

TITLE V PERMIT RENEWAL APPLICATION

FOR

**U.S. SILICA COMPANY
BERKELEY SPRINGS PLANT**

Permit No. R30-06500001

June 2008

Prepared by:

Compliance Technologies, Inc.
4510 East 71st Street
Cuyahoga Hts., Ohio 44105

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**REQUESTED REVISIONS TO CURRENT TITLE V PERMIT
U.S. SILICA COMPANY**

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I. Current Title V Permit - Terms and Conditions

1. Delete Section 4.3.4 – Stack tests have been completed as required.
2. Section 5.1.6 - Revise Note 1 to read: “Storage Tank #9 has not been installed.”
3. Section 5.1.7 - Delete “wet scrubber” and replace with “cartridge filter”.
4. Delete Section 5.2.1 – Stack testing has been completed.
5. Request deletion of Sections 5.2.4, 5.2.5, 6.2.2, 6.2.4, 6.4.2, and 6.4.3. These sections of the permit identify requirements for monitoring and recording of pressure drops for specific control devices. The specified devices control emissions from non-major non-CAM emission units (< 100 TPY potential emissions). U.S. Silica believes that the permit-required periodic visible emissions monitoring is sufficient to ensure proper operation of the control devices and compliance with the emission limits.
6. Delete Section 5.3.1 – Stack test completed.
7. Delete Sections 6.3.1 and 6.3.2 – Stack tests completed.

II. Current Title V Permit Section 1.0 - Emission Units Table

1. Current Title V Permit, Page 6 (See Renewal Application, Attachment D page 2):
Add Emission Unit ID “FCell” and FCell information.
2. Current Title V Permit (See Renewal Application, Attachment D page 5), Page 9:
 - a. Add Emission Unit ID “BE2” and BE2 information
 - b. Add Emission Unit ID “SCREEN21” and SCREEN21 information.
 - c. Amend Emission Unit ID “Airslide 100” description to read “Airslide 100 (2S) for CGS”.
 - d. Amend Emission Unit ID “Airslide 200” description to read “Airslide 200 (3S) for CGS”.

**REQUESTED REVISIONS TO CURRENT TITLE V PERMIT
U.S. SILICA COMPANY**

**TITLE V RENEWAL APPLICATION
JUNE 2008**

3. Current Title V Permit, Page 10 (See Renewal Application, Attachment D page 6):

Add "CF#37 (Mikropul M/N CFH-8-20 (1D))" to control device description for "5 Micron Feed Bin".

4. Current Title V Permit, Page 11 (See Renewal Application, Attachment D page 8):

Amend control device description for Emission Unit ID "Tanks #8 and #13". This emission unit is controlled by CF#7 "M/N DFT-32-SH" not a wet scrubber #7.

5. Current Title V Permit, Page 12 (See Renewal Application, Attachment D page 8):

Add storage silo #8 to emission unit "Minusil storage silos #6 and #7".

6. Current Title V Permit, Page 12 (See Renewal Application, Attachment D page 9):

a. Delete Tank No. 10.

b. Amend "Tank No. 8" description.

III. Revision of Table 6.1.1

Table 6.1.1 is revised to reflect throughputs in the revised Title V Permit, dated May 31, 2006 and to update emission unit data. Table 6.1.1 with revisions is attached.

6.1 Limitations and Standards

6.1.1 The emission limitations are as shown in the table below :

Emission Unit	Emission Point ID	Allowable PM Stack Emissions (Type 'a' Source Operation) (PPH)
CRUSH 2, CONV2, CONV3	Stack # 1(CF#1)	50
CRUSH 3	Stack # 2(Wsc#2)	50
VIBFD5, ELEV4, CONV 39-41, CONV 29, CONV 30, Tank #7 and Tank # 8 loadouts, and QROK spout.	Stack # 6(CF #6)	43
SCREN 10-13, SCREN 2-4, ELEV1, ELEV2, ELEV3, CONV 31, CONV33, Tank # 13 and tank #8 vents	Stack # 7(Wsc#7) CF #7	43
CONV 51, Pulverizer tank # 19, Pulverizer tank # 20, # 2 Feed Silo, Tanks #9-#12 vents and loadouts, Steel Tank # 21 Vent and Loadout, SPOUT 1 to 3	Stack # 27(CF#27)	43
PACKR1.	Stack # 40	43
SCREW3, SCREW5 , #1 Mill Feed Bin, SCREW6, AIRSD7, ELEV 6, ELEV 7, BE1, BE1 #2 Mill Feed Bin, FEEDB1, and FEEDB2	Stack # 10	33 37
Elev 14	Stack # 39	43 40
#5 Mill Feed Bin, FEEDB5, AIRSD2 , ELEV10, #6 Mill Feed Bin, FEEDB6, AIRSD3, ELEV11, PNEU4 , BIN7, #1 AND #2 PUMPS, #2 MICROSIZER FEED BIN, AIRSI 13, TAILINGS BINS, MILL6, and PNEU2.	Stack # 12	33 37
PEMCO Elev, FCP Tank VENT, and PEMCO tank VENT, SPOUT6	Stack # 13	47
Packr 3 & 4	Stack # 20	28
SCREW4(3-4 Screw Conveyor), #3 Mill Feed Bin, # 4 Mill Feed Bin, SCREW7 (Screw Conveyor for #3 Mill Discharge), AIRSD8 (Airslide for #4 Mill Discharge), PNEU4 (#2 Macawber Pneumatic Pumping Station), ELEV8 (#3 Mill Elevator), ELEV9 (#4 Mill Elevator), FEEDB3 (Feed Belt for # 3 Pebble Mill), FEEDB4 (Feed Belt for # 4 Pebble Mill), AIRSD2 (Airslide from #1 Microsizer), SCREW5 (Cross Conveyor), PNEU2 (#1 Macawber Pneumatic Pumping Station), ELEV16 (#5 Micron Feed Elevator(7S)), #1 Microsizer Feed Bins, AIRSD12, and SCREW5.	Stack # 11	40 37

[45CSR§7-4.1]



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.wvdep.org/daq

TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 sections: 1. Name of Applicant (U.S. Silica Company), 2. Facility Name (Berkeley Springs Plant), 3. DAQ Plant ID No. (065 — 00001), 4. Federal Employer ID No. (23-0958670), 5. Permit Application Type (Permit Renewal), 6. Type of Business Entity (Corporation), 7. Is the Applicant the: (Both), 8. Number of onsite employees (85), 9. Governmental Code (Privately owned and operated; 0), 10. Business Confidentiality Claims (No).

11. Mailing Address		
Street or P.O. Box: P.O. Box 187		
City: Berkeley Springs	State: WV	Zip: 25411-
Telephone Number: (304) 258-2500	Fax Number: (304) 258-8293	

12. Facility Location		
Street: Route 522 North	City: Berkeley Springs	County: Morgan
UTM Easting: 2332.5 km	UTM Northing: 424.8 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions: Three miles north of Berkeley Springs off Route 522 in Morgan County West Virginia.		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the affected state(s). Maryland Pennsylvania	
Is facility located within 100 km of a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, name the area(s).	
If no, do emissions impact a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: John A. Ulizio		Title: President
Street or P.O. Box: P.O. Box 187		
City: Berkeley Springs	State: WV	Zip: 25411-
Telephone Number: (304) 258-8258	Fax Number: (304) 258-3500	
E-mail address: ulizio@ussilica.com		
Environmental Contact: Jack M. Pryor, P.E.		Title: Civil Engineering - Permitting
Street or P.O. Box: P.O. Box 187		
City: Berkeley Springs	State: WV	Zip: 25411-
Telephone Number: (304) 258-2500	Fax Number: (304) 258-8293	
E-mail address: pryor@ussilica.com		
Application Preparer: Rudy A. Zupan		Title: Sr. Environmental Scientist
Company: Compliance Technologies, Inc.		
Street or P.O. Box: 4510 E. 71 st Street		
City: Cuyahoga Heights	State: OH	Zip: 44105-
Telephone Number: (216) 341-1800	Fax Number: (216) 641-4610	
E-mail address: rzupan@compliancetechnologies.biz		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Industrial Sand Mining and Beneficiating	Silica Sand Products	212322	1446

Provide a general description of operations.
Sandstone is mined and processed to produce unground, ground, and micronized silica sand products. Operations include mining, crushing, screening, drying, milling, classification, and packaging/bulk loading.

- 15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.
- 16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."
- 17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

1. Open Burning 45 CSR 6-3.1 and 6-3.2
2. Asbestos 40 CFR 61
3. Odor 45 CSR 4-3.1 (State enforceable only)
4. Permanent Shutdown 45 CSR 13-10.5 (State enforceable only)
5. Standby Plan for Reducing Emissions 45 CSR 11-5.2
6. Emission Inventory WV Code 22-5-4(a)(14)
7. Ozone-depleting Substances 40 CFR Part 82, Subpart F, except MVAC in Subpart B
8. Risk Management Plan 40 CFR Part 68
9. Visible Emissions 45 CSR 7-3.1, 7-4.1, and 7-4.3 (Process Emissions)
10. Visible Emissions 45 CSR 7-3.7 (Storage Structures); 45 CSR 7-5.1 and 7-5.2 (Fugitive Emissions)
11. Additional Monitoring and Recordkeeping Requirements 45 CSR 30-5.1c
12. Additional Reporting Requirements
 - Certified Emission Statement 45 CSR 30-8
 - Compliance Certification 45 CSR 30-5.3.e.
 - Semi-annual Monitoring Reports 45 CSR 30-5.1c.3.A.
 - Emergencies 45 CSR 30-5.7.c
 - Deviations 45 CSR 30-5.1c.3.C., 45 CSR 30-5.1c.3.B., and 45 CSR 30-5.1.C.3.D.
 - New Applicable Requirements 45 CSR 30-4.3.h.1.B.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Open Burning: Comply with T5 Permit R30-06500001 Section 3.1 Paragraphs 3.1.1 and 3.1.2
2. Asbestos: Comply with T5 Permit R30-06500001 Section 3.1 Paragraph 3.1.3
3. Odor: Comply with T5 Permit R30-06500001 Section 3.1 Paragraph 3.1.4 and Section 3.4 Paragraph 3.4.3
4. Permanent Shutdown: Comply with T5 Permit R30-06500001 Section 3.1 Paragraph 3.1.5
5. Standby Plan for Reducing Emissions: Comply with T5 Permit R30-06500001 Section 3.1 Paragraph 3.1.6
6. Emission Inventory: Comply with T5 Permit R30-06500001 Section 3.1 Paragraph 3.1.7
7. Ozone-depleting Substances: Comply with T5 Permit R30-06500001 Section 3.1 Paragraph 3.1.8
8. Risk Management Plan: Comply with T5 Permit R30-06500001 Section 3.1 Paragraph 3.1.9
9. Visible Emissions (Process Source Operations):
 - Monitoring; Comply with T5 Permit R30-06500001 Section 3.2 Paragraphs 3.2.1 and 3.2.2
 - Testing; Comply with T5 Permit R30-06500001 Section 3.3 Paragraphs 3.3.1 and 3.3.2, 3.3.3, and 3.3.4
 - Recordkeeping; Comply with T5 Permit R30-06500001 Section 3.4 Paragraphs 3.4.1 and 3.4.2, 3.4.4
10. Visible Emissions (Fugitive Emissions):
 - Monitoring; Comply with T5 Permit R30-06500001 Section 3.2 Paragraphs 3.2.3
 - Recordkeeping; Comply with T5 Permit R30-06500001 Section 3.2 Paragraphs 3.2.3
11. Additional Monitoring and Recordkeeping Requirements:
 - Monitor and maintain records of throughputs for process source operations
 - Comply with T5 Permit R30-06500001 Section 3.2 Paragraphs 3.2.4
12. Additional Reporting Requirements:
 - Certified Emission Statement; Comply with T5 Permit R30-06500001 Section 3.5 Paragraphs 3.5.4
 - Compliance Certification; Comply with T5 Permit R30-06500001 Section 3.5 Paragraphs 3.5.5
 - Semi-Annual Monitoring Reports; Comply with T5 Permit R30-06500001 Section 3.5 Paragraphs 3.5.6
 - Emergencies; Comply with T5 Permit R30-06500001 Section 3.5 Paragraphs 3.5.7 and Section 2.17
 - Deviations; Comply with T5 Permit R30-06500001 Section 3.5 Paragraphs 3.5.8
 - New Applicable Requirements; Comply with T5 Permit R30-06500001 Section 3.5 Paragraphs 3.5.9

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit <i>(if any)</i>
29	7/30/1973	
81	5/28/1974	
83	5/16/1974	
140	4/11/1975	
323	7/27/1977	
478	2/27/1979	
715	12/14/1983	
719	10/20/1983	
750	6/14/1984	PD99-127
991	4/12/1988	PD issued 5-16-94
R13-1350	4/25/1991	
0354065001	7/1/1994	
0652330001	7/1/1994	
R13-1840	3/31/1996	
R13-1970	8/13/1997	
R13-2145	10/29/1997	
R13-2299	4/12/1999	
R13-2423	12/12/2000	
R13-2015	12/10/2001	
R13-715E	8/29/2003	
R30-06500001-2003	12/15/2003	PD05-008, PD05-010, PD05-023
R13-2595	9/20/2004	
	/ /	
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22. Inactive Permits/Obsolete Permit Conditions

Permit Number	Date of Issuance	Permit Condition Number
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Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input checked="" type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input checked="" type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input checked="" type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input checked="" type="checkbox"/>	18. Emergency road flares.
<input checked="" type="checkbox"/>	19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: <u>See Page 9 of Emission Units Table for list of Insignificant Tank Units</u>

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input checked="" type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary

24. Insignificant Activities (Check all that apply)	
	business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input checked="" type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input checked="" type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input checked="" type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input checked="" type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H .

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance	
<i>Note: This Certification must be signed by a responsible official. The original, signed in blue ink, must be submitted with the application. Applications without an original signed certification will be considered as incomplete.</i>	
a. Certification of Truth, Accuracy and Completeness	
I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.	
b. Compliance Certification	
Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.	
Responsible official (type or print)	
Name: John A. Ulizio	Title: President
Responsible official's signature:	
Signature: _____	Signature Date: _____
(Must be signed and dated in blue ink)	

Note: Please check all applicable attachments included with this permit application:	
<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.wvdep.org/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

ATTACHMENT A

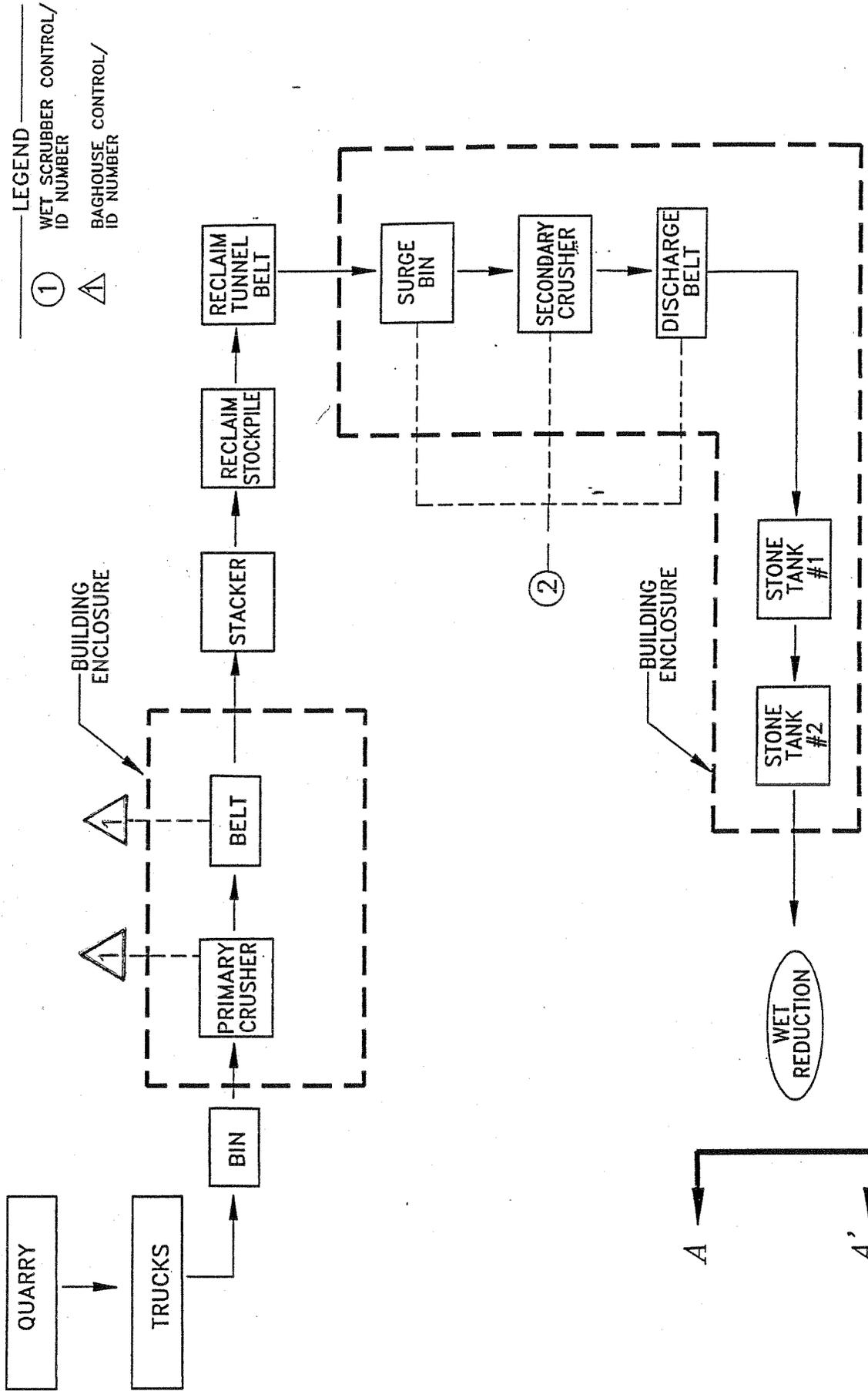
AREA MAP

ATTACHMENT B

PLOT PLAN

ATTACHMENT C

PROCESS FLOW DIAGRAMS



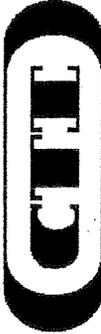
PROCESS FLOW DIAGRAM - CRUSHING PROCESS

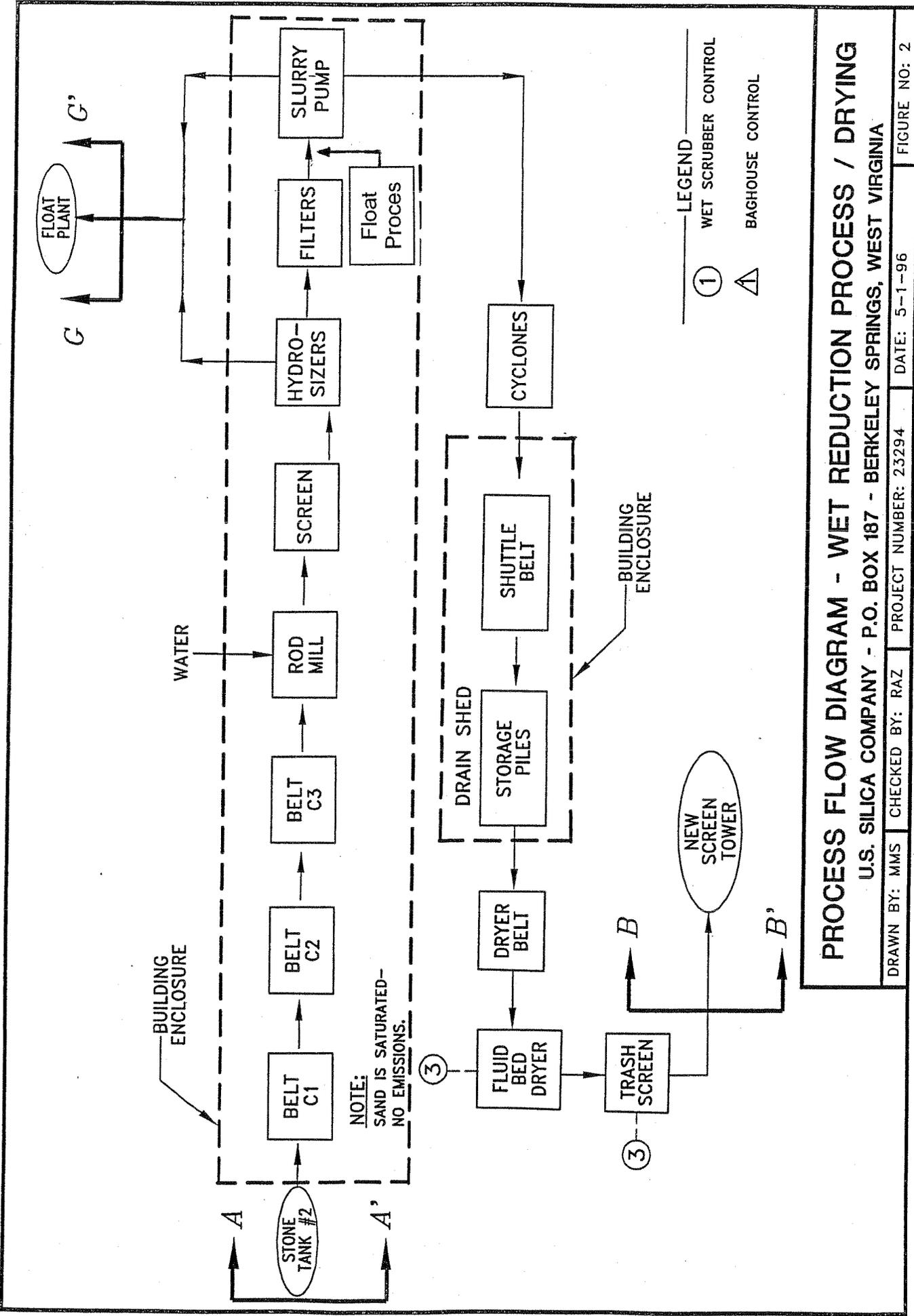
U.S. SILICA COMPANY - P.O. BOX 187 - BERKELEY SPRINGS, WEST VIRGINIA

DRAWN BY: MMS | CHECKED BY: RAZ | PROJECT NUMBER: 23294

DATE: 4-22-96

FIGURE NO: 1





PROCESS FLOW DIAGRAM - WET REDUCTION PROCESS / DRYING

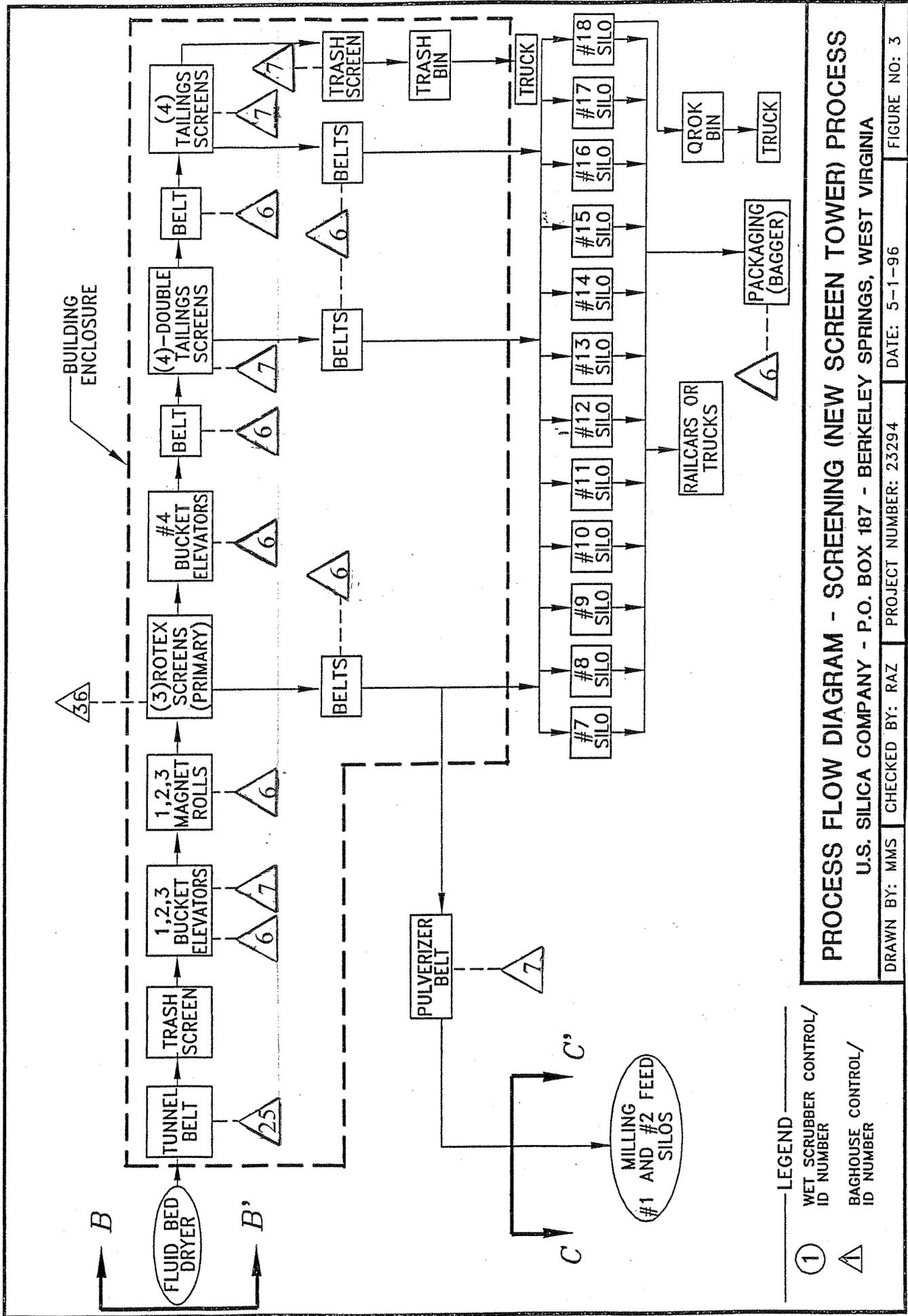
U.S. SILICA COMPANY - P.O. BOX 187 - BERKELEY SPRINGS, WEST VIRGINIA

DRAWN BY: MMS CHECKED BY: RAZ PROJECT NUMBER: 23294 DATE: 5-1-96 FIGURE NO: 2



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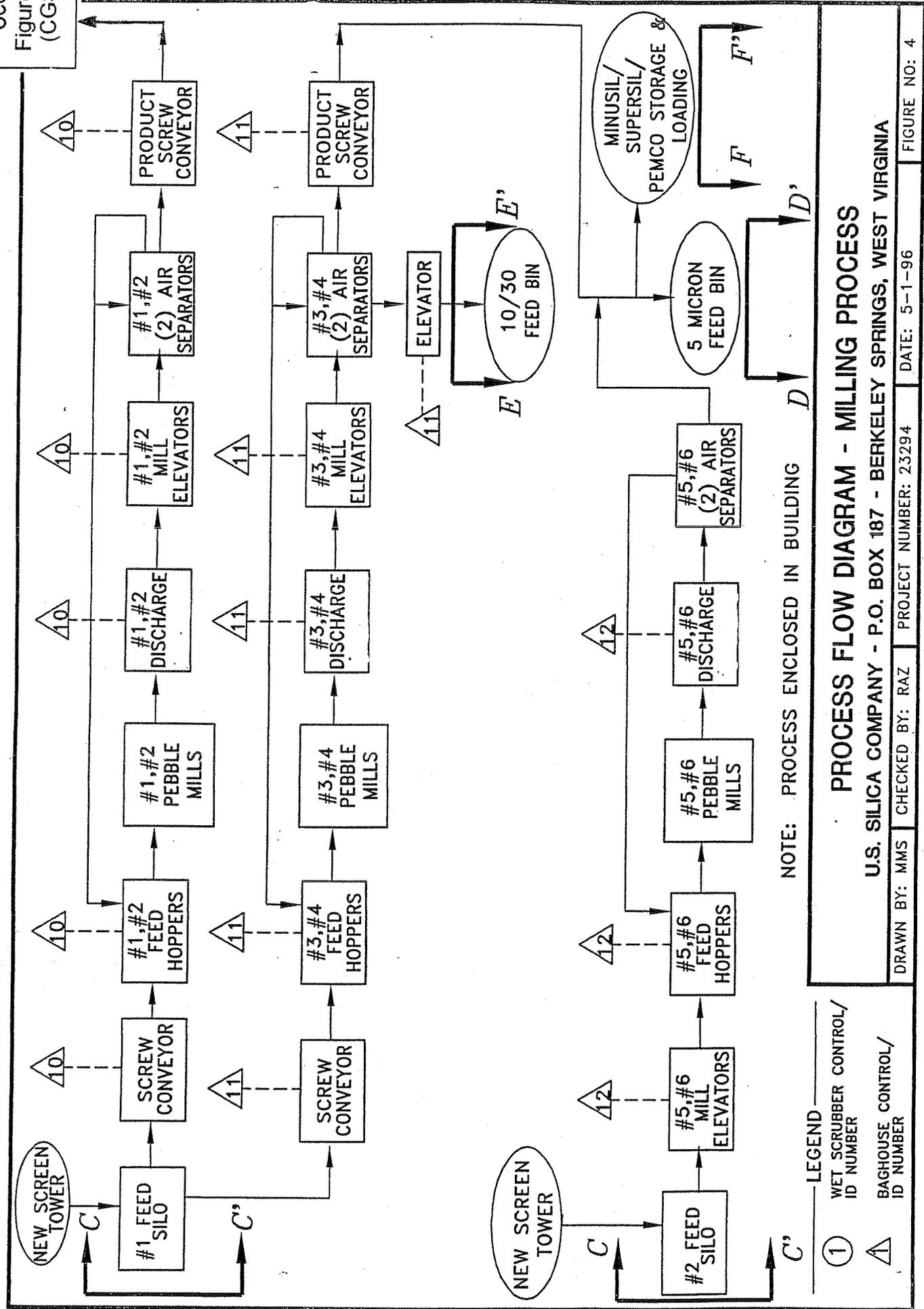
PROCESS FLOW DIAGRAM - SCREENING (NEW SCREEN TOWER) PROCESS
 U.S. SILICA COMPANY - P.O. BOX 187 - BERKELEY SPRINGS, WEST VIRGINIA

DRAWN BY: MMS CHECKED BY: RAZ PROJECT NUMBER: 23294 DATE: 5-1-96 FIGURE NO: 3

LEGEND
 (1) WET SCRUBBER CONTROL/
 ID NUMBER
 △ BAGHOUSE CONTROL/
 ID NUMBER



See Figure 9 (CGS)



NOTE: PROCESS ENCLOSED IN BUILDING

PROCESS FLOW DIAGRAM - MILLING PROCESS

U.S. SILICA COMPANY - P.O. BOX 187 - BERKELEY SPRINGS, WEST VIRGINIA

DRAWN BY: MMS CHECKED BY: RAZ PROJECT NUMBER: 23294

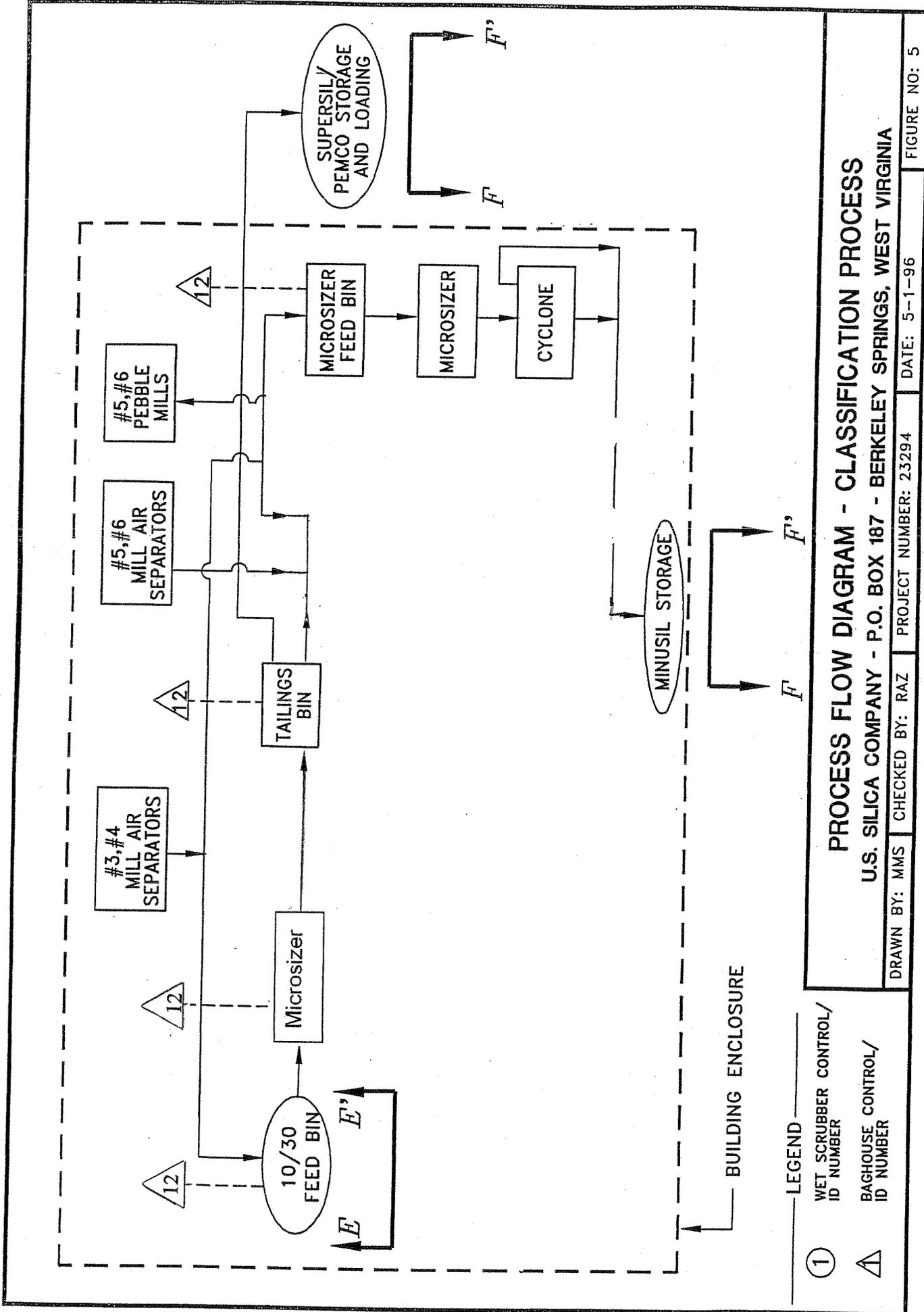
FIGURE NO: 4

- LEGEND
- ① WET SCRUBBER CONTROL/ ID NUMBER
 - △ BAGHOUSE CONTROL/ ID NUMBER



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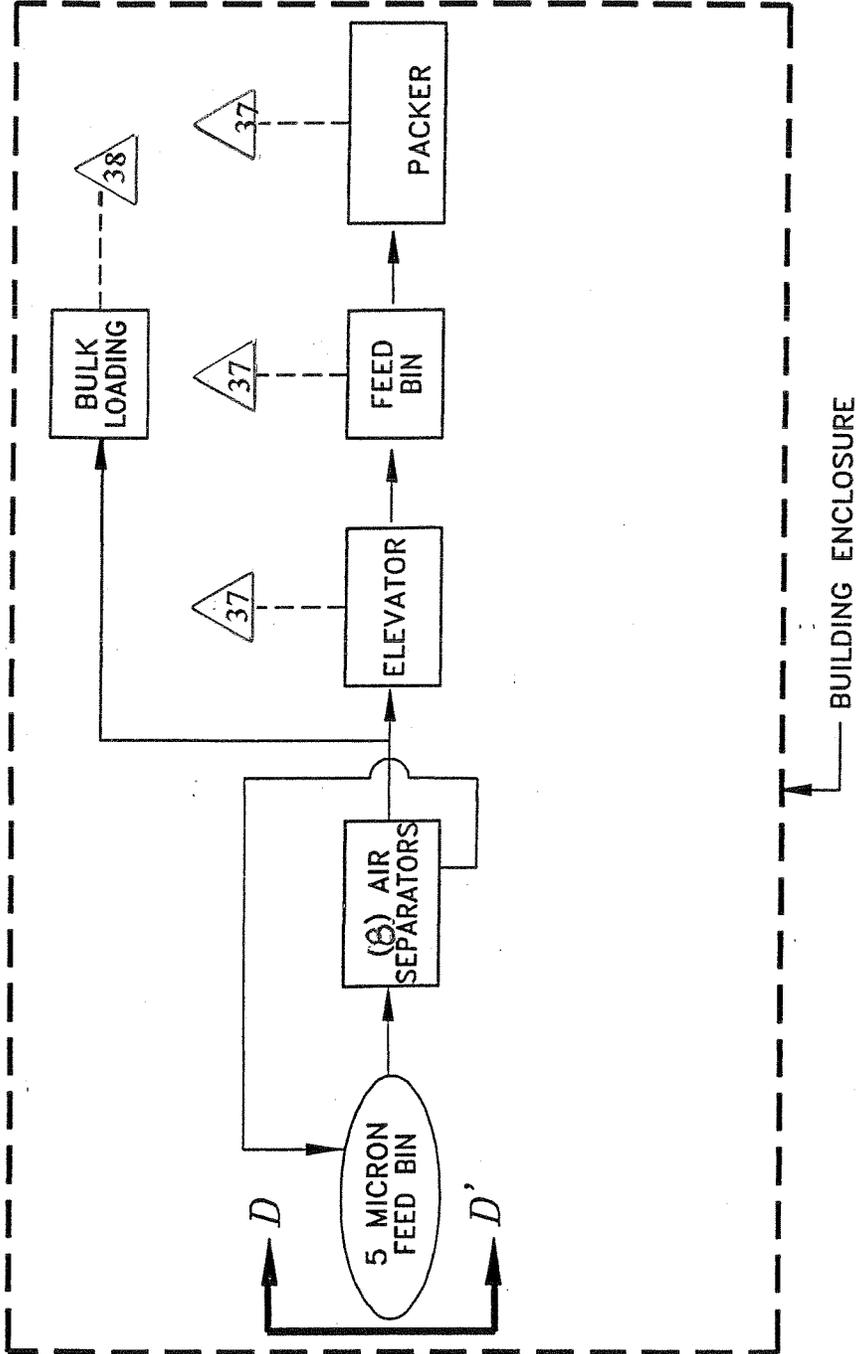


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LEGEND
 ① WET SCRUBBER CONTROL
 ▲ BAGHOUSE CONTROL



PROCESS FLOW DIAGRAM - 5 MICRON BAGGING PROCESS

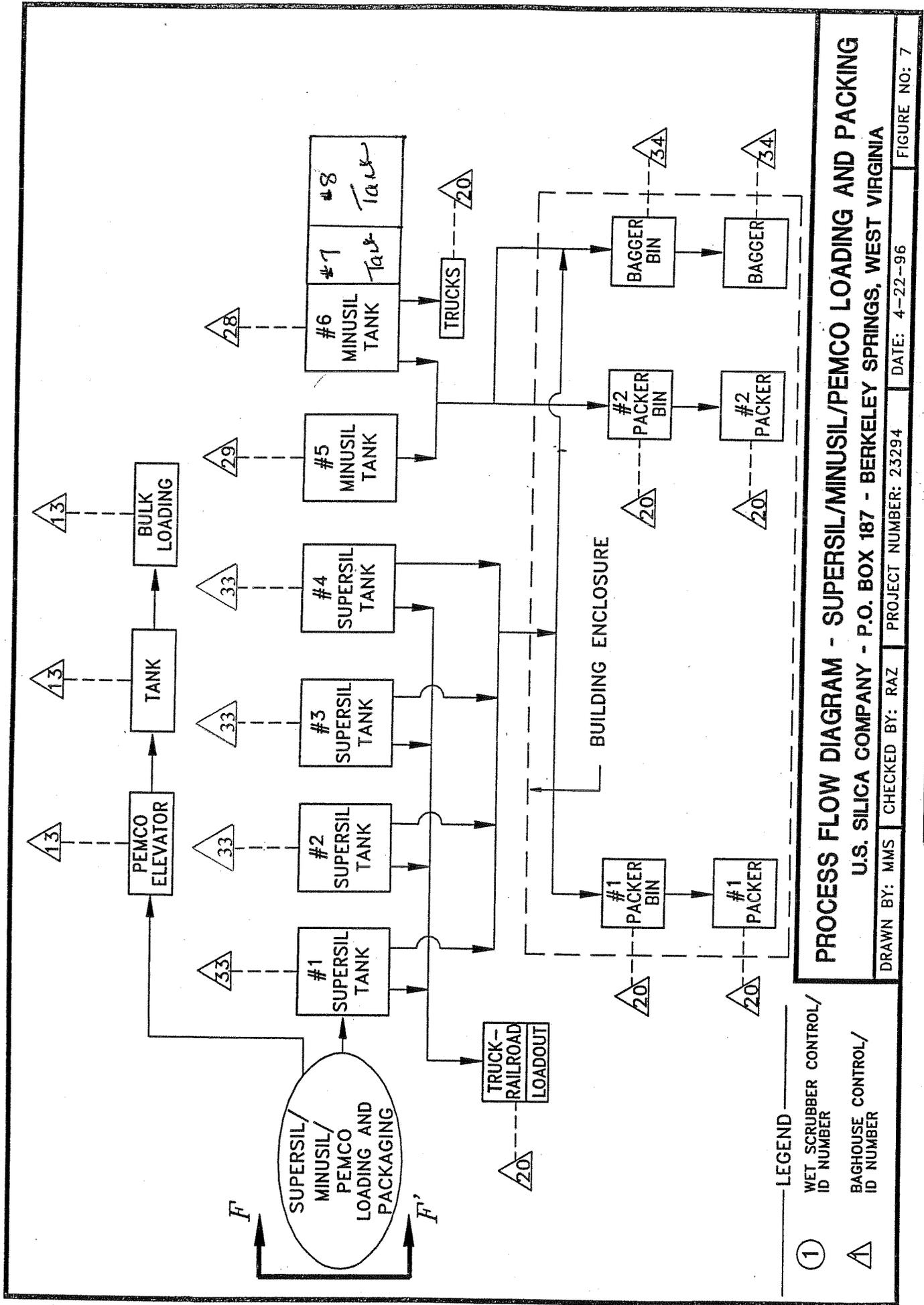
U.S. SILICA COMPANY - P.O. BOX 187 - BERKELEY SPRINGS, WEST VIRGINIA

DRAWN BY: MMS CHECKED BY: RAZ PROJECT NUMBER: 23294 DATE: 4-22-96 FIGURE NO: 6



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PROCESS FLOW DIAGRAM - SUPERSIL/MINUSIL/PEMCO LOADING AND PACKING
 U.S. SILICA COMPANY - P.O. BOX 187 - BERKELEY SPRINGS, WEST VIRGINIA

DRAWN BY: MMS CHECKED BY: RAZ PROJECT NUMBER: 23294 DATE: 4-22-96 FIGURE NO: 7

- LEGEND**
- ① WET SCRUBBER CONTROL/
ID NUMBER
 - △ BAGHOUSE CONTROL/
ID NUMBER

Reviewed by Compliance Technologies, Inc. 5/21/2008 (RAZ)

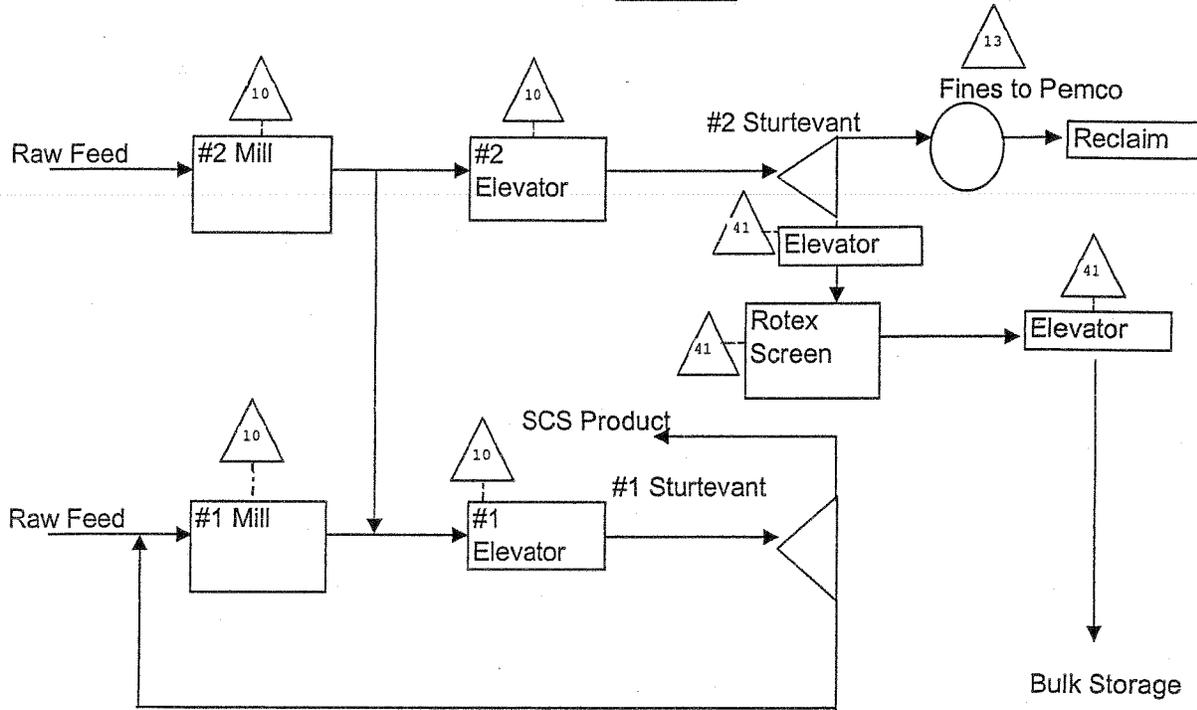


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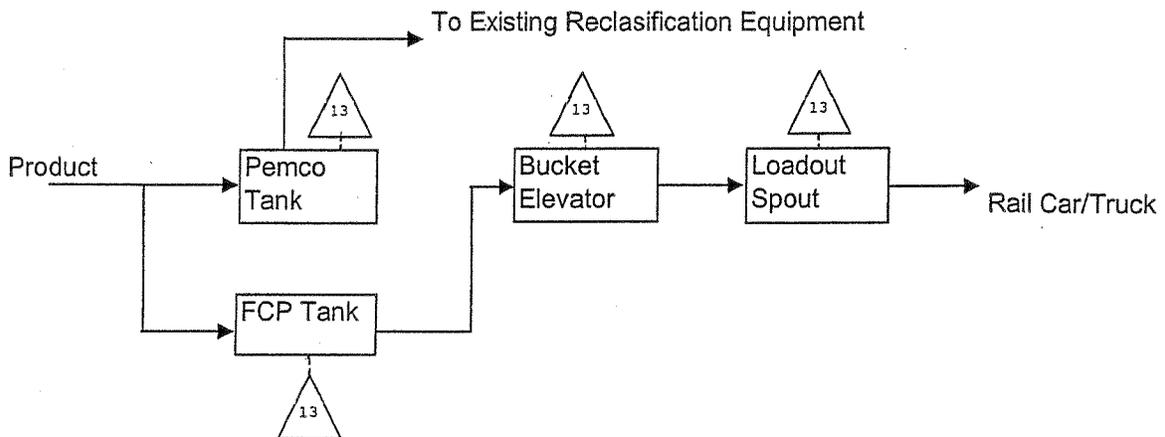
Coarse Ground Special Circuit Modifications

Flow Diagram

Existing



Bulk Storage



LEGEND

- ① WET SCRUBBER CONTROL/
ID NUMBER
- ▲ BAGHOUSE CONTROL/
ID NUMBER

FIGURE NO. 9

ATTACHMENT D

EQUIPMENT TABLE

ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Primary Crushing Plant					
VIBFD1	T1, T2	Primary Crusher Feed Bin and Vibratory Feeder	Pre - 1970	1000	MD, IMC
CRUSH 2	Stack # 1	4' Jaw Crusher	Pre- 1970	800	Bldg # 3, CF # 1-Torit DF-T4-32
CONV3	Stack # 1	42" Short Belt under primary crusher	Pre-1970	800	IMC, BE (Bldg. #3), particle size, CF # 1-Torit DF-T4-32
CONV 2	Stack # 1	42" Incline Belt	Pre-1970	800	IMC, BE (Bldg. #3), particle size, CF # 1-Torit DF-T4-32
CONV1	T3	42" Stacker Belt to Reclaim Stockpile	Pre-1970	800	PE, particle size. IMC
Reclaim Stockpile	Reclaim Stockpile	Reclaim Stockpile	Pre-1970	800	PE, particle size. IMC
Secondary Crushing Plant					
VIBFD2	N/A	Vibratory Feeders # 1 thru # 5 in reclaim tunnel	Pre-1970	400	Tunnel enclosure, IMC, particle size
CONV4	N/A	36" Reclaim Conveyor	Pre-1970	400	Tunnel enclosure, IMC, particle size
CONV5	N/A	42" Conveyor to Secondary Crusher	Pre- 1970	400	Full Enclosure, BE (Bldg. #5), IMC, particle size
CRUSH 3	Stack # 2	Symons Secondary Crusher and Surge Bin	Pre- 1970	400	Full Enclosure, BE (Bldg. #5), IMC, particle size Wsc # 2 Sly Impinjet 270
CONV 6	N/A	36 " discharge conveyor from Secondary Crusher (# 1 Stone Tank transfer conveyor)	Pre-1970	400	FE, IMC, BE (Bldg. #5)
CONV 7	N/A	30" Short Transfer Conveyor	Pre-1970	400	FE, IMC, BE (Bldg. #5)
CONV 8	T4	#2 Stone Tank	Pre-1970	400	FE, IMC
Wet Processing Plant (Rod Mill Building)					
CONV12	N/A	24" #2 Stone Tank discharge conveyor C-1	Pre-1970	200	FE, BE (Bldg. #4), IMC
CONV13	N/A	24" Conveyor C-2	Pre-1970	200	FE, BE (Bldg. #4), IMC
CONV14	N/A	24" Conveyor C-3	Pre-1970	200	FE, BE (Bldg. #4), IMC
MILL1	N/A	Hardinge Rod Mill	Pre-1970	200	FE, BE (Bldg. #4), SS
CONV15	N/A	18" conveyor C-4 to Rod Mill tailings	Pre-1970	150	SS
SCREEN 1	N/A	Ty Speed 8x20 Screening Machine	Pre-1970	200	FE, BE (Bldg. #4), SS

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ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
TANK 2	N/A	Vessels,Bins,tanks and slurry boxes in Rod Mill Building	Pre-1970	200	FE, BE (Bldg. #4), SS
WETSE1 thru WETSE5	N/A	#1-#5 Linatex Separators	Pre-1970	200	FE, BE (Bldg. #4), SS
FERRO1	N/A	Ferro Filters	Pre-1970	200	SS
CLASS4/5 and 7	N/A	Hydrosizers	Pre-1970	200	SS
FCeII	N/A	Outokumpo Flotation Cells	2004	160	SS
CONV54	N/A	Feed conveyor to Denver Ball Mill	2000	50	FE, BE (Bldg. #4), Damp Sand
MILL 8	N/A	Denver 4' X 8" Ball Mill	2000	50	FE, BE (Bldg. #4), Damp Sand
PIPE 1	N/A	Wet Process Sand Slurry Piping	Pre-1970	50	SS
CONV 18	N/A	30" Stationary Conveyor in Fluid Bed Drain Shed (Bldg. #6)	Pre-1970	200	SS
CONV 17 and CONV 19	N/A	30" Shuttle Conveyors in Fluid Bed Drain Shed	Pre-1970	200	FE, Bldg # 6, SS
CONV 20 & CONV 22	N/A	30" F-1 feed hopper conveyor and 30" F-2 feed hopper conveyor	1975	200	FE, Bldg # 6
CONV 21	T5	24" C-1 outside conveyor	1975	200	PE
CONV 23	T6	24" C-2 outside conveyor	1975	200	PE
CONV 24	T7	24" C-3 conveyor	1975	200	FE
VIBFD4	T8	Fluid Bed Dryer vibratory feeder	1975	200	FE
DRYER 1 (3S)	Stack # 3	Fluid Bed Dryer - 71 MMBtu/hr	1975	200	WSc#3 Sly Impinjet Model 1130
CONV 25	Stack # 25	30" C-4 tunnel conveyor	1975	200	Cartridge Filter # 25 Torit DF-4DF-48
SCREN16	Stack # 25	Tyler Ty-Speed shaker screen	1995	200	Cartridge Filter # 25 Torit DF-4DF-48

Screening and Unground Sand Processing

CONV26	Stack # 25	24" #3 dryer conveyor	Pre-1975	200	FE, CF #25-Torit DF-4DF-48
CONV 27	Stack # 25	24" #2 tunnel conveyor	Pre-1975	200	FE, CF #25-Torit DF-4DF-48
ELEV 4	Stack # 6	Elevator #1	Pre-1975	200	FE , Bldg. #7, CF #6-Torit M/N 2DFA-155
VIBFD5	Stack # 6	Grasshopper Vibrating Feeder	1973	200	Totally enclosed, equipment also enclosed in Bldg. #7, CF #6-Torit M/N 2DFA-155
CONV 39-41	Stack # 6	#1 to #3 Magnet Rolls	Pre-1975	200	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, CF #6-Torit M/N 2DFA-155
SCREN 7-9,14-15 (1E)	Stack # 36	#1 to #5 Rotex Screens (1S-5S)	1995-1997	375	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, CF #36-Torit DF-T2-8 (1C)
CONV 30	Stack # 6	20" Tailings Conveyor	Pre-1975	30	FE (Bldg. #7), CF #6-Torit M/N 2DFA-155

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ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
CONV 29	Stack # 6	# 1 Dry sand conveyor	Pre-1975	175	FE (Bldg. #7), CF #6-Torit M/N 2DFA-155
ELEV 2	Stack # 7	#3 Elevator	Pre-1975	30	FE (Bldg. #7), M/N DFT4-32-SH Cartridge Filter
ELEV 1	Stack # 7	#2 Elevator	Pre-1975	75	FE (Bldg. #7), M/N DFT4-32-SH Cartridge Filter
ELEV 3	Stack # 7	#4 Elevator	Pre-1975	75	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, M/N DFT4-32-SH Cartridge Filter
SCREN 10-13 and SCREN 2-4	Stack # 7	# 71 thru #74 Rotex Screens and Tyler Shaker and Hummer Machines (#'s 63-66 and #51)	Modified 1996 Pre-1975	75	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, M/N DFT4-32-SH Cartridge Filter
CONV 31	Stack # 7	24" #9 and #10 Tank conveyor	Pre-1975	75	Chutes and piping are totally enclosed FE (Bldg. #7) M/N DFT4-32-SH Cartridge Filter
CONV32	N/A	24" #11 and #12 Tank conveyor	Pre-1975	75	Chutes and piping are totally enclosed, Building Enclosure #7
CONV36	N/A	20" C-10 conveyor	Pre-1975	110	Chutes and piping are totally enclosed, Building Enclosure #7
CONV 37	N/A	20" C-11 conveyor belt	Pre-1975	110	FE, BE (Bldg # 7)
CONV33	Stack # 7	24" #1 Pulverizer Tank belt conveyor	Pre-1975	200	FE (Bldg #7), M/N DFT4-32-SH Cartridge Filter
CONV34	N/A	24" #2 Pulverizer Tank belt conveyor	Pre-1975	200	FE
CONV 51	Stack # 27	24" 30 mesh loadout conveyor	Pre-1975	200	FE, CF #27-Torit DF-T2-8
PACKR1	Stack # 40	Packaging machine for unground sand	Pre-1975	200	Piping is totally enclosed, BE , CF #40-Torit DF-T2-8
Milling Process					
Pulverizer Tank #19	Stack # 27	Feed Silo for #1-#4 pebble mills	Pre-1970	150	FE, CF#27-T4orit DF-T2-8
SCREW3	Stack # 10	1-2 Screw Conveyor	Pre-1970	30	FE, BE, CF#10-Mikropul CFH 40T-20-B
SCREW5	Stack # 11	Cross Conveyor	Pre-1970	30	FE, BE, CF#11-Mikropul CFH 40T-20-B
SCREW4	Stack # 11 and Stack # 10 (2 Collection Points)	3-4 Screw Conveyor	Pre-1970	30	FE, BE, CF#11-Mikropul CFH 40T-20-B, and CF#10-Mikropul CFH 40T-20-B
#1 Mill Feed Bin	Stack # 10	#1 Mill Feed Bin	Pre-1970	100	FE, BE, CF#10-Mikropul CFH 40T-20-B
#2 Mill Feed Bin	Stack # 10	#2 Mill Feed Bin	Pre-1970	100	FE, BE, CF#10-Mikropul CFH 40T-20-B
#3 Mill Feed Bin	Stack # 11	#3 Mill Feed Bin	Pre-1970	100	FE, BE, CF#11-Mikropul CFH 40T-20-B
#4 Mill Feed Bin	Stack # 11	#4 Mill Feed Bin	Pre-1970	100	FE, BE, CF#11-Mikropul CFH 40T-20-B

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
FEEDB1	Stack # 10	Feeder Belt for #1 Pebble Mill	Pre-1970	15	FE, BE, CF#10-Mikropul CFH 40T-20-B
FEEDB2	Stack # 10	Feeder Belt for #2 Pebble Mill	Pre-1970	15	FE, BE, CF#10-Mikropul CFH 40T-20-B
FEEDB3	Stack # 11	Feeder Belt for #3 Pebble Mill	Pre-1970	15	FE, BE, CF#11-Mikropul CFH 40T-20-B
FEEDB4	Stack # 11	Feeder Belt for #4 Pebble Mill	Pre-1970	15	FE, BE, CF#11-Mikropul CFH 40T-20-B
MILL2	N/A	#1 Pebble Mill	Pre-1970	100	FE, BE (Bldg#11)
MILL3	N/A	#2 Pebble Mill	Pre-1970	100	FE, BE (Bldg#11)
MILL4	N/A	#3 Pebble Mill	Pre-1970	100	FE, BE (Bldg#11)
MILL5	N/A	#4 Pebble Mill	Pre-1970	100	FE, BE (Bldg#11)
SCREW6	Stack # 10	Screw Conveyor for #1 Mill discharge	Pre-1970	100	FE, BE, CF #10-Mikropul CFH 40T-20-B
AIRSD7	Stack # 10	Airslide for #2 Mill discharge	Pre-1970	100	FE, BE, CF #10-Mikropul CFH 40T-20-B
SCREW7	Stack # 11	Screw Conveyor for #3 Mill discharge	Pre-1970	100	FE, BE, CF #11-Mikropul CFH 40T-20-B
AIRSD8	Stack # 11	Airslide for #4 Mill discharge	Pre-1970	100	FE, BE, CF #11-Mikropul CFH 40T-20-B
ELEV 6	Stack # 10	# 1 Mill Elevator	Pre-1970	100	FE, BE, CF #10-Mikropul CFH 40T-20-B
ELEV 7	Stack # 10	# 2 Mill Elevator	Pre-1970	100	FE, BE, CF #10-Mikropul CFH 40T-20-B
ELEV 8	Stack # 11	# 3 Mill Elevator	Pre-1970	100	FE, BE, CF #11-Mikropul CFH 40T-20-B
ELEV 9	Stack # 11	# 4 Mill Elevator	Pre-1970	100	FE, BE, CF #11-Mikropul CFH 40T-20-B
AIRSE 1	N/A	#1 Air Separator	Pre-1970	100	BE, FE (Bldg # 11)
AIRSE 2	N/A	#2 Air Separator	Pre-1970	100	BE, FE (Bldg # 11)
AIRSE 3	N/A	#3 Air Separator	Pre-1970	100	BE, FE (Bldg # 11)
AIRSE 4	N/A	#4 Air Separator	Pre-1970	100	BE, FE (Bldg # 11)
AIRSD9	N/A	Airslide For #1 Separator Feed	Pre-1970	100	BE, FE (Bldg # 11)
SCREW16	N/A	#3Separator Screw Conveyor	Pre-1970	100	BE, FE (Bldg # 11)
SCREW17	N/A	#4 Separator Screw Conveyor	Pre-1970	100	BE, FE (Bldg # 11)
ELEV14	Stack # 39	#14 Elevator	Pre-1970	150	BE, FE, CF #39-Mikropul 8-20-V
Pulverizer Tank # 20	Stack # 27	Feed Silo for #5 and #6 pebble mills	Pre-1970	150	BE, FE, CF #27 (Torit DF-T2-8)

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ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
#5 Mill Feed Bin	Stack # 12	#5 Mill Feed Bin	Pre-1970	100	BE, FE, CF #12-(Mikropul CFH 40T-20-B)
FEEDB5	Stack # 12	#5 Mill Feeder Belt	Pre-1970	15	BE, FE, CF #12-(Mikropul CFH 40T-20-B)
MILL6	Stack # 12	#5 Pebble Mill	Pre-1970	100	BE, FE, CF #12-(Mikropul CFH 40T-20-B)
AIRSD 2	N/A	Airslide discharge for #5 Mill	Pre-1970	100	BE (Bldg # 11), FE
ELEV10	Stack # 12	#5 Mill Elevator	Pre-1970	100	BE, FE, CF #12-(Mikropul CFH 40T-20-B)
AIRSE 5	N/A	#5 Air Separator	Pre-1970	100	BE, FE (Bldg # 11)
SCREW18	N/A	Screw Conveyor for #5 Air Separator	Pre-1970	100	BE, FE (Bldg # 11)
#6 Mill Feed Bin	Stack # 12	#6 Mill Feed Bin	Pre-1970	100	BE, FE, CF #12 (Mikropul CFH 40T-20-B)
FEEDB6	Stack # 12	#6 Mill Feeder Belt	Pre-1970	15	BE, FE, CF #12 (Mikropul CFH 40T-20-B)
MILL7	N/A	#6 Pebble Mill	Pre-1970	100	BE, FE (Bldg #11)
AIRSD 3	Stack # 12	Airslide discharge for #6 Mill	Pre-1970	100	BE, FE, CF # 12 Mikropul CFH 40T-20-B
ELEV11	Stack # 12	#6 Mill Elevator	Pre-1970	100	BE, FE, CF #12 Mikropul CFH 40T-20-B
AIRSE 6	N/A	#6 Air Separator	Pre-1970	100	BE (Bldg # 11), FE
SCREW19	N/A	Screw Conveyor for #6 Air Separator	Pre-1970	100	BE (Bldg # 11), FE
Micronizer #3	Stack #41	MS-20 Microsizer #3	2005	25	Torit M/N DFT 2-4-155 (2c)
BF1	Stack #41	Belt Feeder for Microsizer #3	2005	20	Torit M/N DFT 2-4-155 (2c)
BE1	Stack #41	Ground Fine	2005	20	Torit M/N DFT 2-4-155 (2c)
BE2	Stack #41	CGS Elevator #2	2005	20	Torit M/N DFT 2-4-155 (2c)
Screen21	Stack #41	CGS Rotex Screen	2007	25	Torit M/N DFT 2-4-155 (2c)
AS2	Stack #41	Airslide 2 for Ground Fine	2005	20	Torit M/N DFT 2-4-155 (2c)
AS3	Stack #41	Airslide 3 for Ground Fine	2005	20	Torit M/N DFT 2-4-155 (2c)
IS1	Stack #41	Impact Scale	2005	20	Torit M/N DFT 2-4-155 (2c)
Airslide 100	Stack #41	Airslide (2s) for #3 Microsizer-CGS	2005	8	Torit M/N DFT 2-4-155 (2c)
Airslide 200	Stack #41	Airslide (3s) for #3 Microsizer-CGS	2005	8	Torit M/N DFT 2-4-155 (2c)
Surge Hopper (#3 Micronizer)	Stack #41	Surge Hopper (4s) for #3 Microsizer	2005	8	Torit M/N DFT 2-4-155 (2c)
Tech Air Pumping Station	Stacks #28 and #29	Pneumatic Pumping Station (5s) for #3 Microsizer	2005	8	CF#28 Torit M/N DF-2D-F4 and CF #29 Mikropul 8204B (3c)

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ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Classification (10/15/30/40)					
PNEU2	Stack #12	#1 Macawber Pneumatic Pumping Stations	1996	15	BE, FE, CF # 11 Mikropul CFH 40T-20-B
PNEU4	Stack # 11	#2 Macawber Pneumatic Pumping Stations	1996	15	BE, FE, CF # 11 Mikropul CFH 40T-20-B
BIN7	Stack # 12	#1 & #2 Pump Feed Bins	Pre-1975	15	BE, FE, CF # 12 Mikropul CFH 40T-20-B
#1 & #2 pumps	Stack # 12	#1 & #2 pneumatic pumps	1996	15	BE, FE, CF # 12 Mikropul CFH 40T-20-B
#1 Microsizer Feed Bins	Stack # 11	#1 Microsizer feed bin	1992	100	BE, FE, CF # 11 Mikropul CFH 40T-20-B
#2 Microsizer Feed Bins	Stack # 12	#2 Microsizer feed bin	1992	100	BE, FE, CF # 12 Mikropul CFH 40T-20-B
AIRSI 12	Stack # 11	Airslide from #1 Microsizers	1996	85	BE(Bldg # 13), FE, CF # 11 Mikropul CFH 40T-20-B
AIRSI 13	Stack # 12	Airslide from #2 Microsizers	1996	85	BE (Bldg # 13), FE, CF # 12 Mikropul CFH 40T-20-B
Tailing Bins	Stack # 12	Tailing Bins	Pre-1975	130	BE, FE, CF #12 (Mikropul CFH 40T-20-B)
5 Micron Classification					
ELEV16	Stack # 11	5 Micron Feed Elevator (7S)	1996	150	BE, FE, CF #11 (Mikropul CFH 40T-20-B)
5 Micron Feed Bin	Stack # 37	5 Micron Feed Bin (6S)	1996	150	BE, FE, CF # 37 (Mikropul M/N CFH -8-20(1D))
AIRSE 8-16, 18-19	N/A	Air Separators	1973	20	BE (Bldg # 12), FE
ELEV 17	Stack # 37	5 Micron Return Elevator (8S)	1996	150	BE, FE, CF #37(Mikropul M/N CFH-8-20 (1D))
BIN 5	Stack # 37	5 Micron Product Feed Bin (1S)	1996	10	BE, FE, CF # 37 (Mikropul M/N CFH -8-20(1D))
BIN 4	Stack # 38	Bulk Storage Loading Bin (2S)	1996	10	CF #38(Mikropul M/N CFH 18-20-V-B (1C))
"Stone Container" Bagger Bin	Stack # 38	"Stone Container" Bagger Bin (4S)	1996	15	BE, FE, CF #38(Mikropul M/N CFH 18-20-V-B (1C))
PACKR 7	Stack # 38	"Stone Container" Bagger (5S)	1996	15	BE, FE, CF #38(Mikropul M/N CFH 18-20-V-B (1C))
PEMCO Elevator	Stack # 13	Elevator Pemco/FCP Tanks, Pemco elevator and bulk loadout spout	Pre 1983	150	FE, CF #13 (Torit DF-T3-24)
PACKR 4	Stack # 20	#2 Autobagger and feed Bin	1981	20	Full Enclosure Bldg. #14 BE, CF #20 (Torit DF-T4-16)
PACKR 3	Stack # 20	#1 Autobagger and feed Bin CF #20 – Torit Fabric Filter. Model No. 4DF32-55	1981	20	Full Enclosure Bldg. #14 BE, CF #20 (Torit DF-T4-16)
PACKR 5 (1e & 2e)	Stack # 34	Bulk Bagger and Feed Bin (1s and 2s)	1988	15	Full Enclosure Bldg. #14 BE, CF #34 (Torit DF-2D-F4(1c))

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Wet Float Plant					
Slurry Pumps	N/A	Slurry Pumps	Pre-1948	25	SS
CYCLO 4 and CYCLO 5	N/A	#1 & #2 Wet Cyclones	Pre-1948	25	SS
FERRO 2	N/A	Ferro Filters	Pre-1948	25	SS
CYCLO 3	N/A	#4 Wet Cyclone	Pre-1948	25	SS
Drain Shed	N/A	Drain Shed	Pre-1948	25	SS
CONV46	N/A	24" Conveyor Belt	Pre-1970	25	SS
CONV47	N/A	24" Long Conveyor Belt	Pre-1970	25	SS
CLASS 5	N/A	Rake Classifier	Pre-1970	25	BE,SS
Conditioner	N/A	Conditioner	Pre-1970	25	BE,SS
Flotation	N/A	Flotation	Pre-1970	25	BE (Bldg # 16),SS
Vacuum Table	N/A	Vacuum Table	Pre-1970	25	BE (Bldg # 16),MC
CONV 48	N/A	18" Thrower Conveyor Belt	Pre-1970	25	BE (Bldg # 16),MC
CONV 50	N/A	30" Damp Loadout Conveyor Belt	Pre-1970	25	BE (Bldg # 17),MC
CONV 49	N/A	24" Conveyor	Pre-1970	25	BE (Bldg # 17),MC
DRYER 2 (8s)	Stack # 8	Rotary Dryer 17.1 mmBTUH	Pre-1970	25	BE, FE, WSc #8 (Homemade)
SCREW21	N/A	#1 Screw Conveyor	Pre-1970	25	BE (Bldg # 17),FE
ELEV 19	Stack # 9	#1 Elevator	Pre-1970	25	BE, FE CF #9 (Torit 4 DFT 32-155)
SCREN 17 (1e)	Stack # 9	#1 Rotex Screen (1S)	1999	50	BE, FE CF #9 (Torit 4 DFT 32-155)
SCREN 18 (1e)	Stack # 9	#2 Rotex Screen (2S)	1999	50	BE, FE CF #9 (Torit 4 DFT 32-155)
SCREW22	N/A	#2 Screw Conveyor	Pre-1970	25	BE (Bldg # 17), FE
ELEV 20	Stack # 9	#2 Elevator	Pre-1970	25	FE, CF #9 (Torit 4 DFT 32-155)
PACKR8 (1e)	Stack # 9	BFS Bulk Bagger	1998	30	FE, CF #9 (Torit 4 DFT 32-155)

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
Storage Structures					
Tank #7 and Tank #8	Stack # 6	Storage Tanks #7 and #8 at the New Screen Tower	Pre-1948	150 Tons Each	MD, CF # 6 (Torit 4DF-48)
Tanks #8 and #13	Stack # 7	Storage tanks #8 and #13 at the New Screen Tower	Pre-1970	150 Tons Each	particle size, PE, Wsc#7 (Sly Impinjet Model 175) CF #7 M/N DFT-32-SH
Tanks #9 - #12	Stack # 27	Storage tanks #9-#12 at the New Screen Tower	Pre-1970	150 Tons Each	particle size, PE, MD, CF # 27 (Torit DF-T2-8)
Tanks #14-#18	N/A	Storage tanks #14 and #18 at the New Screen Tower	Pre-1970	150 Tons Each	particle size, PE, MD
Steel Tank #21	Stack # 27	Steel Tank at the New Screen Tower	Pre-1970	100 Tons	particle size, PE, MD, CF # 27 (Torit DF-T2-8)
FCP Tank	Stack # 13	FCP Tank	1998	800 Tons	FE, CF#13 (Torit DF-T3-24)
PEMCO Tank	Stack # 13	PEMCO Tank	Pre 1983	250 Tons	FE, CF#13 (Torit DF-T3-24)
Supersil storage silos #1-#4 (1e-4e)	Stack # 33	#1-#4 Silos	1984	125 Tons Each	FE, CF # 33 (Torit DF-T4-16)
Minusil storage silo #5 (5e)	Stack # 29	# 5 Silo	1984	125 Tons Each	FE, CF#29 (Mikropul CFH-18-20-VB)
Minusil storage silos #6, and #7, and #8 (6e and E1)	Stack # 28	# 6, and #7, and #8 Silos	1984 1999	100 Tons Each	FE, CF#28 (Torit DF-2D-F4)
Concrete storage tank	Stack # 9	Concrete Tank at the Float Plant	Pre-1970	100 Tons	FE, CF#9 (Torit4DF-32-155)
Steel storage tank	Stack # 9	Steel Tank at the Float Plant	Pre-1970	100 Tons	FE, CF#9 (Torit4DF-32-155)
SPOUT1	Stack # 27	30 mesh loadout spout (SPOUT1)	Pre-1970	150	PE, MD, CF#27 (Torit DF-T2-8)
SPOUT2	Stack # 27	Dry sand loadout spout (SPOUT2)	Pre-1970	150	PE, MD, CF#27 (Torit DF-T2-8)
SPOUT3	Stack # 27	DCL loadout spout (SPOUT3)	Pre-1970	200	PE, MD, CF#27 (Torit DF-T2-8)
SPOUT4	Stack # 9	Float Plant loadout spout (SPOUT4)	Pre-1970	150	PE, MD, CF#9 (Torit4DF-32-155)
SPOUT5	Stack # 28	10 Micron loadout chute (SPOUT5)	Pre-1970	150	PE, MD, CF#28 (Torit DF-2D-F4)
SPOUT6	Stack # 13	Pemco/DCL loadout system (SPOUT6)	Pre-1970	250	PE, MD, CF#13 (Torit DF-T3-24)
Q ROK Spouts	Stack #6	Q ROK Bulk Loading Spouts	Pre-1970	150	CF #6-Torit M/N 2DFA-155
Roads	N/A	Unpaved quarry haul roads and paved and unpaved plant roadways	Pre-1970		WT
Golf Sand Stockpile	N/A	Stockpile			Particle Size, MD
Float Sand Stockpile	N/A	Stockpile			Particle Size, MD

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Source ID	Equipment Description/Location	Year Installed/Modified	Design Capacity	Control Device ¹
Tank No. 1	Diesel Fuel Tank	10,000	Before 1976	NA
Tank No. 2	Used Oil Tank at Maintenance garage	275	Before 1976	NA
Tank No. 3	Used Oil Tank at Maintenance garage	275	Before 1976	NA
Tank No. 4	# 1 Oil Tank at Maintenance garage	275	Before 1976	NA
Tank No. 5	# 2 Oil Tank at Maintenance garage	275	Before 1976	NA
Tank No. 6	# 3 Oil Tank at Maintenance garage	275	Before 1976	NA
Tank No. 7	# 4 Oil Tank at Maintenance garage	275	Before 1976	NA
Tank No. 8	#6 Oil Recycled Oil Tank near Float Plant	100,000	1975	NA
Tank No. 10	Diesel Tank at #6 Oil Building	500	Before 1976	NA
Tank No. 11	Kerosene Tank at C & R Shop	275	1995	NA
Tank No. 12	Gasoline Tank at Office Building	1000	1995	NA
Tank No. 13	Lube Oil Tank at Secondary Crusher	300	Before 1976	NA
Tank No. 24	Petroleum Sulfonate (Conditioner) Tank at Float Plant	275	Before 1976	NA
Tank No. 25	Two Propane Tanks at the electric shop	30,000 each	Before 1976	NA
Tank No. 26	Propane Tank at the Quarry	2,000	1999	NA
Tank No. 27	Propane Tank at #6 Oil Building	1,000	Before 1976	NA
Tank No. 28	Two Propane Tanks at the C&R Shop	1,000 Gallons each	Before 1976	NA
Tank No. 16	Recycled Oil	30,000 Gallons	2003	NA
Tank No. 17	Recycled Oil	30,000 Gallons	2003	NA

- Notes:
- (1) If Emission Point ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1e, 2e,)
 - (2) Emission Points are identified by U.S. Silica internal inventory ID system
 - (3) Emission Points are also identified by U.S. Silica stack ID numbering system
 - (4) If Source ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1s, 2s,)
 - (5) If Control equipment ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1c, 2c,)

Abbreviations:

FE=Full Enclosure, PE=Partial Enclosure, BE=Building Enclosure, T=Tunnel or Underground, IMC=Inherent Moisture Content(1-5%), MC=Moisture Content, SS=Saturated Sand(60%moisture), WS=Water Spray, WT=Water Truck, MD=Minimized Drop Height, EL=Enclosed Loading Station, WSc=Wet Scrubber, CF=Cartridge Filter

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT E

EMISSION UNIT FORMS

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: Dryer 2 (8S)	Emission unit name: Rotary Dryer Emission Point ID – Stack #8	List any control devices associated with this emission unit: Wet Scrubber (WSc #8)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Rotary sand dryer (17.1 MMBTUH)			
Manufacturer:	Model number:	Serial number:	
Construction date: pre-1970	Installation date: pre-1970	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 25 TPH			
Maximum Hourly Throughput: 25 tons	Maximum Annual Throughput: 219,000 tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating: 71 MMBTUH		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. Recycled fuel oil; #2 fuel oil; #4 fuel oil; #5 fuel oil; #6 fuel oil; natural gas; and propane			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Recycled fuel oil	1.5 %	no limit	min. 150,000 BTU/gal.
#2 fuel oil	0.2 %	no limit	no limit
#4, #5, and #6 fuel oil	1.5 %	no limit	no limit
Propane and natural gas	NA	no limit	no limit

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.62 ¹	13.75 ²
Nitrogen Oxides (NO _x)	3.7 ¹	96.35 ²
Lead (Pb)	insignificant	insignificant
Particulate Matter (PM _{2.5})	0.747	4.64
Particulate Matter (PM ₁₀)	4.05	25.23
Total Particulate Matter (TSP)	9.0 ¹	95.48 ²
Sulfur Dioxide (SO ₂)	26.3 ¹	267 ²
Volatile Organic Compounds (VOC)	0.06 ¹	1.27 ²
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: The hourly potential emissions for CO, NO_x, TSP, and VOC are based on the emission limits established in Permit R13-0715E, A.5 and cited in the current T5 Permit Section 4.1.4

2. Note 2: The annual potential emissions for CO, NO_x, TSP, and VOC are based on the allowable emission limits for the combined operation of the fluid bed and rotary dryers established in Permit R13-0715E, A.6 and cited in the current T5 Permit Section 4.1.5.

3. Hourly and annual potential emissions for lead, PM_{2.5}, and PM₁₀ are based on AP-42 emission factors in Tables 1.3-10 (1998) and 11.19.2-2 (2004).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Sulfur content limitations: R13-0715E, A.9 and cited in current T5 permit Section 4.1.3
2. Pollutant limitations: R13-0715E, A.5 and A.6 and cited in current T5 permit Section 4.1.4 and 4.1.5
3. Minimum fuel rating for recycled oil: R13-0715E, A.7 and cited in current T5 permit Section 4.1.6
4. Recycled oil specifications: R13-0715E, A.9 and cited in current T5 permit Section 4.1.7
5. Similar unit provisions: R13-0715E, B.4 and cited in current T5 permit Section 4.1.8

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:
 - Visual stack emissions - R13-0715E, A.12 and A.13 and cited in current T5 permit Sections 4.2.1 and 4.2.2
2. Testing Requirements: R13-0715E, B.7 and B.8 and cited in current T5 permit Sections 4.3.1 and 4.3.2

DELETE T5 permit Sections 4.3.3 and 4.3.4 Stack testing has been completed

3. Recordkeeping Requirements:
 - A. Type, quantity, and sulfur content analysis - R13-0715E, A.4 and cited in current T5 permit Section 4.4.1
 - B. Compliance calculations - R13-0715E, A.8 and cited in current T5 permit Section 4.4.2
 - C. Fuel analysis - R13-0715E, A.10 and cited in current T5 permit Section 4.4.3
 - D. Pressure monitoring records - R13-0715E, A.11 and cited in current T5 permit Section 4.4.4
 - E. Monitoring Information - 45 CSR Section 10-8.3a and cited in current T5 permit Section 4.1.14
4. Reporting - 45 CSR Section 10-8.3b and cited in current T5 permit Section 4.1.15

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: Dryer 1 (3S)	Emission unit name: Fluid Bed Dryer Emission Point ID – Stack #3	List any control devices associated with this emission unit: Wet Scrubber (WSc #3)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Fluid bed sand dryer (71 MMBTUH)

Manufacturer:	Model number:	Serial number:
Construction date: pre-1970	Installation date: pre-1970	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 200 TPH

Maximum Hourly Throughput: 200 tons	Maximum Annual Throughput: 1.75 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 71 MMBTUH	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Recycled fuel oil; #2 fuel oil; #4 fuel oil; #5 fuel oil; #6 fuel oil; natural gas; and propane

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Recycled fuel oil	1.5 %	no limit	min. 150,000 BTU/gal.
#2 fuel oil	0.2 %	no limit	no limit
#4, #5, and #6 fuel oil	1.5 %	no limit	no limit
Propane and natural gas	NA	no limit	no limit

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	252 ¹	13.75 ²
Nitrogen Oxides (NO _x)	18.3 ¹	96.35 ²
Lead (Pb)	<2 * 10 ⁻⁴	0.00082
Particulate Matter (PM _{2.5})	1.06	4.64
Particulate Matter (PM ₁₀)	5.76	25.23
Total Particulate Matter (TSP)	12.8 ¹	95.48 ²
Sulfur Dioxide (SO ₂)	130.7 ¹	267 ²
Volatile Organic Compounds (VOC)	0.23 ¹	1.27 ²
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: The hourly potential emissions for CO, NO_x, TSP, and VOC are based on the emission limits established in Permit R13-0715E, A.5 and cited in the current T5 Permit Section 4.1.4

2. Note 2: The annual potential emissions for CO, NO_x, TSP, and VOC are based on the allowable emission limits for the combined operation of the fluid bed and rotary dryers established in Permit R13-0715E, A.6 and cited in the current T5 Permit Section 4.1.5.

3. Hourly and annual potential emissions for lead, PM_{2.5}, and PM₁₀ are based on AP-42 emission factors in Tables 1.3-10 (1998) and 11.19.2-2 (2004).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Sulfur content limitations: R13-0715E, A.9 and cited in current T5 permit Section 4.1.3
2. Pollutant limitations: R13-0715E, A.5 and A.6 and cited in current T5 permit Section 4.1.4 and 4.1.5
3. Minimum fuel rating for recycled oil: R13-0715E, A.7 and cited in current T5 permit Section 4.1.6
4. Recycled oil specifications: R13-0715E, A.9 and cited in current T5 permit Section 4.1.7
5. Similar unit provisions: R13-0715E, B.4 and cited in current T5 permit Section 4.1.8

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:
 - Visual stack emissions - R13-0715E, A.12 and A.13 and cited in current T5 permit Sections 4.2.1 and 4.2.2
2. Testing Requirements: R13-0715E, B.7 and B.8 and cited in current T5 permit Sections 4.3.1 and 4.3.2

DELETE T5 permit Sections 4.3.3 and 4.3.4 Stack testing has been completed

3. Recordkeeping Requirements:
 - A. Type, quantity, and sulfur content analysis - R13-0715E, A.4 and cited in current T5 permit Section 4.4.1
 - B. Compliance calculations - R13-0715E, A.8 and cited in current T5 permit Section 4.4.2
 - C. Fuel analysis - R13-0715E, A.10 and cited in current T5 permit Section 4.4.3
 - D. Pressure monitoring records - R13-0715E, A.11 and cited in current T5 permit Section 4.4.4
 - E. Monitoring information - 45 CSR Section 10-8.3a and cited in current T5 permit Section 4.1.14
4. Reporting - 45 CSR Section 10-8.3b and cited in current T5 permit Section 4.1.15

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CRUSH2, CONV2, CONV3	Emission unit name: Primary Crushing Operations Emission Point ID – Stack #1	List any control devices associated with this emission unit: Cartridge filter (CF #1)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 4-foot jaw crusher, 42-inch incline belt and 42-inch short belt under primary crusher

Manufacturer:	Model number:	Serial number:
Construction date: pre-1970	Installation date: pre-1970	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 800 TPH

Maximum Hourly Throughput: 200 tons	Maximum Annual Throughput: 7 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	4.15 ¹	18.18
Particulate Matter (PM ₁₀)	22.5 ¹	98.55
Total Particulate Matter (TSP)	50 ²	219
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
~~DELETE~~ "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
~~DELETE~~ T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
~~DELETE~~ T5 permit Sections 6.4..2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CRUSH	Emission unit name: Secondary Crushing Operations Emission Point ID – Stack #2	List any control devices associated with this emission unit: Wet scrubber (WSC#2)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Symons secondary crusher and surge bin

Manufacturer:	Model number:	Serial number:
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Construction date: pre-1970	Installation date: pre-1970	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 400 TPH

Maximum Hourly Throughput: 400 tons	Maximum Annual Throughput: 3.5 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	4.15 ¹	18.18
Particulate Matter (PM ₁₀)	22.5 ¹	98.55
Total Particulate Matter (TSP)	50 ²	219
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
DELETE "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
DELETE T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
DELETE T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: VIBFD5, ELEV4, CONV39-41, CONV 29, CONV30, TANK #7, TANK #8, AND QROK SPOUT	Emission unit name: Screening and unground sand processing Emission Point ID – Stack #6	List any control devices associated with this emission unit: Cartridge filter (CF #6)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Grasshopper vibrating feeder, #1 to #3 magnet rolls, #1 dry sand conveyor, 20-inch tailings conveyor, sand storage tanks #7 and #8, and QROK bulk loading spout			
Manufacturer:	Model number:	Serial number:	
Construction date: pre-1970	Installation date: pre-1970	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 200 TPH			
Maximum Hourly Throughput: 400 tons	Maximum Annual Throughput: 1.75 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <u> X </u> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.57 ¹	15.63
Particulate Matter (PM ₁₀)	19.35 ¹	84.75
Total Particulate Matter (TSP)	43 ²	188.34
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
DELETE "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
DELETE T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
DELETE T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: SCREN10-13, SCREN2-4, ELEV1, ELEV2, ELEV3, CONV31, CONV33, TANK #13 AND TANK #8	Emission unit name: Screening and unground sand processing Emission Point ID – Stack #7	List any control devices associated with this emission unit: Cartridge filter (CF #7)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): #71 thru #74 Rotex screens, Tyler shaker screen and Hummer machines (#'s 63-66 and 51), elevators #1 thru #3, 24-inch conveyor for #9 and #10 tanks, 24-inch belt conveyor for Pulverizer tank, and sand storage tanks #8 and #13			
Manufacturer:	Model number:	Serial number:	
Construction date: pre-1970	Installation date: pre-1970	Modification date(s): 1996	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 200 TPH			
Maximum Hourly Throughput: 200 tons	Maximum Annual Throughput: 1.75 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.57 ¹	15.63
Particulate Matter (PM ₁₀)	19.35 ¹	84.75
Total Particulate Matter (TSP)	43 ²	188.34
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
DELETE "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
DELETE T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
DELETE T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: SCREW3, SCREW5, #1 and #2 MILL FEED BINS, SCREW6, AIRSD7, ELEV6, ELEV7, FEEDB1 AND FEEDB2	Emission unit name: Milling process Emission Point ID – Stack #10	List any control devices associated with this emission unit: Cartridge filter (CF #10)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): 1-2 screw conveyor, crossover conveyor, #1 mill feed bin, #2 mill feed bin, feeder belts for #1 and #2 pebble mill, screw conveyor #6, airslide #7, #1 and #2 mill elevator			
Manufacturer:	Model number:	Serial number:	
Construction date: pre-1970	Installation date: pre-1970	Modification date(s): 1996	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 100 TPH			
Maximum Hourly Throughput: 100 tons	Maximum Annual Throughput: 0.88 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <u> X </u> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. 			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.1 ¹	13.45
Particulate Matter (PM ₁₀)	16.65 ¹	72.9
Total Particulate Matter (TSP)	37 ²	162
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
DELETE "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
DELETE T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
DELETE T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: SCREW4, #3 AND #4 MILL FEED BINS, FEEDB3, FEEDB4, SCREW7, AIRSD8, ELEV8, ELEV9, PNEU4, #1 Microsizer Feed Bins, AIRSI 12 and ELEV16(7S)	Emission unit name: classification process Emission Point ID – Stack #11	List any control devices associated with this emission unit: Cartridge filter (CF #11)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): 3-4 screw conveyor, #3 and #4 mill feed bins, feeder belts for #3 and #4 pebble mills, screw conveyor and airslide for #4 mill discharge, #3 and #4 mill elevators, #2 Macawber pumping stations, airslide from #1 microsizer, and 5 micron feed elevator.			
Manufacturer:	Model number:	Serial number:	
Construction date: pre-1970	Installation date: pre-1970	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 100 TPH			
Maximum Hourly Throughput: 100 tons	Maximum Annual Throughput: 0.88 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <u>X</u> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.1 ¹	13.45
Particulate Matter (PM ₁₀)	16.65 ¹	72.9
Total Particulate Matter (TSP)	37 ²	162
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
~~DELETE~~ "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
~~DELETE~~ T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
~~DELETE~~ T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: #5 MILL FEED BIN, FEEDB5, MILL6, ELEV10, #6 MILL FEED BIN, FEEDB6. AIRSD3, ELEV11, PNEU2, BIN7, #1 AND #2 PUMPS, #2 MICROSIZER FEED BINS, AIRSI 13, TAILING BINS	Emission unit name: Milling and classification process Emission Point ID – Stack #12	List any control devices associated with this emission unit: Cartridge filter (CF #12)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 #5 pebble mill, feeder belt and bin, #5 mill elevator, #6 pebble mill feeder belt and bin, #6 mill elevator and airslide discharge for #6 mill, #1 Macawber pneumatic pumping station, #1 and #2 pneumatic pumps and feed bins, #2 microsizer feed bin and airslide from #2 microsizer, and tailings bin.

Manufacturer:	Model number:	Serial number:
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Construction date: pre-1970	Installation date: pre-1970	Modification date(s): 1996
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 100 TPH

Maximum Hourly Throughput: 100 tons	Maximum Annual Throughput: 0.88 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.1 ¹	13.45
Particulate Matter (PM ₁₀)	16.65 ¹	72.9
Total Particulate Matter (TSP)	37 ²	162
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
~~DELETE~~ "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
~~DELETE~~ T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
~~DELETE~~ T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PEMCO ELEVATOR, FCP TANK AND PEMCO TANK VENTS, SPOUT6	Emission unit name: Classification process Emission Point ID – Stack #13	List any control devices associated with this emission unit: Cartridge filter (CF #13)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Elevator for Pemco/FCP tanks, bucket loadout spout and Pemco/DCL loadout system.

Manufacturer:	Model number:	Serial number:
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Construction date: FCP Tank – 1998 SPOUT6 – pre-1970 other equipment – pre-1983	Installation date: FCP Tank – 1998 SPOUT6 – pre-1970 other equipment – pre-1983	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 250 TPH

Maximum Hourly Throughput: 250 tons	Maximum Annual Throughput: 2.19 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.9 ¹	17.1
Particulate Matter (PM ₁₀)	21.15 ¹	92.7
Total Particulate Matter (TSP)	47 ²	206
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
~~DELETE~~ "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
~~DELETE~~ T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
~~DELETE~~ T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: PACKR 3 AND 4	Emission unit name: 5 Micron classification process Emission Point ID – Stack #20	List any control devices associated with this emission unit: Cartridge filter (CF #20)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): #1 and #2 autobaggers and feed bins.			
Manufacturer:	Model number:	Serial number:	
Construction date: 1981	Installation date: 1981	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 20 TPH			
Maximum Hourly Throughput: 20 tons	Maximum Annual Throughput: 0.18 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	2.32 ¹	10.2
Particulate Matter (PM ₁₀)	12.6 ¹	55.2
Total Particulate Matter (TSP)	28 ²	122.6
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
DELETE "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
DELETE T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
DELETE T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CONV51, PULVERIZER TANK #19, PULVERIZER TANK #20, #2 FEED SILO, TANKS #9-#12 VENTS AND LOADOUTS, STEEL TANK #21 VENT AND LOADOUT, SPOUTS 1 TO 3	Emission unit name: Screening and unground sand processing and milling process Emission Point ID – Stack #27	List any control devices associated with this emission unit: Cartridge filter (CF #27)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 24-inch 30 mesh loadout conveyor, feed silo for #1-#4 pebble mills, feed silo for #5 and #6 pebble mills, storage tanks #9-#12 at the New Screen Tower, steel tank at the New Screen Tower, and loadout spouts #1-#3.

Manufacturer:	Model number:	Serial number:
Construction date: pre-1970	Installation date: pre-1970	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 200 TPH

Maximum Hourly Throughput: 200 tons	Maximum Annual Throughput: 1.75 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.57 ¹	15.63
Particulate Matter (PM ₁₀)	19.35 ¹	84.75
Total Particulate Matter (TSP)	43 ²	188.34
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
DELETE "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
DELETE T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
DELETE T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: ELEV14	Emission unit name: Milling process Emission Point ID – Stack #39	List any control devices associated with this emission unit: Cartridge filter (CF #39)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 #14 elevator

Manufacturer:	Model number:	Serial number:
Construction date: pre-1970	Installation date: pre-1970	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 150 TPH

Maximum Hourly Throughput: 150 tons	Maximum Annual Throughput: 1.32 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.32 ¹	14.5
Particulate Matter (PM ₁₀)	18.0 ¹	78.8
Total Particulate Matter (TSP)	40 ²	175.2
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
DELETE "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
DELETE T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
DELETE T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PACKR1	Emission unit name: Screening and unground sand processing Emission Point ID – Stack #40	List any control devices associated with this emission unit: Cartridge filter (CF #40)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 24-inch 30 mesh loadout conveyor, feed silo for #1-#4 pebble mills, feed silo for #5 and #6 pebble mills, storage tanks #9-#12 at the New Screen Tower, steel tank at the New Screen Tower, and loadout spouts #1-#3.

Manufacturer:	Model number:	Serial number:
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Construction date: pre-1975	Installation date: pre-1975	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 200 TPH

Maximum Hourly Throughput: 200 tons	Maximum Annual Throughput: 1.75 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	3.57 ¹	15.63
Particulate Matter (PM ₁₀)	19.35 ¹	84.75
Total Particulate Matter (TSP)	43 ²	188.34
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR Section 7-4.1 (“Type a” source operation) and cited in the T5 permit Section 6.1.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1 and cited in current T5 permit Section 6.1.1
2. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.1, 3.2.1, and 3.2.2
- B. Pressure drop - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.2.2 and 6.2.4
DELETE "and record".

2. Testing Requirements:

Stack Testing – 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.3.1, and 6.3.3
DELETE T5 permit Section 6.3.2 (annual testing requirement)

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.4.1, and 3.4.1, 3.4.2, 3.4.3 and 3.4.4
DELETE T5 permit Sections 6.4.2 and 6.4.3 (pressure drop recording)

4. Reporting Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 6.5.1, 3.5.6, and 3.5.8

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SCREN17 and SCREN18 (1s and 2s)	Emission unit name: Rotex screens Emission Point ID – Stack #9 (1E)	List any control devices associated with this emission unit: Cartridge filter (CF #9) (1c)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Two rotex screens at the wet float plant.

Manufacturer:	Model number:	Serial number:
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Construction date: 1999	Installation date: 1999	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 50 TPH each screen

Maximum Hourly Throughput: 100 tons	Maximum Annual Throughput: 876,000 tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.116 ¹	0.5 ¹
Particulate Matter (PM ₁₀)	0.63 ¹	2.7 ¹
Total Particulate Matter (TSP)	1.4 ²	6.0 ²
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly and annual potential emissions for TSP is based on the allowable emission limits in 45 CSR 13, R13-2423A, A.5 and cited in the T5 permit Section 5.1.9.5.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS), 45CSR13, R13-2423A, A.4 and cited in current Title V permit Sections 5.1.2 and 5.1.9.4.
3. Permit allowable limit established in 45CSR13, R13-2423A, A.4 and cited in current Title V permit Section 5.1.9.5.
4. Maximum allowable throughput established in 45CSR13, R13-2423A, A.1 and A.2 and cited in current Title V permit Sections 5.1.9.1 and 5.1.9.2.
5. Operation of control equipment 45CSR13, R13-2423A, A.3 and cited in current Title V permit Sections 5.1.9.3.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements:

- 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11
45 CSR 13, R13-2423A, B.4 and cited in current T5 permit Section 5.4.1
45 CSR 13, R13-2423A, B.5 and cited in current T5 permit Section 5.4.2

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: SCREW31, PACKR8 (1E)	Emission unit name: Bulk bagging operations Emission Point ID – Stack #9(1E)	List any control devices associated with this emission unit: Cartridge filter (CF #9) (1c)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Bulk bagging operation at the wet float plant.

Manufacturer:	Model number:	Serial number:
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Construction date: 1998	Installation date: 1998	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 30 TPH

Maximum Hourly Throughput: 30 tons	Maximum Annual Throughput: 262,800 tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.114 ¹	0.5 ¹
Particulate Matter (PM ₁₀)	0.617 ¹	2.7 ¹
Total Particulate Matter (TSP)	1.37 ²	6.0 ²
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly and annual potential emissions for TSP is based on the allowable emission limits in 45 CSR 13, R13-2299A, A.4 and cited in the T5 permit Section 5.1.10.4.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS), 45CSR13, R13-2299A, A.3 and cited in current Title V permit Sections 5.1.2 and 5.1.10.3.
3. Permit allowable limit established in 45CSR13, R13-2299A, A.4 and cited in current Title V permit Section 5.1.10.4.
4. Maximum allowable throughput established in 45CSR13, R13-2299A, A.1 and cited in current Title V permit Section 5.1.10.1.
5. Operation of control equipment 45CSR13, R13-2299A, A.2 and cited in current Title V permit Sections 5.1.10.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements:

- 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11
- 45 CSR 13, R13- R13-2299A, B.4 and cited in current T5 permit Section 5.4.3
- 45 CSR 13, R13- R13-2299A, B.5 and cited in current T5 permit Section 5.4.4

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: SCREN16 (TS1)	Emission unit name: Trash vibrating screen Emission Point ID – Stack #25	List any control devices associated with this emission unit: Cartridge filter (CF #25)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Bulk storage bin, product bin, loading spout and Stone Container bagger and bagger bin.			
Manufacturer:	Model number:	Serial number:	
Construction date: 1995	Installation date: 1995	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 200 TPH			
Maximum Hourly Throughput: 200 tons	Maximum Annual Throughput: 1,927,200 tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.083 ¹	0.083 ¹
Particulate Matter (PM ₁₀)	0.45 ¹	0.45 ¹
Total Particulate Matter (TSP)	1.0 ²	1.0 ²
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly and annual potential emissions for TSP is based on the allowable emission limits in 45 CSR 13, R13-2015B, A.2 and cited in the T5 permit Section 5.1.7.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS), 45CSR13, R13-2015B, A.2 and cited in current Title V permit Sections 5.1.2 and 5.1.7.2.
3. Permit allowable limit established in 45CSR13, R13-2015B, A.1 and cited in current Title V permit Section 5.1.7.1.
4. Maximum allowable throughput established in 45CSR13, R13-2015B, A.3 and cited in current Title V permit Section 5.1.7.3.
4. Operation of control equipment 45CSR13, R13-2015B, A.4 and A.5 and cited in current Title V permit Sections 5.1.7.4 and 5.1.7.5.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements:

- 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11
- 45 CSR 13, R13-2015B, B.1 and cited in current T5 permit Section 5.4.7
- 45 CSR 13, R13-2015B, B.2 and cited in current T5 permit Section 5.4.8
- 45 CSR 13, R13-2015B, B.3 and cited in current T5 permit Section 5.4.9
- 45 CSR 13, R13-2015B, B.4 and cited in current T5 permit Section 5.4.10

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: Storage silo #6	Emission unit name: Silica sand storage silo Emission Point ID – Stack #28 (6e)	List any control devices associated with this emission unit: Cartridge filter (CF #28)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Four storage silos #1-#4 for storage of ground silica sand

Manufacturer:	Model number:	Serial number:
Construction date: 1984	Installation date: 1984	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 100 tons

Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.0042 ¹	0.018
Particulate Matter (PM ₁₀)	0.023 ¹	0.099
Total Particulate Matter (TSP)	0.05 ²	0.219
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR 13, R13-750 and cited in the T5 permit Section 5.1.3.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
3. Permit allowable limit established in 45CSR13, R13-750 and cited in current Title V permit Section 5.1.3

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:
 - A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
 - B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.
2. Testing Requirements:
 - A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
 - B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2
3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11
4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: Storage silos #7, and #8	Emission unit name: Silica sand storage silos Emission Point ID – Stack #28 (E1)	List any control devices associated with this emission unit: Cartridge filter (CF #28)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Three storage silos #7 and #8 for storage of ground silica sand

Manufacturer:	Model number:	Serial number:
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Construction date: 1984	Installation date: 1984	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 100 tons each

Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.058 ¹	0.255 ¹
Particulate Matter (PM ₁₀)	0.315 ¹	1.38 ¹
Total Particulate Matter (TSP)	0.7 ²	3.07 ²
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly and annual potential emissions for TSP is based on the allowable emission limits in 45 CSR 13, R13-1970, A.1 and cited in the T5 permit Section 5.1.6.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
3. Permit allowable limit established in 45CSR13, R13-1970 A.1 and cited in current Title V permit Section 5.1.6

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11, 3.4.1 and 3.4.2

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: Storage silo #5	Emission unit name: Silica sand storage silo Emission Point ID – Stack #29 (5e)	List any control devices associated with this emission unit: Cartridge filter (CF #29)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Four storage silos #1-#4 for storage of ground silica sand			
Manufacturer:	Model number:	Serial number:	
Construction date: 1984	Installation date: 1984	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 125 tons			
Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.0042 ¹	0.018
Particulate Matter (PM ₁₀)	0.023 ¹	0.099
Total Particulate Matter (TSP)	0.05 ²	0.219
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR 13, R13-750 and cited in the T5 permit Section 5.1.3.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
3. Permit allowable limit established in 45CSR13, R13-750 and cited in current Title V permit Section 5.1.3

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: Tech Air Pumping Station	Emission unit name: Emission Point ID – Stacks #28 and #29	List any control devices associated with this emission unit: Cartridge filters (CF #28 and #29)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Pneumatic pumping station for Microsizer #3

Manufacturer:	Model number:	Serial number:
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Construction date: 2005	Installation date: 2005	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
8 tons per hour

Maximum Hourly Throughput: 8 tons	Maximum Annual Throughput: 70,080 TPY	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.033 ¹	0.145 ¹
Particulate Matter (PM ₁₀)	0.18 ¹	0.788 ¹
Total Particulate Matter (TSP)	0.40 ²	1.75 ²
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly and annual potential emissions for TSP is based on the allowable emission limit in 45 CSR 13, R13-2595 and cited in the T5 permit Section 5.1.11.2.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
3. Process throughput limitation established in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.1.
4. Permit allowable limit established in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.2.
5. Use of fugitive emissions control devices as required in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.3.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

A. Visible emissions evaluations – as established in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.5.

B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.

B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11 and 5.1.11.5.

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5 and as required in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.5.

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: Supersil silos #1-#4	Emission unit name: Silica sand storage silos Emission Point ID – Stack #33 (1e)	List any control devices associated with this emission unit: Cartridge filter (CF #33)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Four storage silos #1-#4 for storage of ground silica sand			
Manufacturer:	Model number:	Serial number:	
Construction date: 1984	Installation date: 1984	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 125 tons each			
Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.017 ¹	0.073
Particulate Matter (PM ₁₀)	0.09 ¹	0.394
Total Particulate Matter (TSP)	0.2 ²	0.876
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR 13, R13-750 and cited in the T5 permit Section 5.1.3.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
3. Permit allowable limit established in 45CSR13, R13-750 and cited in current Title V permit Section 5.1.3

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: PACKR5	Emission unit name: Ground sand packaging/loading Emission Point ID – Stack #34 (1e and 2e)	List any control devices associated with this emission unit: Cartridge filter (CF #34) (1c)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Bulk bagger and feed bin (1s and 2s)

Manufacturer:	Model number:	Serial number:
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Construction date: 1988	Installation date: 1988	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 15 TPH

Maximum Hourly Throughput: 15 tons	Maximum Annual Throughput: 0.13 * 10 ⁶ tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.042 ¹	0.182
Particulate Matter (PM ₁₀)	0.225 ¹	0.99
Total Particulate Matter (TSP)	0.5 ²	2.19
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR 13, R13-991, and cited in the T5 permit Sections 5.1.4.2 and 5.1.4.3.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- 1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
- 2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
- 3. Permit allowable limit established in 45CSR13, R13-991 and cited in current Title V permit Sections 5.1.4.2 and 5.1.4.3.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

- 1. Monitoring Requirements:
 - A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
 - B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.
- 2. Testing Requirements:
 - A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
 - B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2
- 3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11
- 4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: SCREN7-9, 14-15 (1s-5s)	Emission unit name: Rotex screens Emission Point ID – Stack #36 (1E)	List any control devices associated with this emission unit: Cartridge filter (CF #36) (1c)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): #1 thru #5 Rotex screens at the new screen tower.			
Manufacturer:	Model number:	Serial number:	
Construction date: 1995	Installation date: 1995	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 375 TPH			
Maximum Hourly Throughput: 375 tons	Maximum Annual Throughput: 3,285,000 tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <u> X </u> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.042 ¹	0.083 ¹
Particulate Matter (PM ₁₀)	0.225 ¹	0.45 ¹
Total Particulate Matter (TSP)	0.5 ²	2.2 ²
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly and annual potential emissions for TSP are based on the allowable emission limits in 45 CSR 13, R13-2145B, A.5 and cited in the T5 permit Section 5.1.8.5.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS), 45CSR13, R13-2145B, A.4 and cited in current Title V permit Sections 5.1.2 and 5.1.8.4.
3. Permit allowable limit established in 45CSR13, R13-2145B, A.5 and cited in current Title V permit Section 5.1.8.5.
4. Maximum throughput limit established in 45CSR13, R13-2145B, A.1 and and A.2 and cited in current Title V permit Sections 5.1.8.1 and 5.1.8.2.
5. Operation of control equipment 45CSR13, R13-2145B, A.3 and cited in current Title V permit Section 5.1.8.3.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. ~~DELETE~~ current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. ~~DELETE~~ T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements:

- 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11
- 45 CSR 13, R13-2145B, B.4 and cited in current T5 permit Section 5.4.5
- 45 CSR 13, R13-2145B, B.5 and cited in current T5 permit Section 5.4.6

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: 5 Micron Feed Bin (6s), ELEV16 (7s), and ELEV17 (8s)	Emission unit name: 5 Micron Bagging System Emission Point ID – Stack #37	List any control devices associated with this emission unit: Cartridge filter (CF #37) (1c)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): 5 Micron feed bin and return elevator			
Manufacturer:	Model number:	Serial number:	
Construction date: 1996	Installation date: 1996	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 150 TPH			
Maximum Hourly Throughput: 37.5 tons	Maximum Annual Throughput: 328,500 tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.017 ¹	0.073
Particulate Matter (PM ₁₀)	0.09 ¹	0.394
Total Particulate Matter (TSP)	0.2 ²	0.876
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR 13, R13-1917, A.1, and cited in the T5 permit Sections 5.1.5.1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
3. Permit allowable limit established in 45CSR13, R13-1917, A.1 and cited in current Title V permit Section 5.1.5.1.
4. Throughput limit established in 45CSR13, R13-1917, A.2 and cited in current Title V permit Sections 5.1.5.2.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: Bulk storage bin (2s), BIN5 (1s), BIN4 (3s), Bagger Bin (4s), PACKR7 (5s)	Emission unit name: 5 Micron Bagging System Emission Point ID – Stack #38	List any control devices associated with this emission unit: Cartridge filter (CF #38) (2c)	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Bulk storage bin, product bin, loading spout and Stone Container bagger and bagger bin.			
Manufacturer:	Model number:	Serial number:	
Construction date: 1996	Installation date: 1996	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 150 TPH			
Maximum Hourly Throughput: 35.5 tons	Maximum Annual Throughput: 310,980 tons	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.017 ¹	0.073
Particulate Matter (PM ₁₀)	0.09 ¹	0.394
Total Particulate Matter (TSP)	0.2 ²	0.876
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly potential emissions for TSP is based on the allowable emission limit in 45 CSR 13, R13-1917, A.1, and cited in the T5 permit Section 5.1.5.3.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
3. Permit allowable limit established in 45CSR13, R13-1917, A.3 and cited in current Title V permit Section 5.1.5.3.
4. Throughput limit established in 45CSR13, R13-1917, A.4 and cited in current Title V permit Sections 5.1.5.4.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- A. Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 5.2.3, 3.2.1, and 3.2.2 and 3.2.3
- B. DELETE current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

- A. DELETE T5 permit Section 5.3.1. All NSPS stacks have been tested.
- B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: BE1, BE2, SCREEN21, AS2, AS3, IS1, Airslide100, Airslide 200, BF1, Microsizer #3, Surge Hopper	Emission unit name: Coarse Ground Special Emission Point ID – Stack #41	List any control devices associated with this emission unit: Cartridge filter (CF #41)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Manufacturer: Donaldson	Model number: Torit M/N DFT 2-4-155	Serial number:
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Construction date:	Installation date:	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput: 25	Maximum Annual Throughput: 219,000 TPY	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data								
Criteria Pollutants	Potential Emissions							
	PPH				TPY			
	Microsizer #3	Airslide 100	Airslide 200	Surge Hopper	Microsizer #3	Airslide 100	Airslide 200	Surge Hopper
Carbon Monoxide (CO)								
Nitrogen Oxides (NO _x)								
Lead (Pb)								
Particulate Matter (PM _{2.5})	0.10 ¹	0.013 ¹	0.013 ¹	0.008 ¹	0.437 ¹	0.055 ¹	0.055 ¹	0.036 ¹
Particulate Matter (PM ₁₀)	0.54 ¹	0.068 ¹	0.068 ¹	0.045 ¹	2.37 ¹	0.297 ¹	0.297 ¹	0.194 ¹
Total Particulate Matter (TSP)	1.20 ²	0.15 ²	0.15 ²	0.10 ²	5.26 ²	0.66 ²	0.66 ²	0.43 ²
Sulfur Dioxide (SO ₂)								
Volatile Organic Compounds (VOC)								
Hazardous Air Pollutants	Potential Emissions							
	PPH				TPY			
Regulated Pollutants other than Criteria and HAP	Potential Emissions							
	PPH				TPY			

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004) – PM 10 is 45% of TSP and PM 2.5 is 8.3% of TSP

2. Note 2: The hourly and annual potential emissions for TSP is based on the allowable emission limit in 45 CSR 13, R13-2595 and cited in the T5 permit Section 5.1.11.2.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Mass emission limitations: 45 CSR Section 7-4.1, Table 45-7A and cited in current T5 permit Section 5.1.1
2. 40 CFR 60 Subpart OOO (NSPS) and cited in current Title V permit Section 5.1.2
3. Process throughput limitations established in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.1.
4. Permit allowable limits established in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.2.
5. Use of fugitive emissions control devices as required in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.3.
6. Maintain stabilized static pressure across baghouses as required by 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.4.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

A. Visible emissions evaluations – as established in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.5.

B. ~~DELETE~~ current T5 permit Sections 5.2.2. There are no wet scrubbers being used for NSPS sources.

2. Testing Requirements:

A. ~~DELETE~~ T5 permit Section 5.3.1. All NSPS stacks have been tested.

B. Test methods and procedures – 40 CFR 60.675 and cited in current T5 permit Section 5.3.2

3. Recordkeeping Requirements: 45 CSR Section 30-5.1c and cited in current T5 permit Section 5.4.11 and 5.1.11.5

4. Reporting Requirements: 40 CFR 60 Subpart OOO and cited in current T5 permit Section 5.5 and as required in 45CSR13, R13-2595 and cited in current Title V permit Section 5.1.11.5.

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: Tank No.16 and Tank No. 17	Emission unit name: Recycled oil storage tanks	List any control devices associated with this emission unit:	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Two 30,000-gallon tanks for storage of recycled oil			
Manufacturer:	Model number:	Serial number:	
Construction date: 2003	Installation date: 2003	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 30,000-gallon each			
Maximum Hourly Throughput: 150 gallons	Maximum Annual Throughput: 1,200,000	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	insignificant	insignificant
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Based on low vapor pressure of #2 fuel oil (AP42 Chapter 7.1)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR 60.116(b) and (d) (Subpart Kb)

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Recordkeeping Requirements: 40 CFR 60.116(b) and cited in current T5 permit Section 8.1.1

2. Reporting Requirements: 40 CFR 60.116(d) and cited in current T5 permit Section 8.2.1

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description			
Emission unit ID number: VIBFD1, CONV1, CONV8, CONV21, CONV23, CONV24, AND VIBFD4	Emission unit name: Outside conveyor belts	List any control devices associated with this emission unit: Enclosures	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Primary crusher feed bin and vibratory feeder (T1, T2), 42-inch belt to reclaim stockpile (T3), #2 stone tank conveyor (T4), 24-inch C-1 outside conveyor (T5), 24-inch C-2 outside conveyor (T6), 24-inch conveyor (T7), and Fluid Bed Dryer vibratory feeder (T8).			
Manufacturer:	Model number:	Serial number:	
Construction date: pre-1970	Installation date: pre-1970	Modification date(s):	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): T1 and T2 – 1000 TPH each; T3 – 800 TPH; T4 – 400 TPH; T5-T8 – 200 TPH each			
Maximum Hourly Throughput: T1 and T2 – 1000 tons each; T3 – 800 tons; T4 – 400 tons; T5-T8 – 200 tons each	Maximum Annual Throughput: T1 and T2 – 8,760,000 TPY each; T3 – 7,008,000 TPY; T4 – 3,504,000 TPY; T5-T8 – 752,000 TPY each	Maximum Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating:		Type and Btu/hr rating of burners:	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.56 ¹	2.18
Particulate Matter (PM ₁₀)	2.2 ¹	9.64
Total Particulate Matter (TSP)	6.0 ¹	26.3
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

1. Note 1: PM 10 and PM 2.5 potential emissions are estimated using emission factors found in AP-42 Table 11.19.2-1 (2004)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Visible emissions limitations: 45 CSR Section 30-5.1c and cited in current T5 permit Sections 7.1.1, 7.1.2, and 7.1.3.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring Requirements:

- Visible emissions evaluations - 45 CSR Section 30-5.1c and cited in current T5 permit Sections 7.1.1 and 7.1.2
- Maximum throughputs - 45 CSR Section 30-5.1c and cited in current T5 permit Section 7.1.3 and Section 1.0

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT F

SCHEDULE OF
COMPLIANCE FORMS

NOT APPLICABLE

ATTACHMENT G

AIR POLLUTION
CONTROL DEVICE
FORMS

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CF #1	List all emission units associated with this control device. CRUSH , CONV3, CONV2	
Manufacturer: Donaldson	Model number: Torit DF-T4-32	Installation date: MM/DD/YYYY
Type of Air Pollution Control Device: <input checked="" type="checkbox"/> Baghouse/Fabric Filter <input type="checkbox"/> Venturi Scrubber <input type="checkbox"/> Multiclone <input type="checkbox"/> Carbon Bed Adsorber <input type="checkbox"/> Packed Tower Scrubber <input type="checkbox"/> Single Cyclone <input type="checkbox"/> Carbon Drum(s) <input type="checkbox"/> Other Wet Scrubber <input type="checkbox"/> Cyclone Bank <input type="checkbox"/> Catalytic Incinerator <input type="checkbox"/> Condenser <input type="checkbox"/> Settling Chamber <input type="checkbox"/> Thermal Incinerator <input type="checkbox"/> Flare <input type="checkbox"/> Other (describe) _____ <input type="checkbox"/> Wet Plate Electrostatic Precipitator <input type="checkbox"/> Dry Plate Electrostatic Precipitator		
List the pollutants for which this device is intended to control and the capture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%
Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). 		
Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Complete ATTACHMENT H If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"		
Describe the parameters monitored and/or methods used to indicate performance of this control device. Visible emissions evaluations.		

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
WSc #2

List all emission units associated with this control device.
CRUSH3

Manufacturer:
Sly

Model number:
Impinjet 270

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input checked="" type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	98+%
PM10	99.99%	98+%
PM2.5	99.99%	98+%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
WSc #3

List all emission units associated with this control device.
DRYER1 (3s)

Manufacturer:
Sly

Model number:
Impinjet 1130

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input checked="" type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	98+%
PM10	99.99%	98+%
PM2.5	99.99%	98+%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #6

List all emission units associated with this control device.
VIBFD5, ELEV4, CONV39-41, CONV 29, CONV30, TANK #7,
TANK #8, AND QROK SPOUT

Manufacturer:
Donaldson

Model number:
Torit DFA-155

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CF #7	List all emission units associated with this control device. SCREN10-13, SCREN2-4, ELEV1, ELEV2, ELEV3, CONV31, CONV33, TANK #13 AND TANK #8
---	--

Manufacturer: Donaldson	Model number: Torit DFT-32-SH	Installation date: MM/DD/YYYY
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
WSc #8

List all emission units associated with this control device.
DRYER2 (8s)

Manufacturer:
Homemade

Model number:
NA

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input checked="" type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	90+%
PM10	99.99%	90+%
PM2.5	99.99%	90+%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #9

List all emission units associated with this control device.
SCREN17, SCREN18 (1s and 2s), SCREW31, PACKR8 (1E), ELEV20, concrete storage tank, steel storage tank, and SPOUT4

Manufacturer:
Donaldson

Model number:
Torit 4DFT-32-155

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

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ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CF #10	List all emission units associated with this control device. SCREW3, SCREW5, #1 and #2 MILL FEED BINS, SCREW6, AIRSD7, ELEV6, ELEV7, FEEDB1 AND FEEDB2
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Manufacturer: Mikropul	Model number: CFH 40T-20-B	Installation date: MM/DD/YYYY
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

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ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CF #11	List all emission units associated with this control device. SCREW4, #3 AND #4 MILL FEED BINS, FEEDB3, FEEDB4, SCREW7, AIRSD8, ELEV8, ELEV9, PNEU4, #1 Microsizer Feed Bins, AIRSI 12 and ELEV16(7S)	
Manufacturer: Mikropul	Model number: CFH 40T-20-B	Installation date: MM/DD/YYYY
Type of Air Pollution Control Device:		
<input checked="" type="checkbox"/> Baghouse/Fabric Filter <input type="checkbox"/> Venturi Scrubber <input type="checkbox"/> Multiclone <input type="checkbox"/> Carbon Bed Adsorber <input type="checkbox"/> Packed Tower Scrubber <input type="checkbox"/> Single Cyclone <input type="checkbox"/> Carbon Drum(s) <input type="checkbox"/> Other Wet Scrubber <input type="checkbox"/> Cyclone Bank <input type="checkbox"/> Catalytic Incinerator <input type="checkbox"/> Condenser <input type="checkbox"/> Settling Chamber <input type="checkbox"/> Thermal Incinerator <input type="checkbox"/> Flare <input type="checkbox"/> Other (describe) _____ <input type="checkbox"/> Wet Plate Electrostatic Precipitator <input type="checkbox"/> Dry Plate Electrostatic Precipitator		
List the pollutants for which this device is intended to control and the capture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%
Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). 		
Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Complete ATTACHMENT H If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"		
Describe the parameters monitored and/or methods used to indicate performance of this control device. Visible emissions evaluations.		

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ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #12

List all emission units associated with this control device.
#5 MILL FEED BIN, FEEDB5, MILL6, ELEV10, #6 MILL FEED BIN, FEEDB6. AIRSD3, ELEV11, PNEU2, BIN7, #1 AND #2 PUMPS, #2 MICROSIZER FEED BINS, AIRSI 13, TAILING BINS

Manufacturer:
Mikropul

Model number:
CFH 40T-20-B

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

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ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #13

List all emission units associated with this control device.
PEMCO elevator, FCP Tank, PEMCO Tank, SPOUT6

Manufacturer:

Donaldson

Model number:

Torit DF-T3-24

Installation date:

MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

11/01/24

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #20

List all emission units associated with this control device.
PACKR3 and PACKR4

Manufacturer:

Donaldson

Model number:

Torit DF-T4-16

Installation date:

MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #25

List all emission units associated with this control device.
CONV25, SCREN16, CONV26, and CONV 27

Manufacturer:

Donaldson

Model number:

Torit DF-4DF-48

Installation date:

MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CF #27	List all emission units associated with this control device. CONV51, PULVERIZER TANK #19, PULVERIZER TANK #20, #2 FEED SILO, TANKS #9-#12 VENTS AND LOADOUTS, STEEL TANK #21 VENT AND LOADOUT, SPOUTS 1 TO 3	
Manufacturer: Donaldson	Model number: Torit DF-T2-8	Installation date: MM/DD/YYYY
Type of Air Pollution Control Device:		
<input checked="" type="checkbox"/> Baghouse/Fabric Filter <input type="checkbox"/> Venturi Scrubber <input type="checkbox"/> Multiclone <input type="checkbox"/> Carbon Bed Adsorber <input type="checkbox"/> Packed Tower Scrubber <input type="checkbox"/> Single Cyclone <input type="checkbox"/> Carbon Drum(s) <input type="checkbox"/> Other Wet Scrubber <input type="checkbox"/> Cyclone Bank <input type="checkbox"/> Catalytic Incinerator <input type="checkbox"/> Condenser <input type="checkbox"/> Settling Chamber <input type="checkbox"/> Thermal Incinerator <input type="checkbox"/> Flare <input type="checkbox"/> Other (describe) _____ <input type="checkbox"/> Wet Plate Electrostatic Precipitator <input type="checkbox"/> Dry Plate Electrostatic Precipitator		
List the pollutants for which this device is intended to control and the capture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%
Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).		
Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Complete ATTACHMENT H If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"		
Describe the parameters monitored and/or methods used to indicate performance of this control device. Visible emissions evaluations.		

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ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #28

List all emission units associated with this control device.
Minusil storage silos #6-#9, SPOUT5, Tech Air Pumping Station

Manufacturer:
Donaldson

Model number:
Torit DF-2D-F4

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #29

List all emission units associated with this control device.
Minusil storage silo #5 (5e), and Tech Air Pumping Station

Manufacturer:
Mikropul

Model number:
CFH-18-20-VB

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #33

List all emission units associated with this control device.
Supersil storage silos #1-#4 (1e-4e)

Manufacturer:
Donaldson

Model number:
Torit DF-T4-16

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #34

List all emission units associated with this control device.
PACKR5 (1e and 2e)

Manufacturer:
Donaldson

Model number:
Torit DF-2D-F4

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

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ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #36

List all emission units associated with this control device.
SCREN 7-9 and 14-15 (1E)

Manufacturer:
Donaldson

Model number:
Torit DF-T2-8

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: CF #37	List all emission units associated with this control device. 5 Micron Feed Bin, ELEV 7, and BIN5	
Manufacturer: Mikropul	Model number: CFH-8-20	Installation date: MM/DD/YYYY
Type of Air Pollution Control Device:		
<input checked="" type="checkbox"/> Baghouse/Fabric Filter <input type="checkbox"/> Venturi Scrubber <input type="checkbox"/> Multiclone <input type="checkbox"/> Carbon Bed Adsorber <input type="checkbox"/> Packed Tower Scrubber <input type="checkbox"/> Single Cyclone <input type="checkbox"/> Carbon Drum(s) <input type="checkbox"/> Other Wet Scrubber <input type="checkbox"/> Cyclone Bank <input type="checkbox"/> Catalytic Incinerator <input type="checkbox"/> Condenser <input type="checkbox"/> Settling Chamber <input type="checkbox"/> Thermal Incinerator <input type="checkbox"/> Flare <input type="checkbox"/> Other (describe) _____ <input type="checkbox"/> Wet Plate Electrostatic Precipitator <input type="checkbox"/> Dry Plate Electrostatic Precipitator		
List the pollutants for which this device is intended to control and the capture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%
Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).		
Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Complete ATTACHMENT H If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"		
Describe the parameters monitored and/or methods used to indicate performance of this control device. Visible emissions evaluations.		

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ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #38

List all emission units associated with this control device.
BIN4, Stone Container Bagger Bin, and PACKR7

Manufacturer:
Mikropul

Model number:
CFH 18-20-V-B

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #39

List all emission units associated with this control device.
ELEV14

Manufacturer:
Mikropul

Model number:
CFH 8-20-V

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #40

List all emission units associated with this control device.
PACKR1

Manufacturer:

Donaldson

Model number:

Torit DF-T2-8

Installation date:

MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification.

Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
CF #41

List all emission units associated with this control device.

Manufacturer:
Donaldson

Model number:
Torit DFT 2-4-155

Installation date:
MM/DD/YYYY

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
TSP	99.99%	99.9%
PM10	99.99%	99.9%
PM2.5	99.99%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H

If No, Provide justification. Uncontrolled emission factors in AP-42 Chapter 11.19.2, Table 11.19.2-2 "Crushed Stone Processing Operations (8/04)"

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Visible emissions evaluations.

ATTACHMENT H

COMPLIANCE
ASSURANCE
MONITORING (CAM)
FORMS

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at <http://www.epa.gov/ttn/emc/cam.html>

CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to EACH regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet all of the following criteria (*If No, then the remainder of this form need not be completed*): YES NO

- a. The PSEU is located at a major source that is required to obtain a Title V permit;
- b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is NOT exempt;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
 - Stratospheric Ozone Protection Requirements.
 - Acid Rain Program Requirements.
 - Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
 - An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).
- c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;
 - d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND
 - e. The PSEU is NOT an exempt backup utility power emissions unit that is municipally-owned.

BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

- RENEWAL APPLICATION. ALL PSEUs for which a CAM plan has NOT yet been approved need to be addressed in this CAM plan submittal.
- INITIAL APPLICATION (submitted after 4/20/98). ONLY large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.
- SIGNIFICANT MODIFICATION TO LARGE PSEUs. ONLY large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, Only address the appropriate monitoring requirements affected by the significant modification.

3. ^a BACKGROUND DATA AND INFORMATION

Complete the following table for all PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU in order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	^b EMISSION LIMITATION or STANDARD	^c MONITORING REQUIREMENT
DRYER1	Fluid Bed Sand Dryer	TSP	Wet Scrubber	45CSR, R13-0715E, A.5 – 12.8 lb/hr and, 45CSR, R13-0715E, A.6 – 95.48 TPY in combination with DRYER2	1. visual emissions – 45CSR13, R13-0715E, A.12 and A.13 2. pressure drop – 45CSR13, R13-0715E,
DRYER2	Rotary Sand Dryer	TSP	Wet Scrubber	45CSR, R13-0715E, A.5 – 9.0 lb/hr and, 45CSR, R13-0715E, A.6 – 95.48 TPY in combination with DRYER1	1. visual emissions – 45CSR13, R13-0715E, A.12 and A.13 2. pressure drop – 45CSR13, R13-0715E,
<u>EXAMPLE</u> Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.: 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

^a If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

^b Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

^c Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. If more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

4a) PSEU Designation: DRYER1 and DRYER2	4b) Pollutant: TSP	4c) ^a Indicator No. 1: visible emissions	4d) ^a Indicator No. 2: pressure drop
5a) GENERAL CRITERIA Describe the <u>MONITORING APPROACH</u> used to measure the indicators:		Weekly visible emissions observations using Method 22 and Method 9 monitoring methods in accordance with 45CSR13, R13-0715E, A.12 and A.13 and Title V permit Sections 4.2.1 and 4.2.2.	Daily pressure drop across the scrubber is measured with a differential pressure gauge. Daily recordings are taken in accordance with 45CSR13, R-13-0715E, A.11 and Title V permit Sections 4.4.4.
^b Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:		Greater than 20% opacity, or excess of 40% for any period or periods aggregating more than 5 minutes in any 60 minute period. 45CSR13, R13-0715E, A.12 and Title V permit Sections 4.2.1.	Daily pressure drop monitoring is conducted to ensure that the pressure drop is maintained within manufacturer's specifications.
5b) PERFORMANCE CRITERIA Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:		Observations are made at the scrubber exhaust.	Pressure taps are located at the scrubber inlet and outlet.
^c For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring:		NA	NA
Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):		The observer will be familiar with the scrubber operations and visible emissions methodology (Methods 9 and 22).	Pressure taps are inspected daily and calibrated annually.
^d Provide the <u>MONITORING FREQUENCY</u> :		Weekly observations during operation of the emission unit. Revert to daily if deviation occurs. See 45CSR13, R13-0715E, A.12 and A.13 and Title V permit Sections 4.2.1 and 4.2.2.	Continuous operation of the pressure gauge.
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:		Documentation of all visible emission observations.	Manually recorded daily. Data is collected once per day and recorded in a log book.
Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:		NA	NA

^a Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

- ^b Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.
- ^c The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.
- ^d Emission units with post-control PTE \geq 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION	
<p>Complete this section for <u>EACH</u> PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of <u>EACH</u> indicator and monitoring approach and <u>EACH</u> indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.</p>	
<p>6a) PSEU Designation: DRYER1 and DRYER2</p>	<p>6b) Regulated Air Pollutant: TSP</p>
<p>7) INDICATORS AND THE MONITORING APPROACH: Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):</p> <p>Visible emissions were selected as a performance indicator because they provide a good indication of the operation and maintenance of the wet scrubber. An increase in visible emissions indicates reduced performance of the wet scrubber and is used as a performance indicator. Visible emission monitoring is also required to comply with limitations contained in 45CSR7A-2.1a,b.</p> <p>Wet scrubbers normally operate within a constant pressure drop range. Monitoring pressure drop provides a means of detecting a change in operation that may lead to an increase in emissions.</p>	
<p>8) INDICATOR RANGES: Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how <u>EACH</u> indicator range was selected by either a <u>COMPLIANCE OR PERFORMANCE TEST</u>, a <u>TEST PLAN AND SCHEDULE</u>, or by <u>ENGINEERING ASSESSMENTS</u>. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):</p> <ul style="list-style-type: none"> • <u>COMPLIANCE OR PERFORMANCE TEST</u> (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall <u>INCLUDE</u> a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted. • <u>TEST PLAN AND SCHEDULE</u> (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall <u>INCLUDE</u> the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval. • <u>ENGINEERING ASSESSMENTS</u> (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall <u>INCLUDE</u> documentation demonstrating that compliance testing is not required to establish the indicator range. <p>RATIONALE AND JUSTIFICATION:</p>	

The selected indicator range is the presence of no visible emissions. When visible emissions are observed using Method 22 procedures, the facility will conduct an opacity evaluation using Method 9 procedures. A Method 9 opacity evaluation is not needed if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visual emissions being observed. A deviation is defined as the presence of visible emissions in excess of the limits in 45CSR13, R13-0715E, A.12 and A.13. Visible emissions will be conducted weekly on the two dryer exhaust stacks. Deviations are reported within 5 days after taking the Method 9 opacity reading.

The indicator range for the pressure drop is based on manufacturer's specifications. A deviation is a pressure drop in excess of manufacturer's specifications. Deviations trigger an inspection and corrective action. If the pressure drop falls below 30 % from the average operating pressure drop during normal process operation, the possibility of bypass is investigated. The pressure drop is recorded once per day.

Stack tests were conducted on the dryers on 6/2/2004 and 6/11/2004. Stack test results indicated that the emission units were well within allowable emission limits.