provisions (40 CFR Part 241), is being used as a fuel, according to the following provisions.

PCMACT kiln refers to the kiln operating in accordance with regulations found in 40 CFR 63 Subpart LLL.

CISWI kiln refers to the kiln operating in accordance with regulations found in 40 CFR 60 Subpart DDDD or a state equivalent rule. The Company has requested to comply with the “model” rule for the CISWI Kiln as described in 40 CFR 60 Subpart DDDD.

The Kosmos kiln operates under one of the two operating scenarios at any one time that are defined by which regulations and emission standards are applicable. When solid waste is being utilized as fuel, the kiln must comply with the CISWI emission standards contained in this permit. When solid waste fuel is not being utilized as fuel, the kiln may stay in CISWI compliance or must comply with the emission standards of the PCMACT rule. In addition, the fuel switching requirements in the CISWI rule must be met to transition between the two operating scenarios.

Operating Scenario 1: PCMACT Kiln. The applicable emission standards for the Kosmos kiln are the PCMACT requirements until the effective date of the CISWI regulations if solid waste is utilized as fuel six months prior. If solid waste is not utilized at or in the previous six months before the effective date, the PCMACT requirements continue to be applicable until the first day solid waste is utilized as a fuel in the kiln.

The PCMACT requirements also become applicable following a fuel switch from solid waste fuel to traditional fuels in accordance with the procedures for fuel switching in 40 CFR 60.2710 and 63.1348(a) and described in Section P.3.

The PCMACT revised requirements per the February 12, 2013 rule citation become applicable after September 9, 2015 if the kiln has not been declared a CISWI kiln.

Operating Scenario 2: CISWI Kiln. The applicable emission standards for the Kosmos kiln are the CISWI requirements upon the effective date if solid waste is being utilized at that time or in the previous 6 months. The effective date is 3 years after approval of a state implementation plan or February 7, 2018 in the absence of a state plan.

The CISWI requirements also become applicable immediately following a fuel switch from traditional fuels to solid waste if its utilization begins after the rule’s effective date.

Utilization of Alternative Fuel

The owner or operator is permitted to utilize non-hazardous alternative fuel (such as off-spec used oil, Tire Derived Fuel (TDF) and Refuse Derived Fuel (RDF)) in the Kiln with preheat tower (K-900/901). The owner or operator must determine whether the alternative fuel is regulated as “solid waste” pursuant to 40 CFR Part 241 – Solid Wastes used as fuels or Ingredients in Combustion Units. Whether or

not the owner or operator is utilizing an alternative fuel that is deemed a solid waste for regulatory purposes dictates which of the regulations listed below will be applicable to air emissions from the Kiln with preheat tower (K-900/901) at any particular time. Consistent with the Clean Air Act, the Kiln can be subject to one of these rules at any one time, depending on the fuel types being utilized during a kiln operating scenario. The owner or operator is allowed to switch between solid- and non-solid waste fuels – hence between compliance with the two regulations, but only consistent with the regulatory provision’s switching criteria as follows:

- 40 CFR Part 63 Subpart LLL – National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry and 40 CFR 60 Subpart F – Standards of Performance for Portland Cement Plants apply when traditional fuels or NHSM that is documented to be a non-waste is being used, or
- 40 CFR Part 60 Subpart DDDD – Standards of Performance for Commercial and Industrial Solid Waste Incineration Units applies when NHSM that is a solid waste is being used (Subpart DDDD or State equivalent).

Upon the effective date of Subpart DDDD, the Company has requested to comply with the conditions contained within this permit. The owner or operator utilizes alternative fuels that meet the definition of “solid waste” under the 40 C.F.R. Part 241 (NHSM Rule). If the Kiln does not utilize (and has not for at least 6 months) any fuel that meets the definition of “solid waste,” it can be instead subject to Part 63 Subpart LLL and Part 60 Subpart F. The owner or operator can “fuel switch” as follows:

Fuel Switching Provisions

The owner or operator may choose to begin or cease the utilization of solid waste as fuel in the Kiln with preheat tower (K-900/901) at any time during the permit term; therefore, Subpart DDDD contains provisions that specify the required steps for switching applicability between Operating Scenarios as per 60.2710(a)(4)(ii) which states that, “The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste.”

10. Compliance History:

Incident Date	Regulation Involved	Result
10/23/2001	Reg. 1.14, section 2	Agreement Dated 3/15/2002
3/14/2002	Reg. 1.14, section 2	Agreement Dated 8/8/2003
8/1/2002	Reg. 1.14, section 2	Agreement Dated 8/8/2003
8/7/2002	Reg. 1.14, section 2	Agreement Dated 8/8/2003
5/19/2003	Reg. 1.14, section 2	Agreement Dated 8/8/2003

Incident Date	Regulation Involved	Result
7/7/2003	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
8/29/2003	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
9/15/2003	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
10/16/2003	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
11/4/2003	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
5/10/2004	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
6/10/2004	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
6/22/2004	Reg. 2.16, section 5	Agreed Board Order Dated 9/15/2004
7/6/2004	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
9/1/2004	Reg. 2.16, section 5	Agreed Board Order Dated 9/15/2004
11/9/2004	Reg. 1.14, section 2	Agreed Board Order No. 05-02 Dated 3/16/2005
1/5/2005	Reg. 1.14, section 2	Agreed Board Order No. 06-03 Dated 5/17/2006
6/14/2005	Reg. 1.14, section 2	Agreed Board Order No. 06-03 Dated 5/17/2006
7/6/2005	Reg. 1.14, section 2	Agreed Board Order No. 06-03 Dated 5/17/2006
4/15/2006	Reg. 2.03, section 5/ Reg. 2.16, section 5	Agreed Board Order No. 10-04 Dated 12/15/2010
7/10/2006	Reg. 1.14, section 2	Agreed Board Order No. 10-04 Dated 12/15/2010
9/14/2006	Reg. 1.14, section 2	Agreed Board Order No. 10-04 Dated 12/15/2010
10/12/2007	Reg. 1.14, section 2	Agreed Board Order No. 10-04 Dated 12/15/2010
11/21/2007	Reg. 1.14, section 2	Agreed Board Order No. 10-04 Dated 12/15/2010
6/9/2008	Reg. 1.14, section 2	Agreed Board Order No. 10-04 Dated 12/15/2010
6/18/2008	Reg. 1.14, section 2	Agreed Board Order No. 10-04 Dated 12/15/2010
11/3/2008	Reg. 1.14, section 2	Agreed Board Order No. 10-04 Dated 12/15/2010

Incident Date	Regulation Involved	Result
2/10/2014	Reg. 2.16, section 5	Agreement
5/26/2020 thru 6/10/2020	Reg. 2.16, section 5 /40 CFR § 63.1343	Agreed Board Order No. 21-02 Dated 2/17/2021

11. Calculation Methodology or Other Approved Method:

The owner or operator shall calculate emissions in accordance with the methodologies contained in the Environmental Acceptability Demonstration dated 6/23/2021 except that it shall use actual operating hours and/or material throughputs that occurred during each reporting period, Control efficiencies listed in Appendix E Table, Column 3 except where a different Control efficiency has been determined in accordance with note 2 or 3 of that Appendix, in which case that Control efficiency shall be used during each semi-annual reporting period that occurs while or after that determination is made, and the TAC content of materials which shall be determined as follows. Where annual lab analyses are utilized by the owner or operator to determine the TAC content of a material, calculations for each semi-annual period shall utilize the five (5) year rolling average TAC content calculated using results of analyses of the five most recently collected annual samples. Where (M)SDS are utilized by the owner or operator to determine the TAC content of a material, calculations for each semi-annual period shall utilize the most recent (M)SDS. If there are issues with control device performance or process upsets, the calculations should be adjusted to reflect resultant emissions during those situations.

12. Insignificant Activities

Equipment	Qty	PTE (ton/yr)	Regulation Basis
Above-Ground Storage Tanks (2,000 gal K-2kgrind, 12,000 gal K-12kgrind, and 12,000 gal K-12air)	3	VOC – 0.00025 total	Regulation 1.02
Internal Combustion Engines (Azco Generator: Detroit Engine M-4/71, Pre-2000, 127 Hp; Caterpillar Generator M-D343, 1973, 350 Hp; Caterpillar, 1999, 587 Hp) (See Emission Unit: Engines)	3	NOx – 4.55 (maximum value from single 587 hp Caterpillar engine)	Regulation 1.02, Appendix A

Equipment	Qty	PTE (ton/yr)	Regulation Basis
Above-Ground Fuel Oil Storage Tanks (1-500 gal Diesel for E.G.; 1-500 gal Diesel for MIAG; 1-550 gal Kerosene; 1-3000 gal Diesel 2-10,000 Diesel fuel; 1-10,000 oily water; 1-UST 20,000 gals Diesel fuel) (See Emission Unit: Tanks)	8	VOC - 0.036 total	Regulation 1.02, Appendix A
Portable Diesel/Gasoline Storage Tanks (1-275 gal diesel; 3-50 gal oil; 1-90 gal used oil) (See Emission Unit: Tanks)	5	VOC - 0.2 total based on gasoline	Regulation 1.02, Appendix A
Sand Mining (Fugitive Source not subject to Reg 6.09)	3	PM - 1.1 total	Regulation 1.02

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16, section 3.5.4.1.4.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements as required by Regulation 2.16, section 4.1.9.4.
3. The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16, section 4.3.5.3.6.
6. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) to be reported on the annual emission inventory.
7. The District has determined pursuant to Regulation 2.16, section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) Basis of Regulation Applicability for IA units.