#### **Bay Area Air Quality Management District**

939 Ellis Street San Francisco, CA 94109 (415) 771-6000

#### **FINAL** Proposed

#### **MAJOR FACILITY REVIEW PERMIT**

## Issued To: Criterion Catalysts & Technologies, L.P. Facility #A0227

**Facility Address:** 

2840 Willow Pass Road Pittsburg, CA 94565

**Mailing Address:** 

P.O. Box 5159 Pittsburg, CA 94565-0659

**Responsible Official** 

Alvin G. Lim, Plant Site Manager (925) 458-7200

**Facility Contact** 

Alvin G. Lim, Plant Site Manager (925) 458-7200

**Type of Facility:** Catalyst Manufacturing BAAQMD Engineering Division

Contact: Dharam Singh

Primary SIC: 2819
Product: Catalyst

#### ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jean Roggenkamp for Jack P. Broadbent

September 1, 2011

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

Date

#### TABLE OF CONTENTS

I.	STANDARD CONDITIONS	3
II.	EQUIPMENT	7
III.	GENERALLY APPLICABLE REQUIREMENTS	16
IV.	SOURCE-SPECIFIC APPLICABLE REQUIREMENTS	19
V.	SCHEDULE OF COMPLIANCE	<u>51</u> 50
VI.	PERMIT CONDITIONS	<u>51</u> 50
VII.	APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS	<u>68</u> 67
VIII.	TEST METHODS	<u>99</u> 98
IX.	PERMIT SHIELD	<u>101</u> 400
X.	REVISION HISTORY	<u>102</u> 101
XI.	GLOSSARY	<u>103</u> <del>102</del>

#### I. STANDARD CONDITIONS

#### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 5/2/01);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 6/28/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 6/15/05);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 6/15/05);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 12/21/04);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 1/26/99); and

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review

(as amended by the District Board on 4/16/03).

#### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

- 1. This Major Facility Review Permit was issued on December 15, 2008 and expires on December 14, 2013. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than June 14, 2013, and no earlier than December 14, 2012. If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after December 14, 2013. If the permit renewal has not been issued by December 14, 2013, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407,& 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
- 3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)

#### I. Standard Conditions

- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B Public Information, Confidentiality of Business Information. (40 CFR Part 2)
- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
- 11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)
- 12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

#### I. Standard Conditions

#### C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

#### D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

#### E. Records

- 1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
- 2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, MOP Volume II, Part 3, §4.7)

#### F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. Monitoring reports shall be for the following periods: May 1st through October 31st and November 1st through April 30th, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Attn: Title V Reports

(Regulation 2-6-502, MOP Volume II, Part 3, §4.7)

#### **G.** Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be November 1st through October 31st. The certification shall be submitted by November 30th of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other

#### I. Standard Conditions

specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated compliance certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

Director of the Air Division USEPA, Region IX 75 Hawthorne Street San Francisco, CA94105 Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

#### **H.** Emergency Provisions

- 1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
- 2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
- 3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

#### I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

#### J. Miscellaneous Conditions

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301. (Regulation 2-1-301)

#### K. Accidental Release

This facility is subject to 40 CFR Part 68, Chemical Accident Prevention Provisions. The permit holder shall submit a risk management plan (RMP) by the date specified in §68.10. The permit holder shall also certify compliance with the requirements of Part 68 as part of the annual compliance certification, as required by Regulation 2, Rule 6. (40 CFR Part 68, Regulation 2, Rule 6)

#### II. EQUIPMENT

#### **Table II A - Permitted Sources**

S-#	Description	Make or Type	Model	Capacity
1	X1 Muller	Simpson	3UD	36 ton/day max.
2	X1 Dryer (Natural gas)	Wysmont	Q-16	5.724 MMBTU/hr max,
				36 ton/day max.
3	X1 Dried Product Elevator	Link Belt		36 ton/day max.
4	X1 Dried Product Screener	Rotex	#242	36 ton/day max.
5	X1 Longs Breaker	Shell Development	CLOB #1	36 ton/day max.
6	X1 Kiln Feed Conveyor System	Link Belt		36 ton/day max.
7	X1 Kiln (Natural gas)	B/S Rotary	F-82	8.0 MMBTU/hr max., 36 ton/day max.
8	X1 Calcined Product Elevator	Link Belt		36 ton/day max.
9	X1 Calcined Product Screener	Rotex	#242	36 ton/day max.
10	X1 Calcined Product Packaging	Toledo Scale		36 ton/day max.
11	X1 Calcined Product Conveyor	Custom made		36 ton/day max.
19	X1 Recycle Station	Custom made		36 ton/day max.
104	H1 Blending Tank T-1	Open Tank		480 gallon capacity, 36
				tons/day max.
105	H1 Blending Tank T-2	Open Tank		480 gallon capacity, 36
				tons/day max.
106	H1 Blending Tank T-3	Open Tank		160 gallon capacity, 36
				ton/day max.
107	H1 Liquid/Solids Blender	Patterson Foundry	#58-2971	140 cu. ft., 36 tons/day
				max.
111	04 Calcined Product Elevator	Universal	C2-175	36 ton/day max.
112	04 Calcined Product Screener	Rotex	242	36 ton/day max.
113	04 Calcined Product Packaging	Toledo Scale		36 ton/day max.
114	04 Kiln Hopper	Frederiksen Engineering		36 ton/day max.
303	Alumina Receiving Fluidstat	Buhler-Miag, Inc.		100 cu. ft., 100 ton/day
	Station			max.
304	Alumina Silo 1	Custom made		15,000 cu. ft.
305	Alumina Silo 2	Custom made		15,000 cu. ft.
306	Alumina Silo 3	Custom made		8,500 cu. ft.

#### **Table II A - Permitted Sources**

S-#	Description	Make or Type	Model	Capacity
307	Alumina Silo 4	Custom made		8,500 cu. ft.
308	Alumina Silo 5	Custom made		15,000 cu. ft.
309	Alumina Recirculation Fluidstat	Buhler-Miag, Inc.		180 cu. ft.
	Station			
310	Alumina Measuring Fluidstat	Buhler-Miag, Inc.		150 cu. ft., 112.5 ton/day
	Station			max.
311	Alumina Bulk Bag Unloader	Buhler-Miag, Inc.		48 ton/day max.
312	Alumina Repackaging Station	W.W. Sly		32 ton/day max.
313	Fines Grinder Feed Hopper	Custom made		140 cu. ft., 12 ton/day
	System			max.
314	Reground Fines Storage Silo	Custom made		750 cu. ft., 12 ton/day
	TK-70112			max.
315	Reground Fines Storage Silo	Custom made		750 cu. ft., 12 ton/day
	TK-70113			max.
316	Reground Fines Storage Silo	Custom made		750 cu. ft., 12 ton/day
	TK-70114			max.
317	Reground Fines Storage Silo	Custom made		750 cu. ft., 12 ton/day
	TK-70115			max.
318	Fines Weigh Hopper Blow Pot	Smoot	V-70102	25 cu. ft., 12 ton/day max.
319	Fines Bagout Station No. 1 &			1.0 ton supersacks; 55-
	No. 2			gallon drums, 12 ton/day
				max.
320	Fines Grinder	Micro-Pulverizer	60 ACM	12 ton/day max.
321	Alumina Storage Silo			15,000 cu. ft.
<u>322</u>	Fines Tanker Truck Delivery	Custom Made		<u>40,000 lb</u>
	System			
<u>323</u>	Fines Grinder Feed Hopper	Custom Made		
	System (secondary)			
401	X2 Muller	Simpson	3UD	39 ton/day max.
407	X2 Dryer (Natural gas)	Wysmont	#Q-16	5.7 MMBTU/hr max., 39
				ton/day max.
408	X2 Dried Product Elevator	Link Belt, Bucket		39 ton/day max.
409	X2 Dried Product Screener	Rotex	#242	39 ton/day max.

#### **Table II A - Permitted Sources**

S-#	Description	Make or Type	Model	Capacity
410	X2 Longs Breaker	Shell Development	CLOB #1	39 ton/day max.
412	X2 Kiln Feed Conveyor	Link Belt, Covered		39 ton/day max.
413	X2 Kiln	B/S, Rotary		8.1 MMBTU/hr max., 39
				ton/day max.
414	X2 Calcined Product Elevator	Link Belt or equal		39 ton/day max.
415	X2 Calcined Product Screener	Rotex	#242	39 ton/day max.
416	X2 Calcined Product Packaging	Toledo Scale or equal		39 ton/day max.
417	X2 Calcined Product Conveyor	Custom made		39 ton/day max.
418	X2 Recycle Station	Custom made		39 ton/day max.
420	Cold Cleaner	Shell Design		11 gallon
502	Nickel Solution Tank			15,000 gallon
504	H2 Blending Tank T-1	Heated		500 gallon, 52 ton/day
				max.
505	H2 Blending Tank T-2	Heated		625 gallon, 52 ton/day
				max.
506	H2 Blending Tank T-3	Heated		300 gallon, 52 ton/day
				max.
507	H2 Liquids/Solids Blender			115 cu. ft., 52 ton/day
				max.
509	H2 Kiln Feed Conveyor	Bucket elevator		52 ton/day max.
510	H2 Kiln (Natural gas)	B/S, Rotary		8.6 MMBTU/hr max., 52
				ton/day max.
511	H2 Product Conveyor	Link Belt, Bucket		52 ton/day max.
		elevator		
512	H2 Product Screener	Rotex	#242	52 ton/day max.
513	H2 Product Packaging	Toledo Scale		52 ton/day max.
514	H2 Kiln Bypass Chute &	Custom made		57 ton/day max.
	Hopper w/dusthood			
515	H2 Solid Additive Hopper A	Young, custom		60 ton/day max.
516	H2 Solid Additive Hopper B	Young, custom		60 tons/day max.
517	H2 Product Recycle System	Custom made		52 ton/day max.
518	H2 Calcined Feed System	Custom made		52 ton/day max.
519	H2 Spherical Hopper System	Paystar, custom		52 ton/day max.

#### **Table II A - Permitted Sources**

S-#	Description	Make or Type	Model	Capacity
520	H2 Calcined Feed Bagout	Custom made		52 ton/day max.
	Station			
600	X3 Dried Extruder Screener,			36 ton/day max.
	Conveyors			
601	X3 Fines Surge Hopper			36 ton/day max.
602	X3 Alumina Surge Hopper			36 ton/day max.
603	X3 Extruder	Warner Pflidder		36 ton/day max.
604	X3 Dryer (Natural gas)			6.1 MMBTU/hr max., 36
				ton/day max.
606	X3 Calciner (Natural gas)	Heyl & Patterson Inc.,		8.718 MMBTU/hr max.,
		Custom made		36 ton/day max.

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	
A-#	Description	Controlled	Requirement	Parameters	Limit or Efficiency
2	X1 Kiln Baghouse, Reverse	S7	BAAQMD	None	Outlet grain loading
	Jet, Micro Pul 144-S-10		Reg. 6-1-301,		shall not exceed
			6-1-310,		0.006 grain/dscf
			SIP Reg. 6-		
			301, 6-310,		
			and Cond #		
			13100		
3	X1 Nuisance Dust Baghouse,	S3, S4, S5, S6,	BAAQMD	None	Outlet grain loading
	Reverse Jet, Flex-Kleen	S8, S9, S10,	Reg. 6-1-301,		shall not exceed 0.15
	36BV-25	S11	6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310, and		
			Cond # 16736		
4	X1 Area Dust Collector,	S1, S318 (via	BAAQMD	None	Outlet grain loading
	Pulse Jet, Flex-Kleen 120	S1)	Reg. 6-1-		shall not exceed
	BVTC, 383 sq. ft., 1116		301,6-1-310,		0.006 grain/dscf
	acfm		SIP Reg. 6-		
			301, 6-310,		
			and Cond #		
			8444		
6	X1 Dryer Baghouse, Reverse	S2	BAAQMD	None	Outlet grain loading
	Jet, Flex-Kleen, 10,000 scfm		Reg. 6-1-301,		shall not exceed
			6-1-310, SIP		0.006 grain/dscf
			Reg. 6-301,		
			6-310, and		
			Cond # 13099		
14	04 Plant Nuisance Dust	S110, S111,	BAAQMD	None	Outlet grain loading
	Baghouse, Pulse Jet, Mikro-	S112, S113,	Reg. 6-1-301,		shall not exceed
	Pulsaire, 156S-10-20-TR,	S114	6-1-310, SIP		0.006 grain/dscf
	7500 acfm		Reg. 6-301,		
			6-310, and		
			Cond # 13138		
32	Alumina Receiving Dust	S303	BAAQMD	None	Outlet grain loading
	Collector, Reverse Jet, Flex-		Reg. 6-1-301,		shall not exceed 0.15
	Kleen 84 CT-24, 240 sq. ft.		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	
<b>A-</b> #	Description	Controlled	Requirement	Parameters	Limit or Efficiency
33	Silo 1 Vent Filter, Reverse	S304	BAAQMD	None	Outlet grain loading
	Jet, Flex-Kleen 84 BV-16,		Reg. 6-1-301,		shall not exceed 0.15
	160 sq. ft.		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
34	Silo 2 Vent Filter, Reverse	S305	BAAQMD	None	Outlet grain loading
	Jet, Flex-Kleen 84 BV-16,		Reg. 6-1-301,		shall not exceed 0.15
	160 sq. ft.		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
35	Silo 3 Vent Filter, Reverse	S306	BAAQMD	None	Outlet grain loading
	Jet, Flex-Kleen 84 BV-16,		Reg. 6-1-301,		shall not exceed 0.15
	160 sq. ft.		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
36	Silo 4 Vent Filter, Reverse	S307	BAAQMD	None	Outlet grain loading
	Jet, Flex-Kleen 84 BV-16,		Reg. 6-1-301,		shall not exceed 0.15
	160 sq. ft.		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
37	Silo 5 Vent Filter, Reverse	S308	BAAQMD	None	Outlet grain loading
	Jet, Flex-Kleen 84 BV-16,		Reg. 6-1-301,		shall not exceed 0.15
	160 sq. ft.		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
38	Alumina Recirculation	S309	BAAQMD	None	Outlet grain loading
	Blowpot Baghouse, Reverse		Reg. 6-1-301,		shall not exceed 0.15
	Jet, Flex-Kleen 84 CT-46,		6-1-310, SIP		grain/dscf
	460 sq. ft.		Reg. 6-301,		
			6-310,		
39	Alumina measuring Blowpot	S310	BAAQMD	None	Outlet grain loading
	Baghouse, Reverse Jet, Flex-		Reg. 6-1-301,		shall not exceed 0.15
	Kleen 84 CT-30, 300 sq. ft.		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
40	Repackaging Baghouse,	S311, S312,	Cond # 3344	None	Outlet grain loading
	Reverse Jet, Flex-Kleen	S313, S318 <sub>2</sub>			shall not exceed
	WRTS-64, 6200 acfm.	<u>S323</u>			0.005 grain/dscf

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	
<b>A-</b> #	Description	Controlled	Requirement	Parameters	Limit or Efficiency
42	X2 Extrudate II Dust	S408, S409,	BAAQMD	None	Outlet grain loading
	Collector - Nuisance	S410, S412,	Reg. 6-1-301,		shall not exceed 0.15
	Baghouse, Reverse Jet,	S414, S415,	6-1-310, SIP		grain/dscf
	Mikro Pul 100-S-10-20	S416, S417,	Reg. 6-301,		
		S418	6-310,		
43	X2 Extrudate II Kiln	S413	Cond # 13100	None	Outlet grain loading
	Baghouse, Reverse Jet,				shall not exceed
	Mikro Pul 144-S-10				0.006 grain/dscf
44	Reground Fines Silo Dust	S314, S319	Cond # 8468	None	Outlet grain loading
	Collector, Pulse Jet, Mikro-	(via S314),			shall not exceed
	Pulsaire 100-S12-TR-B,	S320			0.005 grain/dscf
	1414 sq. ft.				
45	Reground Fines Silo Dust	S315, S320	Cond # 8468	None	Outlet grain loading
	Collector, Pulse Jet, Mikro-				shall not exceed
	Pulsaire 100-S12-TR-B,				0.005 grain/dscf
	1414 sq. ft.				
46	Reground Fines Silo Dust	S316, S320	Cond # 8468	None	Outlet grain loading
	Collector, Pulse Jet, Mikro-				shall not exceed
	Pulsaire 100-S12-TR-B,				0.005 grain/dscf
	1414 sq. ft.				
47	Reground Fines Silo Dust	S317, S319	Cond # 8468	None	Outlet grain loading
	Collector, Pulse Jet, Mikro-	(via S317),			shall not exceed
	Pulsaire 100-S12-TR-B,	S320			0.005 grain/dscf
	1414 sq. ft.				
48	X2 Muller Filter Receiver,	S318 (via	Cond # 8445	None	Outlet grain loading
	Pulse Jet, Flex-Kleen 120	S401), S401			shall not exceed
	BVTC, 383 sq. ft., 1116				0.006 grain/dscf
	acfm				
49	H1 Blending Tank	S104, S105,	Cond # 9984	None	Outlet grain loading
	Baghouse, Pulse Jet, Mikro-	S106			shall not exceed
	Pulsaire 64S10-20TRC, 3500				0.006 grain/dscf
	acfm				
50	Alumina Silo 6 Vent Filter,	S321	Cond # 13092	None	Outlet grain loading
	Pulse Jet, Flex-Kleen				shall not exceed
	84-BV-16, 160 sq. ft.				0.006 grain/dscf

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	
<b>A-</b> #	Description	Controlled	Requirement	Parameters	Limit or Efficiency
52	H2 Solid Additive Hopper A	S515	BAAQMD	None	Outlet grain loading
	Filter Receiver, Young		Reg. 6-1-301,		shall not exceed 0.15
	Almos, 1200 acfm		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
53	H2 Solid Additive Hopper B	S516	BAAQMD	None	Outlet grain loading
	Filter Receiver, Young		Reg. 6-1-301,		shall not exceed 0.15
	Almos, 1200 acfm		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
54	H2 Kiln Baghouse, Reverse	S504, S505,	Cond # 9315	None	Outlet grain loading
	Jet, Mikro Pul	S506, S507,			shall not exceed
	144-S-8	S510, S514			0.006 grain/dscf
55	H2 Nuisance Baghouse,	S509, S511,	BAAQMD	None	Outlet grain loading
	Reverse Jet, Mikro Pul 144-	S512, S513,	Reg. 6-1-301,		shall not exceed 0.15
	S-5	S517, S518,	6-1-310, SIP		grain/dscf
		S519, S520	Reg. 6-301,		
			6-310,		
56	H2 Afterburner - H2 Rotary	S504, S505,	Cond # 9315	Minimum	CO = 400 ppm @3%
	Kiln Exhaust, Model 1215-	S506, S507,		operating	Oxygen; $NOx = 120$
	10-TR, 8.0 MMBTU/hr max.	S510, A54		temperature	lb/day; NH3 = 200
	(Natural gas)			of 1400	lb/day
				degree F	
57	X2 Dryer Baghouse, Reverse	S407	Cond # 13099	None	Outlet grain loading
	Jet, Flex-Kleen 10,000 scfm				shall not exceed
					0.006 grain/dscf
58	X1/X2 Kiln SCR, Shell	S7, S413, A2,	Cond # 13100	None	NOx = 58  lb/day or
	DeNOx, 17,000 acfm	A43			21,000 lb/yr
320	Alumina Receiving Station	A32	BAAQMD	None	Outlet grain loading
	Blowpot Dry In-line Filter,		Reg. 6-1-301,		shall not exceed 0.15
	Dollinger, 1000 cfm		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		
380	Alumina Recirculation	A38	BAAQMD	None	Outlet grain loading
	Station Blowpot Dry In-line		Reg. 6-1-301,		shall not exceed 0.15
	Filter, Dollinger, 2000 cfm		6-1-310, SIP		grain/dscf
			Reg. 6-301,		
			6-310,		

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	
<b>A-</b> #	Description	Controlled	Requirement	Parameters	Limit or Efficiency
390	Alumina Measuring Station Blowpot Dry In-line Filter, Dollinger, 2000 cfm	A39	BAAQMD Reg. 6-1-301, 6-1-310, SIP Reg. 6-301,	None	Outlet grain loading shall not exceed 0.15 grain/dscf
601	X3 Fines Surge Hopper Baghouse, Pulse Jet, Flex- Kleen, 148 sq. ft.	S318 (via S601), S601	6-310, Cond # 13094	None	Outlet grain loading shall not exceed 0.006 grain/dscf
602	X3 Alumina Surge Hopper Baghouse, Pulse Jet, Flex- Kleen, 148 sq. ft.	S602	Cond # 13095	None	Outlet grain loading shall not exceed 0.006 grain/dscf
603	X3 Dryer Baghouse, Reverse Jet, Flex-Kleen, 12,000 scfm	S604	Cond # 13097	Pressure drop to be determined	Outlet grain loading shall not exceed 0.006 grain/dscf
604	X3 Calciner Baghouse, Reverse Jet, Hosakawa Micropul, 2,000 scfm	S606 (tube side)	Cond # 15672	Bag failure warning device	Outlet grain loading shall not exceed 0.006 grain/dscf
605	X3 Calciner SCR, Shell DeNOx, 3,100 dscfm	S606 (tube side)	Cond # 15672	None	NOx = 51 lb/day or 18,500 lb/yr; NH3 = 490 lb/day or 48,000 lb/yr
606	X3 Calciner CO Catalyst, Custom made	S606 (tube side)	Cond # 15672	None	CO abatement efficiency at least 90% and inlet conc. not to exceed 200 ppmv; CO outlet conc. not to exceed 25 ppmv
607	X3 Dust Collector – Nuisance Baghouse, Turbo Jet, Unit BH70343STJ- 131115-8, 8000 scfm	S600	Cond.# 13093	None	Exhaust routed to A603 via S606(shell side) & S604

#### III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit. This section also contains provisions that may apply to temporary sources.

The dates in parentheses in the "Regulation Title or Description of Requirement" column identify the versions of the regulations being cited and are, as applicable:

- 1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of the current SIP requirements are posted on the EPA Region 9 website at: http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions.

#### NOTE:

There are differences between the current BAAQMD rules and the versions of the rules in the SIP. All sources must comply with <u>both</u> versions of the rule until US EPA has reviewed and approved the District's revision of the regulation.

Table III
Generally Applicable Requirements

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/17/01)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (6/15/05)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/95)	Y
SIP Regulation 2, Rule 1	General Requirements (1/26/99)	Y
BAAQMD Regulation 2, Rule 5	New Source Review of Toxic Air Contaminants (6/15/05)	N
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (3/6/02)	N

#### III. Generally Applicable Requirements

### Table III Generally Applicable Requirements

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (12/5/2007)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N Y
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)	N
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/01)	Y
BAAQMD Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N
SIP Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/16/2001)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N
SIP Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (4/26/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	Y
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	N
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (5/20/92)	Y
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y

17

#### III. Generally Applicable Requirements

### Table III Generally Applicable Requirements

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
California Health and Safety Code	Portable Equipment	N
Section 41750 et seq.		
California Health and Safety Code	Air Toxics "Hot Spots" Information and Assessment Act	N
Section 44300 et seq.	of 1987	
California Health and Safety Code	Airborne Toxic Control Measure for Stationary	N
Title 17, Section 93115	Compression Ignition Engines	
California Health and Safety Code	Airborne Toxic Control Measure for Diesel Particulate	N
Title 17, Section 93116	Matter from Portable Engines Rated at 50 Horsepower	
	and Greater	
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air	Y
	Pollutants – National Emission Standard for Asbestos	
	(6/19/95)	
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)	
Subpart F, 40 CFR 82.156	Leak Repair	Y
Subpart F, 40 CFR 82.161	Certification of Technicians	Y
Subpart F, 40 CFR 82.166	Records of Refrigerant	Y

#### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

- 1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of the current SIP requirements are posted on the EPA Region 9 website at:

http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions. All other text may be found in the regulations themselves.

Table IV - A
Source-specific Applicable Requirements
S1 - X1 MULLER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

## Table IV - A Source-specific Applicable Requirements S1 – X1 MULLER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition #8444			
Part 1	Visible emissions limit requirement (basis: Regulation 6-1-301, SIP Regulation 6-301)	Y	
Part 2	A4 Area dust collector air flow rate and exhaust grain loading requirement (basis: cumulative increase)	Y	
Part 3	Abatement requirement, and device failure warning requirement (basis: cumulative increase)	Y	

## Table IV - B Source-specific Applicable Requirements S2 - X1 DRYER, S407 - X2 DRYER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

20

# Table IV - B Source-specific Applicable Requirements S2 - X1 DRYER, S407 - X2 DRYER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)		
Regulation 9,			
Rule 1			
9-1-301	Limitations on ground level concentrations	N	
9-1-311	Emission Limitations for Catalyst Manufacturing Plants	N	
9-1-311.2	SO2 Emission Limit	N	
SIP	Inorganic Gaseous Pollutants, Sulfur Dioxide (6/8/99)		
Regulation 9,			
Rule 1			
9-1-301	Limitations on ground level concentrations	Y	
9-1-311	Emission Limitations for Catalyst Manufacturing Plants	Y	
9-1-311.2	SO2 Emission Limit	Y	
BAAQMD			
Condition			
#13099			
Part 1	Visible emissions limit requirement (basis: Regulation 6-1-301, SIP	Y	
	Regulation 6-301, 1-301)		
Part 2	Abatement requirement, and device failure warning requirement (basis:	Y	
	Reg. 6-1-301, 6-1-310, 6-1-311, SIP Regulation 6-301, 6-310, 6-311,		
	cumulative increase)		
Part 3	A6 and A57 Baghouses air flow rate and exhaust grain loading	Y	
	requirement (basis: cumulative increase)		

#### Table IV - C

# Source-specific Applicable Requirements S3 - X1 Dried Product Elevator, S4-X1 Dried Product Screener, S5-X1 Longs Breaker, S6-X1 Kiln Feed Conveyor System, S8-X1 Calcined Product Elevator, S9-X1 Calcined Product Screener, S10-X1 Calcined Product Packaging

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

#### Table IV - D Source-specific Applicable Requirements S7 - X1 KILN, S413 - X2 KILN

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	

#### Table IV - D Source-specific Applicable Requirements S7 - X1 KILN, S413 - X2 KILN

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD	Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)		
Regulation 9,			
Rule 1			
9-1-301	Limitations on ground level concentrations	N	
9-1-311	Emission Limitations for Catalyst Manufacturing Plants	N	
9-1-311.2	SO2 Emission Limit	N	
SIP	Inorganic Gaseous Pollutants, Sulfur Dioxide (6/8/99)		
Regulation 9,			
Rule 1			
9-1-301	Limitations on ground level concentrations	Y	
9-1-311	Emission Limitations for Catalyst Manufacturing Plants	Y	
9-1-311.2	SO2 Emission Limit	Y	
BAAQMD			
Condition			
#13100			
Part 1	Visible emissions limit requirement (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)	Y	
Part 2	Abatement requirement, and device failure warning requirement (basis:	Y	
	Regulation 6-1-301, 6-1-310, SIP Regulation 6-301, 6-310, BACT)		
Part 3	A2 and A43 Baghouses air flow rate and exhaust grain loading	Y	
	requirement (basis: cumulative increase)		
Part 4	Fuel and fuel usage limits at S7 (basis: cumulative increase)	Y	
Part 5	Fuel and fuel usage limits at S413 (basis: cumulative increase)	Y	
Part 6	NOx daily and annual emission limits (basis: cumulative increase)	Y	
Part 7	Grain loading source test requirement (basis: cumulative increase)	Y	
Part 8	NOx continuous emission monitor (CEM) requirement (basis:	Y	
	cumulative increase)		
Part 9	Fuel meter requirement (basis: cumulative increase)	Y	

#### Table IV - D Source-specific Applicable Requirements S7 - X1 KILN, S413 - X2 KILN

Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Fuel usage record keeping requirement (basis: Regulation 2-6-501,	Y	
	Description of Requirement	Regulation Title or Enforceable Description of Requirement (Y/N)  Fuel usage record keeping requirement (basis: Regulation 2-6-501, Y

Table IV - E Source-specific Applicable Requirements S11 - X1 CALCINED PRODUCT CONVEYOR

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#16736			
Part 1	Throughput limit (basis: cumulative increase)	Y	
Part 5	Visible emissions limit requirement (basis: Regulation 6-1-301, SIP	Y	
	Regulation 6-301)		
Part 6	Record keeping requirement (basis: cumulative increase)	Y	

24

## Table IV - F Source-specific Applicable Requirements S19 - X1 RECYCLE STATION

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#16736			
Part 1	Throughput limit (basis: cumulative increase)	Y	
Part 6	Record keeping requirement (basis: cumulative increase)	Y	

# Table IV - G Source-specific Applicable Requirements S104 - H1 BLENDING TANK T-1, S105 - H1 BLENDING TANK T-2, S106 - H1 BLENDING TANK T-3

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#9984			
Part 1	Visible emissions limit requirement (basis: Regulation 1-301, 6-1-301,	Y	
	SIP Regulation 6-301)		
Part 2	A49 Baghouse air flow rate and exhaust grain loading requirement	Y	
	(basis: cumulative increase)		
Part 3	Abatement requirement, and device failure warning requirement (basis:	Y	
	Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-		
	311, cumulative increase)		

## Table IV - H Source-specific Applicable Requirements \$107 - H1 LIQUID/SOLID BLENDER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

#### Table IV - I Source-specific Applicable Requirements

#### S111 – O4 CALCINED PRODUCT ELEVATOR, S112 – O4 CALCINED PRODUCT SCREENER, S113 – CALCINED PRODUCT PACKAGING, S114 – O4 KILN HOPPER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	

27

#### Table IV - I Source-specific Applicable Requirements

#### S111 – O4 CALCINED PRODUCT ELEVATOR, S112 – O4 CALCINED PRODUCT SCREENER, S113 – CALCINED PRODUCT PACKAGING, S114 – O4 KILN HOPPER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#13138			
Part 1	Visible emissions limit requirement (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)	Y	
Part 2	A14 Baghouse particulate emission rate, and exhaust grain loading requirement (basis: cumulative increase)	Y	
Part 3	Abatement requirement, and device failure warning requirement (basis: Regulation 6-1-301, 6-1-310; SIP Regulation 6-301, 6-310, cumulative increase)	Y	

# Table IV - J Source-specific Applicable Requirements S303 - ALUMINA RECEIVING FLUIDSTAT STATION, S309 - ALUMINA RECIRCULATION FLUIDSTAT STATION, S310 - ALUMINA MEASURING FLUIDSTAT STATION

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	

28

# Table IV - J Source-specific Applicable Requirements S303 - ALUMINA RECEIVING FLUIDSTAT STATION, S309 - ALUMINA RECIRCULATION FLUIDSTAT STATION, S310 - ALUMINA MEASURING FLUIDSTAT STATION

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

# Table IV - K Source-specific Applicable Requirements \$304 - ALUMINA SILO 1 \$305 - ALUMINA SILO 2, \$306 - ALUMINA SILO 3

S307 – ALUMINA SILO 2, S300 – ALUMINA SILO 5

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	

29

## Table IV - K Source-specific Applicable Requirements S304 - ALUMINA SILO 1

S305 – ALUMINA SILO 2, S306 – ALUMINA SILO 3 S307 – ALUMINA SILO 4, S308 – ALUMINA SILO 5

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

# Table IV - L Source-specific Applicable Requirements S311 - ALUMINA BULK BAG UNLOADER, S312 - ALUMINA REPACKAGING STATION, S313 - FINES GRINDER FEED HOPPER SYSTEM

#### S-323 – FINES GRINDER FEED HOPPER SYSTEM (SECONDARY)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition			
#3344			

30

# Table IV - L Source-specific Applicable Requirements S311 - ALUMINA BULK BAG UNLOADER, S312 - ALUMINA REPACKAGING STATION,

S313 – FINES GRINDER FEED HOPPER SYSTEM

S-323 – FINES GRINDER FEED HOPPER SYSTEM (SECONDARY)

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 1	Visible emission limit requirement (basis: Regulation 1-301, 6-1-301,	Y	
	SIP Regulation 6-301)		
Part 2	S311 and S312 throughput limit (basis: cumulative increase)	Y	
Part 3	S313 and S323 catalyst throughput limit (basis: cumulative increase)	Y	
Part 4	Abatement requirement (basis: Regulation 6-1-301, 6-1-310, 6-1-311,	Y	
	SIP Regulation 6-301, 6-310, 6-311)		
Part 5	A40 Baghouse good operating condition requirement, and device failure	Y	
	warning requirement (basis: Regulation 6-1-301, 6-1-310, 6-1-311, SIP		
	Regulation 6-301, 6-310, 6-311)		
Part 6	A40 Baghouse air flow rate and exhaust grain loading limits	Y	
	requirement (basis: cumulative increase)		
Part 7	Nickel content limit in the material processed at S313 and S323 (basis:	Y	
	toxic risk screen)		
Part 8	Record keeping requirement (basis: Regulation 2-6-501; cumulative	Y	
	increase)		

#### Table IV - M

#### **Source-specific Applicable Requirements**

S314 - REGROUND FINES STORAGE SILO TK-70112,

S315 - REGROUND FINES STORAGE SILO TK-70113,

S316 - REGROUND FINES STORAGE SILO TK-70114,

S317 - REGROUND FINES STORAGE SILO TK-70115,

S318 – FINES WEIGH HOPPER BLOW POT,

S319 – FINES BAGOUT STATION NO.1 & NO.2,

S320 - FINES GRINDER

S322 - FINES TANKER TRUCK DELIVERY SYSTEM

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date

#### Table IV - M

#### **Source-specific Applicable Requirements**

S314 - REGROUND FINES STORAGE SILO TK-70112,

S315 - REGROUND FINES STORAGE SILO TK-70113,

S316 - REGROUND FINES STORAGE SILO TK-70114,

S317 - REGROUND FINES STORAGE SILO TK-70115,

S318 - FINES WEIGH HOPPER BLOW POT,

S319 – FINES BAGOUT STATION NO.1 & NO.2,

S320 - FINES GRINDER

#### S322 - FINES TANKER TRUCK DELIVERY SYSTEM

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition #8468			
Part 1	Visible emission limit requirement (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)	Y	
Part 2	Catalyst throughput limit (basis: cumulative increase)	Y	
Part 3	One silo loading at one time requirement (basis: cumulative increase)	Y	
Part 4	Abatement requirement (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)	Y	
Part 5	A44 through A47 Baghouses good operating condition requirement, and device failure warning requirement (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)	Y	
Part 6	A44 through A47 Baghouses air flow rate, and exhaust grain loading	Y	

32

#### Table IV - M

#### **Source-specific Applicable Requirements**

S314 - REGROUND FINES STORAGE SILO TK-70112,

S315 - REGROUND FINES STORAGE SILO TK-70113,

S316 - REGROUND FINES STORAGE SILO TK-70114,

S317 - REGROUND FINES STORAGE SILO TK-70115,

S318 – FINES WEIGH HOPPER BLOW POT,

S319 - FINES BAGOUT STATION NO.1 & NO.2,

S320 - FINES GRINDER

#### S322 - FINES TANKER TRUCK DELIVERY SYSTEM

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
	limits requirement (basis: cumulative increase)		
Part 7	Nickel content limit in the material processed (basis: toxic risk screen)	Y	
Part 8	Record keeping requirement (basis: Regulation 2-6-501; cumulative	Y	
	increase)		

### Table IV - N Source-specific Applicable Requirements S321 - ALUMINA STORAGE SILO

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	

33

## Table IV - N Source-specific Applicable Requirements S321 - ALUMINA STORAGE SILO

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
6-401	Appearance of Emissions	Y	
BAAQMD Condition #13092			
Part 1	Visible emission limit requirement (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)	Y	
Part 2	Throughput limit requirement (basis: cumulative increase)	Y	
Part 3	Abatement requirement; A50 Baghouse good operating condition and device failure warning requirement (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)	Y	
Part 4	A50 Baghouse air flow rate, and exhaust grain loading limits requirement (basis: cumulative increase)	Y	
Part 5	Record keeping requirement (basis: Regulation 2-6-501; cumulative increase)	Y	

#### Table IV - O Source-specific Applicable Requirements S401 - X2 MULLER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#8445			
Part 1	Visible emissions limit requirement (basis: Regulation 1-301, 6-1-301,	Y	
	SIP Regulation 6-301)		
Part 2	A48 Baghouse air flow rate, and exhaust grain loading requirement	Y	
	(basis: cumulative increase)		
Part 3	Abatement requirement, and device failure warning requirement (basis:	Y	
	Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-		
	311, cumulative increase)		

#### Table IV - P

Source-specific Applicable Requirements S408 - X2 DRIED PRODUCT ELEVATOR, S409 - X2 DRIED PRODUCT SCREENER, S410 - X2 LONGS BREAKER,

S412 – X2 KILN FEED CONVEYOR,

S414 - X2 CALCINED PRODUCT ELEVATOR,

S415 - X2 CALCINED PRODUCT SCREENER,

S416 - X2 CALCINED PRODUCT PACKAGING

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

Table IV - Q
Source-specific Applicable Requirements
S417 - X2 CALCINED PRODUCT CONVEYOR,
S418 - X2 RECYCLE STATION,
S515 - H2 SOLID ADDITIVE HOPPER A,
S516 - H2 SOLID ADDITIVE HOPPER B,
S517 - H2 PRODUCT RECYCLE SYSTEM,
S518 - H2 CALCINED FEED SYSTEM,
S519 - H2 SPHERICAL HOPPER SYSTEM,
S520 - H2 CALCINED FEED BAGOUT STATION

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#16736			
Part 1	Throughput limit (basis: cumulative increase)	Y	
Part 5	Visible emissions limit requirement (basis: Regulation 6-1-301, SIP	Y	
	Regulation 6-301)		
Part 6	Record keeping requirement (basis: cumulative increase)	Y	

### Table IV - R Source-specific Applicable Requirements \$420 - COLD CLEANER

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Organic Compounds - Solvent Cleaning Operations (10/16/2002)		
Regulation 8,			
Rule 16			
8-16-118	Limited Exemption, compound with low volatility	Y	
8-16-118.2	Cold cleaner		
8-16-121	Limited Exemption, Single cold cleaner	Y	
8-16-122	Limited Exemption, Permitted cold cleaner	Y	
8-16-303	Cold Cleaner Requirements	Y	
8-16-303.1	General Operating Requirements	Y	
8-16-303.1.1	Proper Operation and Maintenance	Y	
8-16-303.1.2	Leak Repair Requirement	Y	
8-16-303.1.3	Prevention of Evaporation of Solvent	Y	
8-16-303.1.4	Waste Solvent	Y	
8-16-	Waste Solvent - Covered Containers	Y	
303.1.4.a			
8-16-	Waste Solvent Treatment	Y	
303.1.4.b			
8-16-303.1.5	Solvent Covers/Remote Reservoirs	Y	
8-16-303.1.6	Solvent Spray	Y	
8-16-303.2	Cold Cleaner Operating Requirements	Y	
8-16-303.2.1	Solvent Draining	Y	
8-16-303.2.2	Solvent Agitation	Y	
8-16-303.2.3	Porous and Absorbent Materials	Y	
8-16-303.3	Cold Cleaner General Equipment Requirements	Y	
8-16-303.3.1	Container	Y	
8-16-303.3.2	Cover/Apparatus to Reduce Evaporation	Y	
8-16-303.3.3	Draining Clean Parts	Y	
8-16-303.3.4	Label	Y	
8-16-304	Halogenated solvent Limitation	Y	
8-16-501	Solvent Records	Y	

38

### Table IV - S Source-specific Applicable Requirements S502 - NICKEL SOLUTION TANK

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Permits, General Requirements (7/19/2006)		
Regulation 2			
Rule 1			
2-1-316.1	Toxic compound emission limit and risk screening analysis	N	
SIP	Permits, General Requirements (11/1/89)		
Regulation 2			
Rule 1			
2-1-316.1	Toxic compound emission limit and risk screening analysis	Y	

# Table IV – T Source-specific Applicable Requirements \$504 - H2 Blending tank T-1, \$505 – H2 Blending tank T-2, \$506 – H2 Blending tank T-3, \$507 – H2 Liquid/Solids blender, \$509 – HSA Kiln Feed Conveyor, \$510 – H2 Kiln, \$514 – H2 Kiln Bypass Chute & Hopper W/Dusthood

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

39

#### Table IV - T

#### Source-specific Applicable Requirements S504 - H2 Blending tank T-1, S505 – H2 Blending tank T-2, S506 – H2 Blending tank T-3, S507 – H2 Liquid/Solids blender, S509 – HSA Kiln Feed Conveyor, S510 – H2 Kiln, S514 – H2 Kiln Bypass Chute & Hopper W/Dusthood

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Odorous Substances (3/17/82)		
Regulation 7			
7-301	General limit	N	
7-302	Limit at or beyond property line	N	
7-303	Limit	N	
7-401	Collection of Samples	N	
7-402	Analysis of Samples	N	
7-403	Evaluation apparatus	N	
7-404	Evaluation Procedure	N	
7-405	Evaluation Analysis	N	
7-601	Collection of Samples	N	
7-602	Sampling Equipment and Techniques for Collection	N	
BAAQMD			
Condition			
#9315			
Part 1	Nickel and Nickel compounds limit in the materials to be processed	Y	
	(basis: toxic risk screening analysis)		
Part 2	Material throughput limit at S510 & S514 (basis: cumulative increase)	Y	
Part 3	A54 Baghouse Visible emissions limit requirement (basis: Regulation 1-	Y	
	301, 6-1-301, SIP Regulation 6-301)		
Part 4	A54 Baghouse air flow rate, and exhaust grain loading requirement	Y	
	(basis: cumulative increase)		
Part 5	Abatement requirement, and device failure warning requirement (basis:	Y	
	Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-		
	311, cumulative increase)		
Part 6	A56 Afterburner good operating condition requirement (basis:	Y	
	cumulative increase)		
Part 7	Natural gas fuel only, and temperature monitor requirement (basis:	Y	
	cumulative increase)		
Part 8	A56 Afterburner CO emissions limit requirement (basis: cumulative	Y	
	increase)		
Part 9	A56 Afterburner operating temperature and residence time requirements	Y	
	(basis: cumulative increase)		

40

#### Table IV - T

# Source-specific Applicable Requirements S504 - H2 Blending tank T-1, S505 - H2 Blending tank T-2, S506 - H2 Blending tank T-3, S507 - H2 Liquid/Solids blender, S509 - HSA Kiln feed conveyor, S510 - H2 Kiln, S514 - H2 Kiln Bypass Chute & Hopper W/Dusthood

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 10	NOx and NH3 daily emission limits (basis: cumulative increase)	Y	
Part 11	A56 Afterburner operating option linked with NH3 daily emissions	Y	
	(basis: cumulative increase)		
Part 12	A56 Afterburner visible emissions limit requirement (basis: Regulation	Y	
	1-301, 6-1-301, SIP Regulation 6-301)		
Part 13	Annual source test requirement (basis: cumulative increase)	Y	
Part 14	Record keeping (basis: Regulation 2-6-501; cumulative increase)	Y	

# Table IV - U Source-specific Applicable Requirements S511 - HSA PRODUCT CONVEYOR, S512 - HSA PRODUCT SCREENER, S513 - HSA PRODUCT PACKAGING

Applicable  Requirement	Regulation Title or	Federally Enforceable	Future Effective Date
Requirement BAAQMD	Particulate Matter , General Requirements (12/5/2007)	(Y/N)	Date
Regulation 6,	Tarteculate Hatter, Ocheral Requirements (12/3/2007)		
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

41

### Table IV - V Source-specific Applicable Requirements \$600 - X3 Dried extruder, screener, conveyors

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#13093			
Part 1	Nickel & Nickel compounds limit in the material to be processed (basis:	Y	
	toxic risk screening analysis)		
Part 2	Visible emissions limit requirement (basis: Regulation 1-301, 6-1-301,	Y	
	SIP Regulation 6-301)		
Part 3	Abatement requirements (basis: TBACT, cumulative increase, permit	Y	
	condition ID# 13097, part 4)		
Part 4	Material throughput limit (basis: cumulative increase)	Y	
Part 5	Record keeping (basis: cumulative increase)	Y	

42

#### Table IV - W Source-specific Applicable Requirements S601 - X3 FINES SURGE HOPPER

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
	Particulate Matter and Visible Emissions (9/4/98)		
SIPRegulatio			
n 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#13094			
Part 1	Visible emission limit requirement (basis: Regulation 1-301, 6-1-301,	Y	
	SIP Regulation 6-301)		
Part 2	Throughput limit requirement (basis: cumulative increase)	Y	
Part 3	Abatement requirement; A601 Baghouse good operating condition and	Y	
	device failure warning requirement (basis: Regulation 6-1-301, 6-1-310,		
	6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)		
Part 4	A601 Baghouse air flow rate, and exhaust grain loading limits	Y	
	requirement (basis: cumulative increase)		
Part 5	Record keeping requirement (basis: Regulation 2-6-501; cumulative	Y	
	increase)		

43

### Table IV - X Source-specific Applicable Requirements S602 - X3 ALUMINA SURGE HOPPER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#13095			
Part 1	Visible emission limit requirement (basis: Regulation 1-301, 6-1-301,	Y	
	SIP Regulation 6-301)		
Part 2	Throughput limit requirement (basis: cumulative increase)	Y	
Part 3	Abatement requirement; A602 Baghouse good operating condition and	Y	
	device failure warning requirement (basis: Regulation 6-1-301, 6-1-310,		
	6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)		
Part 4	A602 Baghouse air flow rate, and exhaust grain loading limits	Y	
	requirement (basis: cumulative increase)		
Part 5	Record keeping requirement (basis: Regulation 2-6-501; cumulative	Y	
	increase)		

#### Table IV - Y Source-specific Applicable Requirements S603 - X3 EXTRUDER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD	Odorous Substances (3/17/82)		
Regulation 7			
7-301	General limit	N	
7-302	Limit at or beyond property line	N	
7-303	Limit	N	
7-401	Collection of Samples	N	
7-402	Analysis of Samples	N	
7-403	Evaluation apparatus	N	
7-404	Evaluation Procedure	N	
7-405	Evaluation Analysis	N	
7-601	Collection of Samples	N	
7-602	Sampling Equipment and Techniques for Collection	N	
BAAQMD			
Condition			
#13096			
Part 1	Visible emission limit requirement (basis: Regulation 1-301, 6-1-301,	Y	
	SIP Regulation 6-301)		
Part 2	Throughput limit requirement (basis: cumulative increase)	Y	

45

#### Table IV - Y Source-specific Applicable Requirements S603 - X3 EXTRUDER

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
Part 3	Record keeping requirement (basis: Regulation 2-6-501; cumulative	Y	
	increase)		
BAAQMD			
Condition			
#15672			
Part 5	NH3 daily and annual emission limits (basis: cumulative increase)	Y	
Part 11	Annual source test requirement (basis: BACT)	Y	

Table IV - Z Source-specific Applicable Requirements S604 - X3 DRYER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter , General Requirements (12/5/2007)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-301	Ringelmann 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD	Odorous Substances (3/17/82)		
Regulation 7			
7-301	General limit	N	
7-302	Limit at or beyond property line	N	

46

#### Table IV - Z Source-specific Applicable Requirements S604 - X3 DRYER

Requirement         De           7-303         Lin           7-401         Co           7-402         An           7-403         Ev           7-404         Ev           7-601         Co           7-602         Sa           BAAQMD         Inc           Regulation 9,         Rule 1           9-1-301         Lin	egulation Title or escription of Requirement  imit  ollection of Samples nalysis of Samples valuation apparatus valuation Procedure valuation Analysis ollection of Samples ampling Equipment and Techniques for Collection norganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	Enforceable (Y/N)  N  N  N  N  N  N  N  N  N  N  N  N	Effective Date
7-303 Lin 7-401 Co 7-402 An 7-403 Ev 7-404 Ev 7-405 Ev 7-601 Co 7-602 Sa: BAAQMD Inc Regulation 9, Rule 1 9-1-301 Lin	imit ollection of Samples nalysis of Samples valuation apparatus valuation Procedure valuation Analysis ollection of Samples ampling Equipment and Techniques for Collection norganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	N N N N N N N N	Date
7-401 Co 7-402 An 7-403 Ev 7-404 Ev 7-405 Ev 7-601 Co 7-602 Sa BAAQMD Regulation 9, Rule 1 9-1-301 Lin	ollection of Samples nalysis of Samples valuation apparatus valuation Procedure valuation Analysis ollection of Samples ampling Equipment and Techniques for Collection norganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	N N N N N	
7-402 An 7-403 Ev 7-404 Ev 7-405 Ev 7-601 Co 7-602 Sa: BAAQMD Inc Regulation 9, Rule 1	nalysis of Samples valuation apparatus valuation Procedure valuation Analysis ollection of Samples ampling Equipment and Techniques for Collection norganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	N N N N	
7-403 Ev 7-404 Ev 7-405 Ev 7-601 Co 7-602 Sa BAAQMD Inc Regulation 9, Rule 1 9-1-301 Lin	valuation apparatus valuation Procedure valuation Analysis ollection of Samples ampling Equipment and Techniques for Collection aorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	N N N	
7-404 Ev 7-405 Ev 7-601 Co 7-602 Sa BAAQMD Inc Regulation 9, Rule 1 9-1-301 Lin	valuation Procedure valuation Analysis ollection of Samples ampling Equipment and Techniques for Collection norganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	N N N	
7-405 Ev 7-601 Co 7-602 Sa BAAQMD Inc Regulation 9, Rule 1 9-1-301 Lin	valuation Analysis ollection of Samples ampling Equipment and Techniques for Collection aorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	N N	
7-601 Co 7-602 Sa: BAAQMD Inc Regulation 9, Rule 1 9-1-301 Lin	ollection of Samples ampling Equipment and Techniques for Collection aorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	N	
7-602 Sa <b>BAAQMD Regulation 9, Rule 1</b> 9-1-301 Lin	ampling Equipment and Techniques for Collection  norganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)		
BAAQMD Inc Regulation 9, Rule 1	norganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)	N	
Regulation 9,         Rule 1           9-1-301         Lin			
<b>Rule 1</b> 9-1-301 Lin	imitations on ground level concentrations		
9-1-301 Lii	imitations on ground level concentrations		1
	imitations on ground level concentrations		
	<u></u>	Y	
9-1-311 En	mission Limitations for Catalyst Manufacturing Plants	Y	
9-1-311.2 SC	O2 Emission Limit	Y	
SIP Inc	norganic Gaseous Pollutants, Sulfur Dioxide (6/8/99)		
Regulation 9,			
Rule 1			
9-1-301 Li1	imitations on ground level concentrations	Y	
9-1-311 En	mission Limitations for Catalyst Manufacturing Plants	Y	
9-1-311.2 SC	O2 Emission Limit	Y	
BAAQMD			
Condition			
#13097			
	isible emission limit requirement (basis: Regulation 1-301, 6-1-301, IP Regulation 6-301)	Y	
	batement requirement (basis: Regulation 6-1-301, 6-1-310, 6-1-311, IP Regulation 6-301, 6-310, 6-311)	Y	
Part 3 A6	603 Baghouse good operating condition and pressure drop monitoring quirement (basis: Regulation 6-1-301, 6-1-310, 6-1-311, 2-1-403, SIP egulation 6-301, 6-310, 6-311)	Y	
	603 Baghouse air flow rate, and exhaust grain loading limits quirement (basis: cumulative increase)	Y	
	atural gas fuel only, and usage limit (basis: cumulative increase)	Y	
Part 6 Fu	uel metering device requirement (basis: cumulative increase)	Y	
	ecord keeping requirement (basis: Regulation 2-6-501; cumulative crease)	Y	

47

#### Table IV - Z Source-specific Applicable Requirements S604 - X3 DRYER

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Condition			
#15672			
Part 5	NH3 daily and annual emission limits (basis: cumulative increase)	Y	
Part 11	Annual source test requirement (basis: BACT)	Y	

### Table IV - AA Source-specific Applicable Requirements S606 - X3 CALCINER

		Federally	Future	
Applicable	Regulation Title or	Enforceable	Effective	
Requirement	Description of Requirement	(Y/N)	Date	
BAAQMD	Particulate Matter , General Requirements (12/5/2007)			
Regulation 6,				
Rule 1				
6-1-301	Ringelmann 1 Limitation	N		
6-1-305	Visible Particles	N		
6-1-310	Particle Weight Limitation	N		
6-1-311	General Operations	N		
6-1-401	Appearance of Emissions	N		
SIP	Particulate Matter and Visible Emissions (9/4/98)			
Regulation 6				
6-301	Ringelmann 1 Limitation	Y		
6-305	Visible Particles	Y		
6-310	Particle Weight Limitation	Y		
6-311	General Operations	Y		
6-401	Appearance of Emissions	Y		
BAAQMD	Odorous Substances (3/17/82)			
Regulation 7				
7-301	General limit	N		
7-302	Limit at or beyond property line	N		
7-303	Limit	N		
7-401	Collection of Samples	N		

48

### Table IV - AA Source-specific Applicable Requirements S606 - X3 CALCINER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
7-402	Analysis of Samples	N	
7-403	Evaluation apparatus	N	
7-404	Evaluation Procedure	N	
7-405	Evaluation Analysis	N	
7-601	Collection of Samples	N	
7-602	Sampling Equipment and Techniques for Collection	N	
BAAQMD	Inorganic Gaseous Pollutants, Sulfur Dioxide (3/15/95)		
Regulation 9,			
Rule 1			
9-1-301	Limitations on ground level concentrations	Y	
9-1-311	Emission Limitations for Catalyst Manufacturing Plants	Y	
9-1-311.2	Hourly SO2 limit	Y	
SIP	Inorganic Gaseous Pollutants, Sulfur Dioxide (6/8/99)		
Regulation 9,			
Rule 1			
9-1-301	Limitations on ground level concentrations	Y	
9-1-311	Emission Limitations for Catalyst Manufacturing Plants	Y	
9-1-311.2	SO2 Emission Limit	Y	
BAAQMD			
Condition			
#15672			
Part 1	Visible emissions limit requirement (basis: Regulation 1-301, 6-1-301,	Y	
	SIP Regulation 6-301)		
Part 2	Abatement requirement, and device failure warning requirement (basis: BACT)	Y	
Part 3	A604 Baghouse air flow rate and exhaust grain loading requirement (basis: BACT; cumulative increase)	Y	
D	<u> </u>	V	
Part 4	Fuel and fuel usage limits (basis: cumulative increase)	Y	
Part 5	NH3 daily and annual emission limits (basis: cumulative increase)	Y	
Part 6	NOx daily and annual emission limits (basis: cumulative increase)	Y	
Part 7	CO abatement requirement (basis: BACT)	Y	
Part 8	CO abatement efficiency requirement (basis: BACT; cumulative increase)	Y	
Part 9	CO annual emission limit (basis: BACT; cumulative increase)	Y	
Part 10	Nickel content limit in the material processed (basis: toxic risk screen;	Y	

49

### Table IV - AA Source-specific Applicable Requirements S606 - X3 CALCINER

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	cumulative increase)		
Part 11	Annual source test requirement (basis: BACT)	Y	
Part 12	NOx and CO continuous emission monitoring (CEM) requirement (basis: BACT; cumulative increase)	Y	
Part 13	Fuel meter requirement (basis: cumulative increase)	Y	
Part 14	Fuel usage and nickel content record keeping requirement (basis: Regulation 2-6-501; cumulative increase)	Y	

#### V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.

#### VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

#### Condition # 3344

For S311, Alumina bulk bag unloader, S312, Alumina repackaging station, and S313, Fines grinder feed hopper system, and S323, Fines grinder feed hopper system (secondary)

- 1. The owner/operator shall ensure \(\frac{\su}{\pi}\)isible particulate emissions from each source, S311, S312, and S313, and S323, shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. The <u>owner/operator shall not exceed the</u> combined bulk throughput at source S311, Bulk Bag Unloader, and S312, Repackaging Station, <u>shall not exceed of</u> 12,480 tons during any consecutive twelve-month period. (basis: cumulative increase)
- 3. The owner/operator shall not exceed a total catalyst throughput of at sources S313 and S323 shall not exceed of 4,380 tons during any consecutive twelve-month period. (basis: cumulative increase)
- 4. The owner/operator shall route Aall particulate emissions from S311 through S313, and S323 shall be routed under negative pressure to specified Dust Collector A40. (basis: Regulation 6-1-301, 6-1-310, 6-1-311, SIP Regulation 6-301, 6-310, 6-311)
- 5. The owner/operator shall abate Eemissions from sources S311, S312, and S313, and S323 shall be abated by the properly maintained Dust Collector A40 at all times that S311, S312, and S313, and S323 are/or in operation. A District approved bag failure warning device shall be installed and maintained on A40 (Dust Collector). (basis: Regulation 6-1-301, 6-1-310, 6-1-311, SIP Regulation 6-301, 6-310, 6-311)

- 6. The outlet loading for Dust Collector A40 shall not exceed 0.005 grain/dscf. The airflow rate from A40 shall not exceed 2,900 scfm. (basis: cumulative increase)
- 7. The nickel content of the material processed in the grinder feed hoppers (S313 and S323) shall not exceed 7% by weight in any 24-hour averaging period. (basis: toxic risk screen)

#### Condition #3344

For S311, Alumina bulk bag unloader

S312, Alumina repackaging station, and

S313, Fines grinder feed hopper system:

- 8. In order to demonstrate compliance with the above conditions, the <a href="https://owner/operator.shall-maintain-the">owner/operator</a> shall maintain the following records shall be kept on site, and made available for District inspection for a period of five years from the date on which a record was made.
  - <u>a.</u> The daily throughput of product at source S 311, S312, and S323, summarized on a monthly basis.
  - a.b. Nickel content of materials processed at sources S313 and S323.
  - bc. Total daily hours of operation, summarized on a monthly basis. (basis: Regulation 2-6-501; cumulative increase)

#### Condition #8444

For S1, X1 Muller:

- 1. Visible particulate emissions from the area dust collector A4 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. The airflow rate from A4, dust collector, shall not exceed 1,116 SCFM. The outlet loading of the dust collector A4 shall not exceed 0.006 grains/dscf. (basis: cumulative increase)
- 3. Emission from source S1 shall be abated by the properly maintained Dust Collector A4 at all times that S1 is in operation. A district approved bag failure warning device must be in operation at all such times. (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)

#### **Condition #8445**

For S401, X2 Muller:

- 1. Visible particulate emissions from the area dust collector A48 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. The air flow rate from A48, dust collector, shall not exceed 1,116 SCFM. The outlet loading of the dust collectorA48 shall not exceed 0.006 grains/dscf. (basis: cumulative increase)
- 3. Emission from source S401 shall be abated by the properly maintained Dust Collector A48 at all times that S401 is in operation. A district approved bag failure warning device must be in operation at all such times. (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)

#### **Condition #8468**

For S314 through S317, Reground fines storage silos,

S318, Fines weigh hopper blow pot,

S319, Fines bagout stations, and

S320, Fines grinder, and ÷

S322, Fines tanker truck delivery system

- 1. The owner/operator shall ensure \(\frac{\sqrt{v}}{v}\) isible particulate emissions from each source S314 through S320, and S322 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. The <u>owner/operator total catalyst throughput at each source (S314 through S320)</u> shall not exceed <u>the following material/catalyst throughput limits</u>4,380 tons during any consecutive twelve month period.

S314 through S317: 4,380 tons,

S318: 4,380 tons,

S319: 4,380 tons,

S320 & S322: 4,380 tons

(basis: cumulative increase)

3. Only one silo among sources S314 through S317 shall be in active loading operation from source S313 at any one time. (basis: cumulative increase)

4. The owner/operator shall route Aall particulate emissions from sources S314 through S320, and S322 shall be routed under negative pressure to specified Dust Collector A44, A45, A46, or A47. (basis: Regulation 6-1-301,6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase, TBACT, toxic risk screen)

#### Condition #8468

For S314 through S317, Reground fines storage silos,
— S318, Fines weigh hopper blow pot,
S319, Fines bagout stations, and
S320, Fines grinder:

- 5. The owner/operator shall abate Eemissions from sources S314 through S320, and S322 shall be abated by the properly maintained Dust Collector A44, A45, A46 or A47 at all times that S314 through S320, and S322 are in operation. A District approved bag failure warning device shall be installed and maintained on A40 (Dust Collector). (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase, TBACT, toxic risk screen)
- 6. The outlet loading for Dust Collector A44, A45, A46 and A47 shall not exceed 0.005 grain/dscf. The air flow rate from A44, A45, A46 and A47 shall not exceed 3,000 scfm from each unit. (basis: cumulative increase, TBACT, toxic risk screen)
- 7. The nickel content of the materials processed by the handling and grinding equipment (S314 through S320, and S322) shall not exceed 7% by weight in any hour.

(basis: toxic risk screen)

- 8. In order to demonstrate compliance with the above conditions, the <a href="https://owner/operatorshall-maintain-the-">owner/operator</a> shall maintain the following records shall be kept on site and made available for District inspection for a period of five years from the date on which a record was made.
  - a. The daily throughput of product at sources S 318, and S329, S320, and S322 summarized on a monthly basis.
  - b. Total daily hours of operation, summarized on a monthly basis. (basis: Regulation 2-6-501; cumulative increase)

#### **Condition # 9315**

For S504 through S506, H2 Blending tanks,

S507, H2 Liquid/solids blender,

S509, HSA kiln feed conveyor,

S510, H2 Kiln, and

S514, H2 Kiln Bypass Chute & Hopper w/dusthood:

- 1. The owner/operator shall not process or handle materials, which contain more than 10% of nickel or nickel compounds by weight averaged over any consecutive 12-month period. (basis: Toxic risk screening analysis)
- 2. The owner/operator shall not exceed a combined total material throughput limit of 52 ton per day at S510 and S514. (basis: cumulative increase)
- 3. The owner/operator shall not exceed visible particulate emissions from the area dust collector A54 of Ringelmann 1.0 for a period or periods aggregating more than three minutes in any hour, or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 4. The owner/operator shall not exceed the air flow rate from A54, dust collector of 7,500 SCFM. The outlet loading of the dust collector A54 shall not exceed 0.006 grain/dscf. (basis: TBACT; cumulative increase)
- 5. The owner/operator shall abate emissions from sources S504 through S507, S509, S510, and S514 by the properly maintained dust collector, A54, at all times that any of the sources S504 through S507, S509, S510, and S514 is in operation. A District approved bag failure warning device must be in operation at all such times. (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)
- 6. The owner/operator of afterburner, A56, shall maintain the afterburner in proper operating condition, including a dedicated fuel meter. (basis: cumulative increase)
- 7. The owner/operator of afterburner, A56, shall burn only natural gas, and shall have a District approved temperature monitor. (basis: cumulative increase)
- 8. The CO contribution from A56 shall not exceed 400 ppmv dry at 3% oxygen. (basis: cumulative increase)
- 9. When the afterburner, A56, is being used to abate emissions from S504 through S507, S509,S 510, and S514, the owner/operator shall operate the afterburner, A56, at a minimum operating temperature of 1400 degree Fahrenheit and a minimum residence time of 0.4 second. (basis: cumulative increase)
- 10. The owner/operator shall operate S504 through S507, S509, S510, and S514 so that the following emission limits are not exceeded:
  - a. NOx 120 lb/day
  - b. NH3 2,200 lb/day

Whenever the total ammonia input, calculated as equivalent NH3, to sources S504, through S507, S509, S510, and S514 exceeds 2,200 lb/day, the owner/operator shall abate sources S 504, through S507, S509, S510, and S514 by the afterburner, A56. When the afterburner A56 is in operation, the emissions from A56 shall not exceed

the following limits:

NOx = 120 lb/dayNH3 = 200 lb/day

A day shall be defined as an operating day of 24 hours from midnight to midnight. A year shall be defined as any consecutive 12 month period. (basis: cumulative increase)

- 11. Not withstanding the terms of part 10, the operation of the afterburner A56 may be waived for a particular catalyst product and ammonia input if the owner/operator demonstrates through a District approved source test(s) representative of that catalyst product and ammonia input, that the ammonia emissions from sources S504 through S507, S509, S510, and S514 do not exceed 2,200 lb/day. (basis: cumulative increase)
- 12. The owner/operator shall not exceed visible particulate emissions from A56 of Ringelmann 1.0 for a period or periods aggregating more than three minutes in any hour, or result in fallout on adjacent property in such quantities as to cause public nuisance per Regulation

1-301. (basis: Regulation 6-1-301, 1-301, SIP Regulation 6-301)

13. The owner/operator of A56 shall conduct a District approved source test annually with the after burner abatement device in operation and not in operation to demonstrate a net reduction of NH3 emissions from uncontrolled levels per operating day, and to demonstrate compliance with parts 8, 10, and 11. At a minimum, the following emissions will be measured (ppm, lb/hr, lb/day): NOx, NH3, O2, CO, and non-methane hydrocarbons.

The source tests shall be conducted on representative materials processed at S504 through S507, S509, S510, and S514 with representatively high NH3 emissions and representatively high NOx emissions to demonstrate compliance with parts 8, 10, and 11. The test results shall be reported to the District within 30 days of completion of the test.

The owner/operator of A56 shall conduct the source tests annually with no more than 12 months between tests. Furthermore, the District may require at its discretion the owner/operator to conduct up to an additional two source tests annually to demonstrate continuing compliance with parts 8, 10, and 11. (basis: cumulative increase)

- 14. To demonstrate compliance with the above parts, the owner/operator shall maintain the following records in a District approved log and made available for District inspection for at least five years from the date on which a record was made.
  - a. The natural gas usage of A56, totaled on a monthly basis
  - b. The days of operation and type of material processed, daily throughput of each material and daily input of ammonia, calculated as equivalent NH3 at the Calciner Oven, S510, totaled on a monthly basis, as necessary to verify compliance with the emission limits of parts 10 and 11 using the emission factors generated in the source tests of part 13.
  - c. All source tests results conducted for compliance with parts 8, 10, and 11. (basis: cumulative increase)

#### **Condition # 9984**

For sources S104, S105 and S106, Mixing Tanks:

- 1. Visible particulate emissions from the H-1 Baghouse, A49, shall not reach nor exceed Ringelmann 1.0 for a period or periods aggregating more than three consecutive minutes in any hour, or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 6-1-301, 1-301, SIP Regulation 6-301)
- 2. The air flow rate from A49, H-1 Baghouse, shall not exceed 3,500 SCFM. The outlet loading of the dust collector A49 shall not exceed 0.006 grains/dscf. (basis: cumulative increase)
- 3. Emissions from sources S104, S105 and S106 shall be abated by the properly maintained H-1 Baghouse, A49, at all times that S104, S105 and/or S106, respectively, are in operation. A district approved bag failure warning device must be in operation at all such times. (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)

#### **Condition # 13092**

For source S321, Alumina Storage Silo abated by A50 baghouse (A/N 14899):

- 1. Visible particulate emissions from source S321 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 6-1-301, 1-301, SIP Regulation 6-301)
- 2. The Alumina through put at source S321 shall not exceed 9,636 tons (dry basis) during any consecutive twelve month period. (basis: cumulative increase)
- 3. Emissions from source S321 shall be abated by the properly maintained baghouse A50 at all times that S321 is in operation. A District approved bag failure warning device shall be installed and maintained on A50. (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)
- 4. The outlet loading for baghouse A50 shall not exceed 0.006 grain/dscf. The air flow rate from A50 shall not exceed 150 dscfm. (basis: cumulative increase)
- 5. In order to demonstrate compliance with the above conditions, the following records shall be kept on site and made available for District inspection for a period of five years from the date on which a record was made.
  - a. The daily throughput of Alumina at source S 321, summarized on a monthly basis.
  - b. Total daily hours of operation, summarized on a monthly basis. (basis: Regulation 2-6-501; cumulative increase)

#### **Condition # 13093**

For source S600, X-3 Extrudate Screener, Conveyors, and Fugitive emissions (A/N 14899):

(Revisions: A# 7774; A# 17565)

- 1. The owner/operator shall not process or handle materials which contain more than 0.84% of nickel or nickel compounds by weight averaged over any consecutive 12-month period. (basis: Toxic risk screening analysis)
- 2. 2. The owner/operator shall not exceed visible particulate emissions from source S-600 of Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 6-1-301. (basis: Regulation 6-1-301, SIP Regulation 6-301)
- 3. The owner/operator shall abate particulate emissions from S-600 by the dust collector,

A-607, at all times of operation. The exhaust from A-607 shall always be routed to the baghouse, A-603, via the calciner, S-606 (shell side) and the dryer, S-604. The particulate loading of the exhaust from the baghouse, A-603, shall not exceed 0.006 gr/dscf. The exhaust flow rate from A-603 shall not exceed 12,000 dscfm. (basis: TBACT; cumulative increase; permit condition ID # 13097, part 4).

- 4. The owner/operator shall not exceed a total material throughput limit of 36 ton per day. (basis: cumulative increase)
- 5. The owner/operator shall maintain records of daily material throughput, and calculations for nickel/nickel compounds concentration to demonstrate compliance with conditions 1 & 4 in a District approved logbook. These records shall be kept on site for a period of five years from the date of data entry and be made available to the District staff for inspection. (basis: cumulative increase)

#### **Condition # 13094**

For source S601, X-3 Fines Surge Hopper abated by A601 baghouse (A/N 14899):

- 1. Visible particulate emissions from source S601 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 6-1-301, 1-301, SIP Regulation 6-301)
- 2. The catalyst throughput at source S601 shall not exceed 1,400 tons (dry basis) during any consecutive twelve month period. (basis: cumulative increase)
- 3. Emissions from source S601 shall be abated by the properly maintained baghouse A601 at all times that S601 is in operation. A District approved bag failure warning device shall be installed and maintained on A601. (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)
- 4. The outlet loading for baghouse A601 shall not exceed 0.006 grain/dscf. The air flow rate from A601 shall not exceed 100 dscfm. (basis: cumulative increase)
- 5. In order to demonstrate compliance with the above conditions, the following records shall be kept on site and made available for District inspection for a period of five years from the date on which a record was made.
  - a. The daily throughput of product at source S 601, summarized on a monthly basis.
  - b. Total daily hours of operation, summarized on a monthly basis. (basis: Regulation 2-6-501; cumulative increase)

#### **Condition # 13095**

For source S602, X-3 Alumina Surge Hopper abated by A602 dust collector (A/N 14899):

- 1. Visible particulate emissions from source S602 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. The Alumina through put at source S602 shall not exceed 9636 tons (dry basis) during any consecutive twelve month period. (basis: cumulative increase)
- 3. Emissions from source S602 shall be abated by the properly maintained baghouse A602 at all times that S602 is in operation. A District approved bag failure warning device shall be installed and maintained on A602. (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)
- 4. The outlet loading for baghouse A602 shall not exceed 0.006 grain/dscf. The air flow rate from A602 shall not exceed 200 dscfm. (basis: cumulative increase)
- 5. In order to demonstrate compliance with the above conditions, the following records shall be kept on site and made available for District inspection for a period of five years from the date on which a record was made.
  - a. The daily throughput of Alumina at source S 602, summarized on a monthly basis.
  - b. Total daily hours of operation, summarized on a monthly basis. (basis: Regulation 2-6-501; cumulative increase)

#### **Condition # 13096**

For source S603, X-3 Extruder (A/N 14899):

- 1. Visible particulate emissions from source S603 shall not reach nor exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. The combined throughput at source S603 shall not exceed 31,665 tons (wet basis) during any consecutive twelve month period. (basis: cumulative increase)
- 3. In order to demonstrate compliance with the above conditions, the following records shall be kept on site and made available for District inspection for a period of five years from the date on which a record was made.

- a. The daily throughput of product at source S 603, summarized on a monthly basis.
- b. Total daily hours of operation, summarized on a monthly basis. (basis: Regulation 2-6-501; cumulative increase)

#### **Condition # 13097**

For source S604, X-3 Dryer abated by A603 baghouse (A/N 14899):

- 1. Visible particulate emissions from source S604 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. All particulate matter emissions from this source (S604) shall be routed to the Baghouse (A 603). (basis: Regulation 6-1-301, 6-1-310, 6-1-311, SIP Regulation 6-301, 6-310, 6-311)
- 3. Baghouse (A603) shall be properly maintained and kept in good operating condition at all times. Baghouse (A603) shall be equipped with a device for measuring the pressure drop across the baghouse. (basis: Regulation 6-1-301, 6-1-310, 6-1-311, 2-1-403, SIP Regulation 6-301, 6-310, 6-311)
- 4. The outlet loading for baghouse A603 shall not exceed 0.006 grain/dscf. The air flow rate from A603 shall not exceed 12,000 dscfm. (basis: Cumulative Increase)
- 5. The total combined fuel usage at source S604 shall not exceed 534,360 therms in any consecutive 12 month period. Only natural gas shall be burned at S604. (basis: Cumulative Increase)
- 6. The owner/operator shall install and maintain a non-resettable totalizing fuel meter for natural gas, unless the owner/operator applies for and receives written approval from the District to use an alternate method for measuring the cumulative annual fuel usage. (basis: Cumulative Increase)
- 7. In order to demonstrate compliance with the above conditions, the owner/operator shall keep records of the natural gas usage of S604, totaled on a monthly basis. Records shall be kept on site and made available for District inspection for a period of five years from the date on which a record was made. (basis: Regulation 2-6-501; Cumulative Increase)

#### **Condition # 13099**

For sources S2 (X-1) and S407 (X-2) Dryers, abated by A6 and A57 baghouses, respectively (A/N 14899):

- 1. Visible particulate emissions from each source, S2 or S407, shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1- 301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. Emissions from source S2 or S407, shall be abated by the properly maintained baghouses A-6 or A-57, respectively, at all times that S2 or S407 are in operation. A District approved bag failure warning device shall be installed and maintained on A-6 and A-57 baghouses. (basis: Regulation 6-1-301, 6-1-310, 6-1-311; SIP Regulation 6-301, 6-310, 6-311, cumulative increase)
- 3. The outlet loading for baghouses A-6 or A-57 shall not exceed 0.006 grain/dscf each. The air flow rate from A-6 or A-57 shall not exceed 8,000 dscfm each. (basis: cumulative increase)

#### **Condition # 13100**

Permit conditions for Sources S7 (X-1 Kiln) and S413(X-2 Kiln) abated by A-2 and A-43 baghouses, respectively. S7 and S413 are also abated by A-58 Selective Catalyst Reduction System (A/N 14899):

- 1. Visible particulate emissions from each source S7 or S413 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. Emissions from source S7 or S413 shall be abated by the properly maintained baghouse A-2 and A-43, respectively, and SCR A-58 at all times that S7 or S413 is in operation. A District approved bag failure warning device shall be installed and maintained on A-2 and A-43 baghouses. (basis: Regulation 6-1-301, 6-1-310, 6-1-311, SIP Regulation 6-301, 6-310, 6-311)
- 3. The outlet loading for baghouse A-2 and/or A-43 shall not exceed 0.006 grain/dscf each. The air flow rate from A-2 and A-43 shall not exceed 8,000 dscfm, combined. (basis: cumulative increase)

- 4. The total combined fuel usage at source S7 shall not exceed 700,000 therms in any consecutive 12 month period. Only natural gas shall be burned at S7. (basis: cumulative increase)
- 5. The total combined fuel usage at source S413 shall not exceed 700,000 therms in any consecutive 12 month period. Only natural gas shall be burned at S413. (basis: cumulative increase)
- 6. The NOx emissions from sources S7 and S413 through P-43 shall not exceed: 58 lb/day or 21,000 lb/yr. A day shall be defined as an operating day of 24 hours from midnight to midnight. A year shall be defined as any consecutive 12 month period. (basis: cumulative increase)
- 7. The plant shall conduct a District approved source test on the dust collector to demonstrate compliance with the 0.006 grain/dscf or less outlet grain loading, as specified in part 3. The source test shall be conducted with source S7 and/or S413, X-1 and/or X-2 Kilns operating at or near their full rated capacity of 1,680 lb/hr. (basis: cumulative increase)
- 8. To demonstrate compliance with parts 6 and 7, the owner/operator of S7, S413, A-2, A-43 and A-58 shall install and maintain a District approved continuous emission monitor (CEM) for NOx. (basis: cumulative increase)
- 9. The owner/operator of S7 and S413 shall install and maintain non-resettable totalizing fuel meters for natural gas for each source, unless the owner/operator applies for and receives written approval from the District to use an alternate method for measuring the cumulative annual fuel usage. (basis: cumulative increase)
- 10. In order to demonstrate compliance with the above conditions, the following records shall be kept on site and made available for District inspection for a period of five years from the date on which a record was made.
  - a. The natural gas usage of S7 and S413, totaled on a monthly basis (basis: Regulation 2-6-501, cumulative increase)

#### **Condition # 13138**

For S111 through S114, Product Packaging Operation (A/N 25609):

1. Visible particulate emissions from the Baghouse, A-14, shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour, or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.

(basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)

- 2. The outlet loading of the dust collector A-14 shall not exceed 0.006 grains/dscf and the total particulate emissions from the collector shall not exceed 0.390 pounds per hour. (basis: cumulative increase)
- 3. Emissions from sources S111, S112, S113 and S114 shall be abated by the properly maintained Baghouse, A-14, at all times that S111 through S114 are in operation. A district approved bag failure warning device must be in operation at all such times. (basis: Regulation 6-1-301, 6-1-310; , SIP Regulation 6-301, 6-310, cumulative increase)

#### **Condition # 15672**

For Source S606 (X-3 Calciner) abated by A-604 baghouse, A-605 Selective Catalyst Reduction System, And A-606 CO Catalyst A/N 18507:

(Revision: A# 17565, 22820, 22844)

- 1. The owner/operator shall not exceed visible particulate emissions from source S606 of Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 2. The owner/operator shall abate emissions from source S606 by the properly maintained baghouse A-604 and SCR A-605 at all times that S606 is in operation. A District approved bag failure warning device shall be installed and maintained on A-604 baghouse.(basis: BACT)
- 3. The owner/operator shall ensure that the particulate loading of the exhaust from the baghouse A-604 shall not exceed 0.006 grain/dscf. The air flow rate from A-604 shall not exceed 1,736 dscfm. (basis: BACT; cumulative increase)
- 4. The owner/operator shall not exceed a total combined fuel usage at source S606 of 700,000 therms in any consecutive 12 month period. Only natural gas shall be burned at S606. (basis: Cumulative Increase)
- The owner/operator shall not exceed the following ammonia emission limits from sources S603, S604 and S606 through P-603:

NH3 = 490 lb/day or 48,000 lb/yr.

A day shall be defined as an operating day of 24 hours from midnight to midnight. A year shall be defined as any consecutive 12 month period. (basis: Cumulative Increase)

6. The owner/operator shall not exceed the following NOx emission limits from S606 (Calciner):

NOx = 51 lb/day or 18,500 lb/yr.

A day shall be defined as an operating day of 24 hours from midnight to midnight. A year shall be defined as any consecutive 12 month period. (basis: Cumulative Increase)

- 8. 7.The owner/operator shall abate CO emissions from the X3 Calciner S606, with the CO Catalytic Oxidizer, A606, at all times the Calciner, S606, is in operation. (basis: BACT)
  - 8. The owner/operator shall maintain the percent CO abatement efficiency of the CO Catalyst Oxidizer, -A-606, of at least 90% on a mass basis; whenever the CO concentration at the A606 outlet is greater than 40 ppmv. Any indicated excess will be considered to have occurred if the average abatement efficiency over any continuous 8-hour average (15 minutes interval readings) falls below 90% on a mass basis and the CO concentration exceeds 40 ppmv (15 miniutes interval readings). the percent CO abatement efficiency of the CO Catalyst Oxidizer A-606 shall be calculated on a rolling average of the last eight (8) hours of conversion data for which the inlet concentration is above two hundred parts per million on a volumetric basis (200 ppmv). The outlet CO concentration from A-606 shall not exceed 25 ppmv, when the inlet CO concentration to A-606 is less than or equal to 200 ppmv.

The unit shall be considered in violation (except during duct burner flame outs) whenever the rolling 8 hour average percent CO conversion is below ninety percent (90%), on a mass basis, and the CO concentration at the A-606 inlet is greater than 200 ppmv. The unit shall also be considered in violation (except during duct burner flame outs) whenever the outlet CO concentration from A-606 exceeds 25 ppmv, and the inlet CO concentration to A-606 is less than or equal to 200 ppmv.

During duct burner flame outs, the outlet concentration shall still be recorded and reported, the unit shall be considered in violation of this part (8) if excess CO emissions (over outlet CO concentration of 25 ppmv) exceed 2 lb/day. (basis: BACT; cumulative increase)

9.8. The owner/operator shall not exceed the following CO emission limit from \$606 (Calciner):

CO = 19,524 lb/yr. (basis: Cumulative Increase; BACT)

10. The owner/operator shall not exceed the nickel content of an average of 0.84% by

weight in the materials processed in S603, S604 and S606 during any consecutive twelvemonth period. (basis: toxic risk screen; Cumulative Increase)

- 11. The owner/operator of S603 through S606 shall conduct source tests annually with baghouses A-603, A-604 and SCR A-605 in operation to determine compliance with part 5, with no more than 12 months between tests. Furthermore, at the District's discretion, the District may require the owner/operator to conduct up to an additional two source tests annually to determine continuing compliance with part 5. (basis: BACT)
- 12. To demonstrate compliance with parts 6, 8 and 9, the owner/operator of S606 shall in stall and maintain District approved continuous emission monitors (CEM) for NOx and CO. An alternative to a continuous emission monitor for CO may be used to demonstrate compliance with Condition 8 and 9, upon written approval by the District. (basis: Cumulative Increase; BACT)
- 13. The owner/operator shall install and maintain a non-re settable totalizing fuel meter for natural gas, unless the owner/operator applies for and receives written approval from the District to use an alternate method for measuring the cumulative annual fuel usage. (basis: Cumulative Increase)
- 14. In order to demonstrate compliance with the above conditions, the following records shall be kept onsite and made available for District inspection for a period of five years from the date on which are cord was made.
  - a. The natural gas usage of S606, totaled on a monthly basis
  - The nickel weight percent of each material processed in S603, S604 and S606.
     The weight average shall be calculated on a monthly basis.
     (basis: Regulation 2-6-501; Cumulative Increase)

#### **Condition # 16736**

For S11, S19, S417, S418, S515, S516, S517, S518, S519, and S520:

1. The material throughput at these sources shall not exceed the following limits per consecutive 365 day period.

S11: 11,000 tons; S19: 3,667 tons; S417: 12,000 tons; S418: 12,000 tons; S515: 1,700 tons; S516: 3,300 tons;

S517 : 16,000 tons; S518 : 16,000 tons; S519 : 16,000 tons. S520 : 16,000 tons

(basis: cumulative increase)

- 2. The total particulate grain loading of exhaust from the baghouse, A-23, shall not exceed 0.01 gr/dscf. This limit will be revised after reviewing the source test results as required per condition #4 below. (basis: TBACT; Toxic risk screen)
- 3. Visible particulate emissions from the baghouses, A-3, A-22, A-23, A-42, A-52, A-53, and A-55 shall not exceed Ringelmann 1.0 for more than 3 consecutive minutes in any hour or result in fallout on adjacent property in such quantities as to cause public nuisance. (basis: Regulation 1-301, 6-1-301, SIP Regulation 6-301)
- 4. In order to demonstrate compliance with part #1, the owner/operator of these sources shall keep daily records of material throughput in a District approved logbook. The records shall be kept on-site for at least five years from the date of data entry, and shall be made available to the District staff for inspection. (basis: cumulative increase)

### VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI, the preceding sections take precedence over Section VII.

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1 - X1 MULLER

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	N		Ringelmann 1.0	BAAQMD	С	Bag failure
	6-1-301			for ≤ 3 minutes/hr	condition		warning device
					#8444, part 3		
Opacity	SIP 6-301	Y		Ringelmann 1.0	BAAQMD	С	Bag failure
				for ≤ 3 minutes/hr	condition		warning device
					#8444, part 3		
	BAAQMD	Y		Ringelmann 0.5	BAAQMD	С	Bag failure
	condition				condition		warning device
	#8444, part				#8444, part 3		
	1						
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning device
					#8444, part 3		
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr,		N	None
	6-1-311			where P is process			
				weight, ton/hr			

### Table VII - A Applicable Limits and Compliance Monitoring Requirements S1 - X1 MULLER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD condition #8444, part 3	С	Bag failure warning device
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr		N	None
	BAAQMD condition #8444, part	Y		0.006 gr/dscf	BAAQMD condition #8444, part 3	С	Bag failure warning device
Air flow rate	BAAQMD condition 8444, part 2	Y		1,116 scfm	None	N	None

Table VII - B
Applicable Limits and Compliance Monitoring Requirements
S2 - X1 DRYER
S407 - X2 DRYER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for ≤	BAAQMD	С	Bag failure
	6-1-301			3 minutes/hr	condition		warning device
					#13099, part 2		
Opacity	SIP 6-301	Y		Ringelmann 1.0 for ≤	BAAQMD	С	Bag failure
				3 minutes/hr	condition		warning device
					#13099, part 2		
	BAAQMD	Y		Ringelmann 0.5	BAAQMD	С	Bag failure
	condition				condition		warning device
	#13099,				#13099, part 2		
	part 1						

69

## Table VII - B Applicable Limits and Compliance Monitoring Requirements S2 - X1 DRYER S407 - X2 DRYER

Type of	Citation of	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	BAAQMD 6-1-310	N		0.15 gr/dscf	BAAQMD condition #13099, part 2	C	Bag failure warning device
	BAAQMD 6-1-311	N		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	-	N	None
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD condition #13099, part 2	С	Bag failure warning device
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr		N	None
	BAAQMD condition #13099, part 3	Y		0.006 gr/dscf	BAAQMD condition #13099, part 2	С	Bag failure warning device
Air flow rate	BAAQMD condition 13099, part 3	Y		8,000 scfm	None	N	None
SO2	BAAQMD 9-1-301	N		GLC of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	None	N	None
	BAAQMD 9-1-311.2	N		50 lbs/hr	None	N	None
SO2	SIP 9-1- 301	Y		GLC of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	None	N	None
	SIP 9-1- 311.2	Y		50 lbs/hr	None	N	None

#### Table VII - C

#### **Applicable Limits and Compliance Monitoring Requirements**

S3 - X1 DRIED PRODUCT ELEVATOR

S4-X1 DRIED PRODUCT SCREENER

S5-X1 LONG BREAKER

S6 – X1 KILN FEED CONVEYOR SYSTEM

S8-X1 CALCINED PRODUCT ELEVATOR

S9-X1 CALCINED PRODUCT SCREENER

S10 - X1 CALCINED PRODUCT PACKAGING

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301	N		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
Opacity	SIP 6-301	Y		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
FP	BAAQMD 6-1-310	N		0.15 gr/dscf	None	N	None
	BAAQMD 6-1-311	N		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None

Table VII - D
Applicable Limits and Compliance Monitoring Requirements
S7 - X1 KILN
S413 – X2 KILN

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	BAAQMD	С	Bag failure
	6-1-301			3 minutes/hr	condition		warning device
					#13100, part 2		

## Table VII - D Applicable Limits and Compliance Monitoring Requirements S7 - X1 KILN S413 – X2 KILN

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	SIP 6-301	Y		Ringelmann 1.0 for ≤	BAAQMD	C	Bag failure
				3 minutes/hr	condition		warning device
					#13100, part 2		
FP	BAAQMD	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning device
					#13100, part 2		
	BAAQMD	Y		$4.10P^{0.67}$ lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					condition		warning device
					#13100, part 2		
	SIP 6-311	Y		$4.10P^{0.67}$ lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
FP	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition				condition		warning device
	#13100,				#13100, part 2		
	part 3						
Air flow	BAAQMD	Y		8,000 scfm	None	N	None
rate	condition						
	#13100,						
	part 3						
NOx	BAAQMD	Y		58 lb/day or 21,000	BAAQMD	С	CEM
	condition			lb/yr	condition		
	#13100,				#13100, part 8		
	part 6						
Natural	BAAQMD	Y		700,000 therms at S7	BAAQMD	С	Fuel meter,
gas	condition				condition		record keeping
	#13100,				#13100, part 9		
	part 4				& 10		

# Table VII - D Applicable Limits and Compliance Monitoring Requirements S7 - X1 KILN S413 – X2 KILN

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #13100, part 5	Y		700,000 therms at S413	BAAQMD condition #13100, part 9 & 10	С	Fuel meter, record keeping
SO2	BAAQMD 9-1-301	N		GLC of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	None	N	None
	BAAQMD 9-1-311.2	N		50 lbs/hr	None	N	None
SO2	SIP 9-1- 301	Y		GLC of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	None	N	None
	SIP 9-1- 311.2	Y		50 lbs/hr	None	N	None

Table VII - E
Applicable Limits and Compliance Monitoring Requirements
S11 - X1 CALCINED PRODUCT CONVEYOR

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for ≤	None	N	None
	6-1-301,			3 minutes/hr			
	Condition						
	# 16736,						
	part 5						

Table VII - E
Applicable Limits and Compliance Monitoring Requirements
S11 - X1 CALCINED PRODUCT CONVEYOR

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	Y		Ringelmann 1.0 for ≤	None	N	None
	6-301,			3 minutes/hr			
	Condition						
	# 16736,						
	part 5						
FP	BAAQMD	N		0.15 gr/dscf	None	N	None
	6-1-310						
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
Through-	BAAQMD	Y		11,000 tons/yr	BAAQMD	P/D	Record
put	condition				condition		keeping
	#16736,				#16736, part 6		
	part 1						

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
	-		Date			, ,	
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	None	N	None
	6-1-301			3 minutes/hr			
Opacity	SIP 6-301	Y		Ringelmann 1.0 for <	None	N	None
				3 minutes/hr			
FP	BAAQMD	N		0.15 gr/dscf	None	N	None
	6-1-310						

74

# Table VII - F Applicable Limits and Compliance Monitoring Requirements \$19 - X1 RECYCLE STATION

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
Through-	BAAQMD	Y		3,667 tons/yr	BAAQMD	P/D	Record
put	condition				condition		keeping
	#16736,				#16736, part 6		
	part 1						

# $\label{eq:continuous} Table~VII-G\\$ Applicable Limits and Compliance Monitoring Requirements

S104 - H1 BLENDING TANK T-1

S105 - H1 BLENDING TANK T-2

S106 - H1 BLENDING TANK T-3

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	BAAQMD	С	Bag failure
	6-1-301,			3 minutes/hr	condition		warning device
	Condition				#9984, part 3		
	9984, part						
	1						
Opacity	SIP 6-301,	Y		Ringelmann 1.0 for $\leq$	BAAQMD	С	Bag failure
	Condition			3 minutes/hr	condition		warning device
	9984, part				#9984, part 3		
	1						
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning device
					#9984, part 3		

75

### Table VII - G

# **Applicable Limits and Compliance Monitoring Requirements**

S104 - H1 BLENDING TANK T-1

S105 – H1 BLENDING TANK T-2

S106 - H1 BLENDING TANK T-3

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					condition		warning device
					#9984, part 3		
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition				condition		warning device
	#9984, part				#9984, part 3		
	2						
Air flow	BAAQMD	Y		3,500 scfm	None	N	None
rate	condition						
	#9984, part						
	2						

Table VII - H
Applicable Limits and Compliance Monitoring Requirements
S107 - H1 LIQUID/SOLID BLENDER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD	N		Ringelmann 1.0 for ≤	None	N	None
	6-1-301			3 minutes/hr			
Opacity	SIP 6-301	Y		Ringelmann 1.0 for ≤	None	N	None
				3 minutes/hr			

# Table VII - I Applicable Limits and Compliance Monitoring Requirements

# S111 – O4 CALCINED PRODUCT ELEVATOR S112 – O4 CALCINED PRODUCT SCREENER S113 – O4 CALCINED PRODUCT PACKAGING S114 – O4 KILN HOPPER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	BAAQMD	С	Bag failure
	6-1-301,			3 minutes/hr	condition		warning
	condition				#13138, part 3		device
	#13138						
	part 1						
Opacity	SIP 6-301,	Y		Ringelmann 1.0 for $\leq$	BAAQMD	С	Bag failure
	condition			3 minutes/hr	condition		warning
	#13138				#13138, part 3		device
	part 1						
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning
					#13138, part 3		device
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					condition		warning
				0.45	#13138, part 3		device
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition				condition		warning
	#13138,				#13138, part 3		device
	part 2						
	BAAQMD	Y		0.39 lb/hr	BAAQMD	С	Bag failure
	condition				condition		warning
	#13138,				#13138, part 3		device
	part 2						

# Table VII - J

# **Applicable Limits and Compliance Monitoring Requirements** S303 - ALUMINA RECEIVING FLUIDSTAT STATION S309 – ALUMINA RECIRCULATION FLUIDSTAT STATION S310 – ALUMINA MEASURING FLUIDSTAT STATION

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301	N		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
Opacity	SIP 6-301	Y		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
FP	BAAQMD 6-1-310	N		0.15 gr/dscf	None	N	None
	BAAQMD 6-1-311	N		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None

### Table VII - K

# **Applicable Limits and Compliance Monitoring Requirements**

S304 - ALUMINA SILO 1

S305 – ALUMINA SILO 2, S306 – ALUMINA SILO 3

S307 – ALUMINA SILO 4, S308 – ALUMINA SILO 5

Type of	Citation of	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	-		Date	-		, ,	
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	None	N	None
	6-1-301			3 minutes/hr			
Opacity	SIP 6-301	Y		Ringelmann 1.0 for ≤	None	N	None
				3 minutes/hr			
FP	BAAQMD	N		0.15 gr/dscf	None	N	None
	6-1-310						

78

# Table VII - K Applicable Limits and Compliance Monitoring Requirements

S304 - ALUMINA SILO 1

S305 – ALUMINA SILO 2, S306 – ALUMINA SILO 3

S307 – ALUMINA SILO 4, S308 – ALUMINA SILO 5

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			

### Table VII - L

# Applicable Limits and Compliance Monitoring Requirements

S311 - ALUMINA BULK BAG UNLOADER

S312 – ALUMINA REPACKAGING STATION

S313 – FINES GRINDER FEED HOPPER SYSTEM

S323 – FINES GRINDER FEED HOPPER SYSTEM (SECONDARY)

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for	BAAQMD	С	Bag failure
	6-1-301,			≤ 3 minutes/hr	condition #3344,		warning device
	condition				part 5		
	#3344, part 1						
Opacity	SIP	Y		Ringelmann 1.0 for	BAAQMD	С	Bag failure
	6-301,			≤ 3 minutes/hr	condition #3344,		warning device
	condition				part 5		
	#3344, part 1						
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	C	Bag failure
	6-1-310				Condition #3344,		warning device
					part 5		

### **Table VII - L**

# Applicable Limits and Compliance Monitoring Requirements S311 - ALUMINA BULK BAG UNLOADER

S312 – ALUMINA REPACKAGING STATION

S313 – Fines Grinder Feed Hopper System

### S323 – FINES GRINDER FEED HOPPER SYSTEM (SECONDARY)

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
	BAAQMD 6-	N		$4.10P^{0.67}$ lb/hr,	None	N	None
	1-311			where P is process			
				weight, ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	C	Bag failure
					Condition #3344,		warning device
					part 5		
	SIP 6-311	Y		$4.10P^{0.67}$ lb/hr,	None	N	None
				where P is process			
				weight, ton/hr			
	BAAQMD	Y		0.005 gr/dscf	BAAQMD	С	Bag failure
	condition				condition. #3344,		warning device
	#3344, part 6				part 5		
Nickel	BAAQMD	Y		7% by weight per	BAAQMD	P/H	Record
content	condition			hour at S313 and	condition #3344,		keeping
	#3344, part			<u>\$323</u>	part <u>98</u>		
	<u>87</u>						
Through-	BAAQMD	Y		12,480 tons/yr for	BAAQMD	P/D	Record
put (bulk)	condition			S311 and S312	condition #3344,		keeping
	#3344, part 2				part <u>98</u>		
Through-	BAAQMD	Y		4,380 tons/yr for	BAAQMD	P/D	Record
put	condition			S313 and S323	condition #3344,		keeping
(catalyst)	#3344, part 3				part <u>98</u>		
Air flow	BAAQMD	Y		2,900 scfm	None	N	None
rate	condition						
	#3344, part 6						

### Table VII - M

**Applicable Limits and Compliance Monitoring Requirements** 

S314 - REGROUND FINES STORAGE SILO TK-70112

S315 – REGROUND FINES STORAGE SILO TK-70113

S316 – REGROUND FINES STORAGE SILO TK-70114

S317 – REGROUND FINES STORAGE SILO TK-70115

S318 – FINES WEIGH HOPPER BLOW POT

S319 – FINES BAGOUT STATION NO.1 & NO.2

S320 - FINES GRINDER

S322 - FINES TANKER TRUCK DELIVERY SYSTEM

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	N		Ringelmann 1.0	BAAQMD	С	Bag failure
	6-1-301			for $\leq 3$ minutes/hr	condition		warning device
					#8468, part 5		
Opacity	SIP 6-301	Y		Ringelmann 1.0	BAAQMD	С	Bag failure
				for $\leq 3$ minutes/hr	condition		warning device
					#8468, part 5		
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning device
					#8468, part 5		
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr,	None	N	None
	6-1-311			where P is process			
				weight, ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					condition		warning device
					#8468, part 5		
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr,	None	N	None
				where P is process			
				weight, ton/hr			
	BAAQMD	Y		0.005 gr/dscf	BAAQMD	С	Bag failure
	condition				condition.		warning device
	#8468, part 6				#8468, part 5		
Nickel	BAAQMD	Y		7% by weight per	BAAQMD	P/H	Record keeping
content	condition			hour	condition		
	#8468, part				#3344, part 9 <u>8</u>		
	<del>8</del> 7						
Through-	BAAQMD	Y		4,380 tons/yr for	BAAQMD	P/D	Record keeping
put	condition			each source	condition		
(catalyst)	#8468, part 2				#8468, part <mark>98</mark>		

### Table VII - M

### **Applicable Limits and Compliance Monitoring Requirements**

S314 - REGROUND FINES STORAGE SILO TK-70112

S315 – REGROUND FINES STORAGE SILO TK-70113

S316 – REGROUND FINES STORAGE SILO TK-70114

S317 – REGROUND FINES STORAGE SILO TK-70115

S318 – FINES WEIGH HOPPER BLOW POT

S319 – FINES BAGOUT STATION NO.1 & NO.2

S320 - FINES GRINDER

S322 – FINES TANKER TRUCK DELIVERY SYSTEM

Type of	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Air flow	BAAQMD	Y	Dute	3,000 scfm from	None	N	None
rate	condition #8468, part 6			each source			

Table VII - N
Applicable Limits and Compliance Monitoring Requirements
S321 - ALUMINA STORAGE SILO

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	BAAQMD	C	Bag failure
	6-1-301			3 minutes/hr	Condition		warning device
					#13092, part 3		
Opacity	SIP 6-301	Y		Ringelmann 1.0 for $\leq$	BAAQMD	C	Bag failure
				3 minutes/hr	Condition		warning device
					#13092, part 3		
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning device
					#13092, part 3		
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					condition		warning device
					#13092, part 3		

# Table VII - N Applicable Limits and Compliance Monitoring Requirements S321 - ALUMINA STORAGE SILO

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
	BAAQMD	Y		0.005 gr/dscf	BAAQMD	С	Bag failure
	condition				condition.		warning device
	#13092,				#13092, part 3		
	part 4						
Through-	BAAQMD	Y		9,636 tons/yr	BAAQMD	P/D	Record
put	condition				condition		keeping
(Alumina)	#13092,				#13092, part 5		
	part 2						
Air flow	BAAQMD	Y		150 scfm	None	N	None
rate	condition						
	#13092,						
	part 4						

Table VII - O
Applicable Limits and Compliance Monitoring Requirements
S401 - X2 MULLER

TD 6	Gu u	EE	Future		Monitoring	Monitoring	35 11
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for	BAAQMD	С	Bag failure
	6-1-301			≤ 3 minutes/hr	condition		warning device
					#8445, part 3		
Opacity	SIP 6-301	Y		Ringelmann 1.0 for	BAAQMD	С	Bag failure
				≤ 3 minutes/hr	condition		warning device
					#8445, part 3		
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning device
					#8445, part 3		

83

# Table VII - O Applicable Limits and Compliance Monitoring Requirements S401 - X2 MULLER

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr,	None	N	None
	6-1-311			where P is process			
				weight, ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					condition		warning device
					#8445, part 3		
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr,	None	N	None
				where P is process			
				weight, ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition				condition.		warning device
	#8445, part 2				#8445, part 3		
Air flow	BAAQMD	Y		1,116 scfm	None	N	None
rate	condition						
	#8445, part 2						

84

### Table VII - P

# **Applicable Limits and Compliance Monitoring Requirements**

S408 - X2 DRIED PRODUCT ELEVATOR

S409 - X2 DRIED PRODUCT SCREENER

S410 - X2 LONG BREAKER, S412 - X2 KILN FEED CONVEYOR

S414 - X2 CALCINED PRODUCT ELEVATOR

S415 - X2 CALCINED PRODUCT SCREENER

S416 - X2 CALCINED PRODUCT PACKAGING

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301	N		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
Opacity	SIP 6-301	Y		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
FP	BAAQMD 6-1-310	N		0.15 gr/dscf	None	N	None
FP	BAAQMD 6-1-311	N		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
FP	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None

85

### Table VII - Q

# **Applicable Limits and Compliance Monitoring Requirements**

S417 - X2 CALCINED PRODUCT CONVEYOR

S418 - X2 RECYCLE STATION

S515 - H2 SOLID ADDITIVE HOPPER A

S516 - H2 SOLID ADDITIVE HOPPER B

S517 - H2 PRODUCT RECYCLE SYSTEM

S518 - H2 CALCINED FEED SYSTEM

S519 – H2 SPHERICAL HOPPER SYSTEM

S520 - H2 CALCINED FEED BAGOUT STATION

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD 6-1-301, condition #16736,	N		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
Opacity	part 5 SIP 6-301, condition #16736,	Y		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
FP	part 5 BAAQMD	N		0.15 gr/dscf	None	N	None
	6-1-310			_			
	6-1-311	N		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None
Through- put	BAAQMD condition #16736, part 1	Y		S417: 12,000 tons/yr S418: 12,000 tons/yr S515: 1,700 tons/yr S516: 3,300 tons/yr S517: 16,000 tons/yr S518: 16,000 tons/yr S519: 16,000 tons/yr S520: 16,000 tons/yr	BAAQMD condition #16736, part 6	P/D	Record keeping

86

Table VII - R
Applicable Limits and Compliance Monitoring Requirements
S420 - COLD CLEANER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Through	BAAQMD	Y		20 gallons/yr	BAAQMD	P/Annual	Record
put	8-16-121				8-16-501.2, 8-16-501.6		keeping

 $\begin{tabular}{ll} Table\ VII-S \\ Applicable\ Limits\ and\ Compliance\ Monitoring\ Requirements \\ S502\ -\ NICKEL\ SOLUTION\ TANK \end{tabular}$ 

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Ni	BAAQMD	Y		0.73 lb/yr	BAAQMD	P/Annual	Record
	Regulation				2-1-316.1		keeping
	2-1, Table						
	2-1-316						

87

### Table VII - T

# **Applicable Limits and Compliance Monitoring Requirements**

S504 - H2 BLENDING TANK T-1

S505 - H2 BLENDING TANK T-2

S506 - H2 BLENDING TANK T-3

S507 - H2 LIQUID/SOLID BLENDER

S509 - H2 KILN FEED CONVEYOR

**S510 – H2 Kiln** 

# S514 - H2 Kiln Bypass Chute & Hopper w/dusthood

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effectiv	<b>.</b>	Requirement	Frequency	Monitoring
Limit	Limit	Y/N	e Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	N		Ringelmann 1.0	BAAQMD	С	Bag failure
	6-1-301			for $\leq 3$ minutes/hr	condition		warning
					#9315, part 5		device
Opacity	SIP 6-301	Y		Ringelmann 1.0	BAAQMD	С	Bag failure
				for $\leq 3$ minutes/hr	condition		warning
					#9315, part 5		device
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning
					#9315, part 5		device
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr,	None	N	None
	6-1-311			where P is process			
				weight, ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	C	Bag failure
					condition		warning
					#9315, part 5		device
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr,	None	N	None
				where P is process			
				weight, ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition				condition		warning
	#9315, part 4				#9315, part 5		device
Air flow	BAAQMD	Y		7,500 scfm	None	N	None
rate	condition						
	#9315, part 4						
NOx	BAAQMD	Y		120 lb/day	BAAQMD	P/A and D	Source test
	condition				condition		(A), Record
	#9315, part				#9315, part 13		keeping (D)
	10				& 14		

### Table VII - T

# **Applicable Limits and Compliance Monitoring Requirements**

S504 - H2 BLENDING TANK T-1

S505 – H2 BLENDING TANK T-2

S506 - H2 BLENDING TANK T-3

S507 - H2 LIQUID/SOLID BLENDER

S509 - H2 KILN FEED CONVEYOR

S510 - H2 Kiln

# S514 - H2 Kiln Bypass Chute & Hopper w/dusthood

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effectiv		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	e Date	Limit	Citation	(P/C/N)	Type
NH3	BAAQMD	Y		2,200 lb/day, and	BAAQMD	P/A and D	Source test
	condition			200 lb/day (when	condition		(A), Record
	#9315, part			A-56 in operation)	#9315, part 13		keeping (D)
	10						
CO	BAAQMD	Y		400 ppmv dry @	BAAQMD	P/A	Source test
	condition			3% Oxygen	condition		
	#9315, part 8				#9315, part 13		
Temp-	BAAQMD	Y		1400 degree F	BAAQMD	С	Temperature
erature	condition				condition		Monitor
(A-56)	#9315, part 9				#9315, part 7		
Residence	BAAQMD	Y		0.4 second	BAAQMD	P/A	Source test
time	condition				condition		
(A-56)	#9315, part 9				#9315, part 13		

# Table VII - U Applicable Limits and Compliance Monitoring Requirements \$511 - H2 Product Conveyor \$512 - H2 Product Screener \$513 - H2 Product Packaging

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301	N		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
Opacity	SIP 6-301	Y		Ringelmann 1.0 for ≤ 3 minutes/hr	None	N	None
FP	BAAQMD 6-1-310	N		0.15 gr/dscf	None	N	None
	BAAQMD 6-1-311	N		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N	None

Table VII – V
Applicable Limits and Compliance Monitoring Requirements S600 - X3 DRIED EXTRUDER, SCREENER, CONVEYOR

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	None	N	None
	6-1-301,			3 minutes/hr			
	condition						
	#13093,						
	part 2						
Opacity	SIP 6-301,	Y		Ringelmann 1.0 for $\leq$	None	N	None
	condition			3 minutes/hr			
	#13093,						
	part 2						

# Table VII – V Applicable Limits and Compliance Monitoring Requirements S600 - X3 DRIED EXTRUDER, SCREENER, CONVEYOR

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition #		warning
					15672, part 2		device
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					condition #		warning
					15672, part 2		device
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition #				condition #		warning
	13093, part				13097, part 4		device
	3						
Air flow	BAAQMD	Y		12,000 cfm	None	N	None
rate	condition #						
	13093, part						
	3						
Through-	BAAQMD	Y		36 tons/day	BAAQMD	P/D	Record
put	condition				condition		keeping
	#13093,				#13093, part 6		
	part 4						
Nickel &	BAAQMD	Y		0.84% by weight per	BAAQMD	P/D	Record
Nickel	condition			year	condition		keeping
compoun	#13093,				#13093, part 6		
ds content	part 1						

# Table VII - W Applicable Limits and Compliance Monitoring Requirements S601 - X3 FINES SURGE HOPPER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for ≤	BAAQMD	С	Bag failure
	6-1-301,			3 minutes/hr	Condition		warning
	condition				#13094, part 3		device
	#13094,						
	part 1						
Opacity	SIP 6-301,	Y		Ringelmann 1.0 for $\leq$	BAAQMD	С	Bag failure
	condition			3 minutes/hr	Condition		warning
	#13094,				#13094, part 3		device
	part 1						
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	C	Bag failure
	6-1-310				Condition		warning
					#13094, part 3		device
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					Condition		warning
					#13094, part 3		device
	SIP 6-311	Y		$4.10P^{0.67}$ lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition				Condition		warning
	#13094,				#13094, part 3		device
	part 4						
Air flow	BAAQMD	Y		100 scfm	None	N	None
rate	condition						
	#13094,						
	part 4						
Through-	BAAQMD	Y		1,400 tons/yr	BAAQMD	P/D	Record
put	condition				condition		keeping
(catalyst)	#13094,				#13094, part 5		
	part 2						

# Table VII - X Applicable Limits and Compliance Monitoring Requirements S602 - X3 ALUMINA SURGE HOPPER

Type of	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD	N	Date	Ringelmann 1.0 for <	BAAQMD	C	Bag failure
	6-1-301,			3 minutes/hr	Condition		warning
	condition				#13095, part 3		device
	#13095,						
	part 1						
Opacity	SIP 6-301,	Y		Ringelmann 1.0 for ≤	BAAQMD	С	Bag failure
	condition			3 minutes/hr	Condition		warning
	#13095,				#13095, part 3		device
	part 1						
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				Condition		warning
					#13095, part 3		device
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					Condition		warning
					#13095, part 3		device
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition				Condition		warning
	#13095,				#13095, part 3		device
	part 4						
Air flow	BAAQMD	Y		200 scfm	BAAQMD	N	None
rate	condition				condition		
	#13095,				#13095, part 4		
	part 4						
Through-	BAAQMD	Y		9,636 tons/yr	BAAQMD	P/D	Record
put	condition				condition		keeping
(Alumina)	#13095,				#13095, part 5		
	part 2						

# Table VII - Y Applicable Limits and Compliance Monitoring Requirements S603 - X3 EXTRUDER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	None	N	None
	6-1-301,			3 minutes/hr			
	condition						
	#13096,						
	part 1						
Opacity	SIP 6-301,	Y		Ringelmann 1.0 for <	None	N	None
	condition			3 minutes/hr			
	#13096,						
	part 1						
FP	BAAQMD	N		0.15 gr/dscf	None	N	None
	6-1-310						
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	None	N	None
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
NH3	BAAQMD	Y		490 lb/day or 48,000	BAAQMD	P/A	Source test
	#15672,			lb/yr	condition		
	part 5				#15672, part 11		
Through-	BAAQMD	Y		31,665 tons/yr	BAAQMD	P/D	Record
put	condition				condition		keeping
	#13096,				#13096, part 3		
	part 2						
Nickel	BAAQMD	Y		0.84% by weight per	BAAQMD	P/M	Record
content	condition			year	condition		keeping
	#15672,				#15672, part 14		
	part 10						

# Table VII - Z Applicable Limits and Compliance Monitoring Requirements S604 - X3 DRYER

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	N		Ringelmann 1.0 for ≤	BAAQMD	С	Pressure drop
	6-1-301,			3 minutes/hr	Condition		monitoring
	condition				#13097, part 3		device
	#13097,						
	part 1						
Opacity	SIP 6-301,	Y		Ringelmann 1.0 for $\leq$	BAAQMD	С	Pressure drop
	condition			3 minutes/hr	Condition		monitoring
	#13097,				#13097, part 3		device
	part 1						
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	C	Pressure drop
	6-1-310				Condition		monitoring
					#13097, part 3		device
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Pressure drop
					Condition		monitoring
					#13097, part 3		device
	SIP 6-311	Y		$4.10P^{0.67}$ lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Pressure drop
	condition				Condition		monitoring
	#13097,				#13097, part 3		device
	part 4						
NH3	BAAQMD	Y		490 lb/day or 48,000	BAAQMD	P/A	Source test
	#15672,			lb/yr	condition		
	part 5				#15672, part 11		
Nickel	BAAQMD	Y		0.84% by weight per	BAAQMD	P/M	Record
content	condition			year	condition		keeping
	#15672,				#15672, part 14		
	part 10						

# Table VII - Z Applicable Limits and Compliance Monitoring Requirements S604 - X3 DRYER

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Air flow	BAAQMD	Y		12,000 scfm	None	N	None
rate	condition						
	#13097,						
	part 4						
Natural	BAAQMD	Y		534,360 therms/yr	BAAQMD	C/M	Fuel meter and
gas	condition				condition		Record
	#13097,				#13097, part 6		keeping
	part 5				and 7		

Table VII - AA
Applicable Limits and Compliance Monitoring Requirements
\$606 - X3 CALCINER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Opacity	BAAQMD	N		Ringelmann 1.0 for $\leq$	BAAQMD	C	Bag failure
	6-1-301,			3 minutes/hr	condition		warning device
	condition				#15672, part 2		
	#15672,						
	part 1						
Opacity	SIP 6-301,	Y		Ringelmann 1.0 for $\leq$	BAAQMD	С	Bag failure
	condition			3 minutes/hr	condition		warning device
	#15672,				#15672, part 2		
	part 1						
FP	BAAQMD	N		0.15 gr/dscf	BAAQMD	С	Bag failure
	6-1-310				condition		warning device
					#15672, part 2		
	BAAQMD	N		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
	6-1-311			P is process weight,			
				ton/hr			

96

# Table VII - AA Applicable Limits and Compliance Monitoring Requirements \$606 - X3 CALCINER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD	С	Bag failure
					condition		warning device
					#15672, part 2		
	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr, where	None	N	None
				P is process weight,			
				ton/hr			
	BAAQMD	Y		0.006 gr/dscf	BAAQMD	С	Bag failure
	condition				condition		warning device
	#15672,				#15672, part 2		
	part 3						
NOx	BAAQMD	Y		51 lb/day or 18,500	BAAQMD	C	CEM
	condition			lb/yr	condition		
	#15672,				#15672,		
	part 6				part 12		
CO	BAAQMD	Y		19,524 lb/yr	BAAQMD	С	CEM
	condition				condition		
	#15672,				#15672,		
	part 9				part 12		
	BAAQMD	Y		25 <u>40</u> ppmv <del>when</del>	BAAQMD	C	CEM
	condition			A606 inlet	condition		
	#15672,			concentration ≤200	#15672,		
	part 8			<del>ppmv</del>	part 12		
CO	BAAQMD	Y		90% mass basis	BAAQMD	C	CEM
abatement	condition				condition		
efficiency	#15672,				#15672,		
	part 8				part 12		
NH3	BAAQMD	Y		490 lb/day or 48,000	BAAQMD	P/A	Source test
	#15672,			lb/yr	condition		
	part 5				#15672,		
					part 11		
SO2	BAAQMD	N		GLC of 0.5 ppm for 3	None	N	None
	9-1-301			min. or 0.25 ppm for			
				60 min. or 0.05 ppm			
				for 24 hours			

97

# Table VII - AA Applicable Limits and Compliance Monitoring Requirements S606 - X3 CALCINER

TD 6	C't t'	- EE	Future		Monitoring	Monitoring	<b>3</b> 5 %
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
	BAAQMD	N		50 lbs/hr	None	N	None
	9-1-311.2						
SO2	SIP 9-1-	Y		GLC of 0.5 ppm for 3	None	N	None
	301			min. or 0.25 ppm for			
				60 min. or 0.05 ppm			
				for 24 hours			
	SIP 9-1-	Y		50 lbs/hr	None	N	None
	311.2						
Nickel	BAAQMD	Y		0.84% by weight per	BAAQMD	P/M	Record
content	condition			year	condition		keeping
	#15672,				#15672,		
	part 10				part 14		
Air flow	BAAQMD	Y		1,736 scfm	None	N	None
rate	condition						
	#15672,						
	part 3						
Natural	BAAQMD	Y		700,000 therms at \$7	BAAQMD	P/C/M	Fuel meter,
gas	condition				condition		Record
	#15672,				#15672,		keeping
	part 4				part 13 & 14		

# VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally referenced in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
6-1-301		Emissions
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates
6-1-310		Sampling
		or
		USEPA Method 5, Determination of Particulate Matter
		Emissions from Stationary Sources
BAAQMD	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates
6-1-311		Sampling
		or
		USEPA Method 5, Determination of Particulate Matter
		Emissions from Stationary Sources
SIP 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
		Emissions
SIP 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates
		Sampling
		or
		USEPA Method 5, Determination of Particulate Matter
		Emissions from Stationary Sources
SIP 6-311	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates
		Sampling
		or
		USEPA Method 5, Determination of Particulate Matter
		Emissions from Stationary Sources
BAAQMD	VOC emissions	Manual of Procedures, Volume IV, ST-7, or
8-16-601		EPA Method 25 or 25A
BAAQMD	VOC content	Manual of Procedures, Volume III, Methods 21 or 22, 31
8-16-602		
BAAQMD	Ground Level Concentrations,	Manual of Procedures, Volume VI, Section 1.
9-1-301	SO2	

# VIII. Test Methods

# Table VIII Test Methods

Applicable		est victious
	Description of Requirement	Acceptable Test Methods
_	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,
9-1-302	General Emission Emitation	Continuous Sampling, or
7 1 302		ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD	Fuel Burning (Liquid and Solid	Manual of Procedures, Volume III, Method 10, Determination
	Fuels)	of Sulfur in Fuel Oils.
	Emission Limitations, SO2	Manual of Procedures, Volume IV, ST-19A or B.
9-1-311.2	Emission Emitations, 502	ivialitial of Flocedures, Volume IV, S1-19A of B.
	Cround Lavel Concentrations	Manual of Dragodynas Volume VI Castian 1
	Ground Level Concentrations, SO2	Manual of Procedures, Volume VI, Section 1.
SIP 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,
		Continuous Sampling, or
		ST-19B, Total Sulfur Oxides Integrated Sample
SIP	Fuel Burning (Liquid and Solid	Manual of Procedures, Volume III, Method 10, Determination
9-1-304	Fuels)	of Sulfur in Fuel Oils.
SIP 9-1-311.2	Emission Limitations, SO2	Manual of Procedures, Volume IV, ST-19A or B.
BAAQMD	Emission Limit, NOx	Manual of Procedures, Volume IV, ST-13A, Oxides of
conditions		Nitrogen, Continuous Sampling or
#9315,		EPA Method 7E, 40 CFR Part 60 Appendix A
#13100,		
#15672,		
BAAQMD	Emission Limit, CO	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide
condition		
#9315,		
#15672,		
BAAQMD	Stack-gas Oxygen	Manual of Procedures, Volume IV, ST-14, Oxygen
condition		
#9315		
BAAQMD	Emission Limit, NH3	Manual of Procedures, Volume IV, ST-1B, Ammonia
condition		
#9315, #15672		
BAAQMD	Ni content	Atomic Absorption Spectro-photometry
condition		
#3344, #8468,		
#15672		
BAAQMD	Hexavalent Chromium	Manual of Procedures, Volume III, Method 34
condition		
#16736		

# IX. PERMIT SHIELD

Not applicable

December 15, 2008

### X. REVISION HISTORY

Final Title V Permit (Application 18172)

November 30, 2001

Minor Revision (Application 6134): January 7, 2003

Capacity for S-321, Silo, changed from operating rate to volume

Renewal (Application 14581)

Administrative Amendment (Application 23611): September 1, 2011

Administrative Amendment (Application 23611): Sources S109, S110, S201, S205, S206, S207, S208, S210, S211, S216, S220, S221, S222 thru S231, and Abatement Devices A12, A15, A21 thru A26 deleted because they were dismantled and removed from operation.

Minor Revision (Application 23296):
New sources S322 and S323 added. Permit conditions for S322, S323, and S606 revised.

### XI. GLOSSARY

### **ACT**

Federal Clean Air Act

### **BAAQMD**

Bay Area Air Quality Management District

### **BACT**

Best Available Control Technology

### CAA

The federal Clean Air Act

### **CAAQS**

California Ambient Air Quality Standards

### **CEQA**

California Environmental Quality Act

### **CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

#### CO

Carbon Monoxide

### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

#### District

The Bay Area Air Quality Management District

### **EPA**

The federal Environmental Protection Agency.

### **Excluded**

Not subject to any District regulations.

### Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60, (NSPS), Part 61, (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

# IX. Glossary

#### FP

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

#### HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

### **Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

#### MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

#### **MOP**

The District's Manual of Procedures.

### **NAAQS**

National Ambient Air Quality Standards

#### NESHAPS

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63

### **NMHC**

Non-methane Hydrocarbons

### **NOx**

Oxides of nitrogen.

#### **NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

### **NSR**

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

# IX. Glossary

### **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NOx, PM10, and SO2.

### **Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

### **POC**

**Precursor Organic Compounds** 

### PM

Particulate Matter

#### **PM10**

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

#### **PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

#### SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

### SO<sub>2</sub>

Sulfur dioxide

### Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

### **TRMP**

Toxic Risk Management Plan

### **TSP**

**Total Suspended Particulate** 

### VOC

Volatile Organic Compounds

# IX. Glossary

# **Units of Measure:**

bhp	=	brake-horsepower
btu	=	British Thermal Unit
g	=	grams
gal	=	gallon
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
$m^2$	=	square meter
min	=	minute
mm	=	million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year