DES
DEPARTMENT OF ENVIRONMENT AND SUSTAINABILITY

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PART 70 OPERATING PERMIT

SOURCE ID: 19

Titanium Metals Corporation–Henderson Facility
181 North Water Street
Henderson, NV 89015

ISSUED ON: May 28, 2019 **EXPIRES ON: May 27, 2024**

REVISED ON: December 15, 2021

Current action: Reopen for Cause with a minor revision

Issued to:	**Responsible Official:**
Titanium Metals Corporation	Alun Davies
P.O. Box 2128	Director of Operations
Henderson, NV 89009	PHONE: (702) 564-2544 FAX: (702) 565-2689
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NATURE OF BUSINESS:
SIC 3339, "Primary Smelting and Refining of Nonferrous Metals, Except Copper and Aluminum"
NAICS 331419, "Primary Smelting and Refining of Nonferrous Metals (except Copper and Aluminum)"

Issued by the Clark County Department of Environment and Sustainability, Division of Air Quality, in accordance with Section 12.5 of the Clark County Air Quality Regulations.

Theodore A. Lendis, Permitting Manager

EXECUTIVE SUMMARY

Titanium Metals Corporation (TIMET) is a combined titanium sponge and ingot facility located in the BMI Complex near Henderson, Nevada. The location of the source is described as portions of T22S, R62E, Section 12 in Las Vegas Valley, Clark County, Nevada. TIMET is situated in Hydrographic Area 212 (the Las Vegas Valley), which is designated a marginal nonattainment area for ozone (regulated through NO_x and VOC) but attainment for all other criteria air pollutants.

TIMET is a major stationary source for CO, a synthetic minor source for PM_{10}, $PM_{2.5}$ and total HAPs, and a minor source for NO_x, SO_2, VOCs, and individual HAPs. The sponge plant (chlorination, magnesium recovery, and vacuum distillation process) has a nameplate capacity of 32 million pounds per year of titanium sponge production. The melt shop utilizes the vacuum arc re-melt process for the production of titanium ingots from sponge, scrap, and master alloy additions. TIMET is capable of producing approximately 125 million pounds of $TiCl_4$ and 30 million pounds of titanium ingots per year. This Part 70 Operating Permit (OP) is issued based on two reopen for cuases for annual emission statements and AQR Section 92 and 94 conditions along with a minor revision application to add a backup groundwater remediation system. It also addresses $PM_{2.5}$ emissions for haul roads.

Table 1 summarizes the source's potential to emit for each regulated air pollutant and all emission units addressed by this Part 70 OP.

Table 1. Potential to Emit (tons per year)

PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAPs	HCl	Cl_2	COS	H_2SO_4	Total HAPs
81.45	68.65	32.38	282.19	30.46	7.84	3.08	7.22	2.84	0.31	3.78	17.23

The current Part 70 OP was issued on May 28, 2019.

Pursuant to AQR 12.5, all terms and conditions in Sections I–VI and Attachment 1 in this permit are federally enforceable unless explicitly denoted otherwise.

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I. ACRONYMS

Table I-1: List of Acronyms

Acronym	Term
AQR	Clark County Air Quality Regulation
ATC	Authority to Construct
CEMS	Continuous Emissions Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
Cl_2	chlorine gases
CO	carbon monoxide
COS	carbonyl sulfide
DAQ	Clark County Department of Air Quality
EPA	U.S. Environmental Protection Agency
EU	emission unit
H_2SO_4	sulfuric acid
HAP	hazardous air pollutant
HCl	hydrochloric acid
kW	kilowatt
MMBtu	Millions of British thermal units
NAICS	North American Industry Classification System
NO_x	nitrogen oxides
NRS	Nevada Revised Statutes
OP	Operating Permit
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter
ppm	parts per million
PTE	potential to emit
RATA	Relative Accuracy Test Audit
SIC	Standard Industrial Classification
SO_2	sulfur dioxides
TDS	total dissolved solids
$TiCl_4$	titanium tetrachloride
TIMET	Titanium Metals Corporation
TiO_2	titanium dioxide
VDP	vacuum distillation process
VOC	volatile organic compound
VMT	vehicle miles traveled
WCF	Water Conservation Facility

II. GENERAL CONDITIONS

A. GENERAL REQUIREMENTS

1. The permittee shall comply with all conditions of this Part 70 OP. Any permit noncompliance may constitute a violation of the AQRs, Nevada law, and the Clean Air Act, and is grounds for enforcement action; permit termination; permit revocation and reissuance; permit revision; or denial of a permit renewal application. *[AQR 12.5.2.6(g)(1)]*

2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall be unaffected and remain valid. *[AQR 12.5.2.6(f)]*

3. The permittee shall pay fees to the Control Officer consistent with the approved fee schedule in AQR 18. *[AQR 12.5.2.6(h)]*

4. This permit does not convey property rights of any sort, or any exclusive privilege. *[AQR 12.5.2.6(g)(4)]*

5. The permittee agrees to allow inspection of the premises to which this permit relates by the Control Officer at any time during the permittee's hours of operation without prior notice. The permittee shall not obstruct, hamper or interfere with any such inspection. *[AQR 4.3.3; AQR 4.9; AQR 5.1.1; AQR 12.5.2.8(b)]*

6. The permittee shall allow the Control Officer, upon presentation of credentials to: *[AQR 4.3 & AQR 12.5.2.8(b)]*

    a. Access and copy any records that must be kept under the conditions of the permit;

    b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

    c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and

    d. Document alleged violations using such devices as cameras or video equipment.

7. Any permittee who fails to submit relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit the needed supplementary facts or corrected information. In addition, the permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. A responsible official shall certify the additional information consistent with the requirements of AQR 12.5.2.4. *[AQR 12.5.2.2]*

8. Anyone issued a permit under AQR 12.5 shall post the permit according to the requirements in AQR 12.13. *[AQR 12.5.2.6(m)]*

B. MODIFICATION, REVISION, RENEWAL REQUIREMENTS

1. No person shall begin actual construction of a New Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an ATC permit from the Control Officer. *[AQR 12.4.1.1(a)]*

2. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, does not stay any permit condition. *[AQR 12.5.2.6(g)(3)]*

3. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: *[AQR 12.5.2.10(a)]*

    a. The permittee has submitted to the Control Officer a complete application for a permit, permit revision, or permit renewal, except that a complete application need not be received before a Part 70 general permit is issued pursuant to AQR 12.5.2.20; and

    b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of AQR 12.5.

4. The permittee shall not build, erect, install, or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere reduces or conceals an emission, which would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 & 40 CFR Part 60.12]*

5. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. *[AQR 12.5.2.6(i)]*

6. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. *[AQR 12.5.2.11(b)]*

7. For purposes of permit renewal, a timely application is a complete application that is submitted at least six months, but not more than 18 months, before the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 OP until final action is taken on its application for a renewed Part 70 O. *[AQR 12.5.2.1(a)(2)]*

C. REPORTING/NOTIFICATIONS/PROVIDING INFORMATION REQUIREMENTS

1. The permittee shall submit all compliance certifications to EPA and to the Control Officer. *[AQR 12.5.2.8(e)(4)]*

2. Any application form, report, or compliance certification submitted to the Control Officer pursuant to the permit or AQRs shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under AQR 12.5 shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *[AQR 12.5.2.6(l)]*

3. The permittee shall furnish to the Control Officer, in writing and within a reasonable time, any information that the Control Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Control Officer copies of records that the permit requires keeping. The permittee may furnish records claimed to be confidential directly to the Administrator, along with a claim of confidentiality. *[AQR 12.5.2.6(g)(5)]*

4. Upon request of the Control Officer, the permittee shall provide such information or analyses as will disclose the nature, extent, quantity, or degree of air contaminants that are or may be discharged by the source, and the type or nature of control equipment in use. The Control Officer may require that such disclosures be certified by a professional engineer registered in the state. In addition to such a report, the Control Officer may designate an authorized agent to make an independent study and report on the nature, extent, quantity, or degree of any air contaminants that are or may be discharged from the source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report. *[AQR 4.1]*

5. The permittee shall submit annual emissions inventory reports based on the following: *[AQR 18.6.1]*

    a. The annual emissions inventory must be submitted to DAQ by March 31 of each calendar year (if March 31 falls on a Saturday or Sunday, or on a Nevada or federal holiday, the submittal shall be due on the next regularly scheduled business day);

    b. The calculated actual annual emissions from each emission unit shall be reported even if there was no activity, along with the total calculated actual annual emissions for the source based on the emissions calculation methodology used to establish the potential to emit (PTE) in the permit or an equivalent method approved by the Control Officer prior to submittal; and

    c. As the first page of text, a signed certification containing the sentence: "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate, and complete." This statement shall be signed and dated by a responsible official of the company (a sample form is available from DAQ).

6. Stationary sources that emit 25 tons or more of nitrogen oxide (NOx) and/or 25 tons or more of volatile organic compounds (VOCs) during a calendar year from emission units, insignificant activities, and exempt activities shall submit an annual emissions statement for both pollutants. This statement must include actual annual NOx and VOC emissions from all activities, including emission units, insignificant activities, and exempt activities. Emissions statements are separate from, and additional to, the calculated annual emissions reported each year for all regulated air pollutants (i.e., the emissions inventory). *[AQR 12.9.1]*

D. COMPLIANCE REQUIREMENTS

1. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[AQR 12.5.2.6(g)(2)]*

2. Any person who violates any provision of the AQR, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry, or monitoring activities; or any requirements by DAQ is guilty of a civil offense and shall pay the civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than $10,000. Each day of violation constitutes a separate offense. *[AQR 9.1; NRS 445B.640]*

3. Any person aggrieved by an order issued pursuant to AQR 9.1 is entitled to a review, as provided in Chapter 233B of the NRS. *[AQR 9.12]*

4. The permittee shall comply with the requirements of 40 CFR Part 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. *[AQR 13.1(b)(8)]*

5. The permittee shall certify compliance with terms and conditions contained in this Part 70 OP, including emission limitations, standards, work practices, and the means for monitoring such compliance. *[AQR 12.5.2.8(e)]*

6. The permittee shall submit compliance certifications annually in writing to the Control Officer (4701 W. Russell Road, Suite 200, Las Vegas, NV 89118) and the EPA Administrator at Region 9 (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30 of the following year and shall include the following: *[AQR 12.5.2.8(e)]*

    a. The identification of each term or condition of the permit that is the basis of the certification;

    b. The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. The methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR Part 70.6(a)(3). If necessary, the permittee shall also identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information; and

    c. The status of compliance with the terms and conditions of this permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in (b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance, as defined under 40 CFR Part 64, occurred.

7. The permittee shall report to the Control Officer (4701 West Russell Road, Suite 200, Las Vegas, NV 89118) any startup, shutdown, malfunction, emergency, or deviation that causes emissions of regulated air pollutants in excess of any limits set by regulations or by this permit. The report shall be in two parts, as specified below: *[AQR 12.5.2.6(d)(4)(B)]*

    a. Within 24 hours of the time the permittee learns of the excess emissions, the permittee shall notify DAQ by phone at (702) 455-5942, by fax at (702) 383-9994, or by email at airquality@clarkcountynv.gov; and

b. Within 72 hours of the notification required by paragraph (a) above, the permittee shall submit a detailed written excess emission report to DAQ containing the information required by AQR 25.6.3 and certified by a responsible official.

8. The permittee shall report to the Control Officer all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown, with the semiannual report. These reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. *[AQR 12.5.2.6(d)(4)(B)]*

9. The owner or operator of any source required to obtain a permit under AQR 12 shall report to the Control Officer any emissions in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health, safety, or the environment as soon as possible, but in no case later than 12 hours after the deviation is discovered, with a written report submitted within two days of the occurrence. *[AQR 25.6.2]*

E. PERFORMANCE TESTING REQUIREMENTS

1. Upon request of the Control Officer, the permittee shall test (or have tests performed) to determine emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of those allowed by the AQRs is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. *[AQR 4.2]*

2. Upon request of the Control Officer, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. *[AQR 4.2]*

3. The permittee shall submit to the Control Officer for approval a performance testing protocol that contains testing, reporting, and notification schedules, test protocols, and anticipated test dates no less than 45 days, but no more than 90 days, before the anticipated date of the performance test unless otherwise specified in this permit. *[AQR 12.5.2.8]*

4. The permittee shall submit to EPA for approval any alternative test methods EPA has not already approved to demonstrate compliance with a requirement under 40 CFR Part 60. *[40 CFR Part 60.8(b)]*

5. The permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days of the end of the test. *[AQR 12.5.2.8]*

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

1. The stationary source covered by this Part 70 OP is defined to consist of the emission units and associated appurtenances summarized in Tables III-A-1, III-B-1, III-C-1, III-D-1, III-E-1, III-F-1, III-G-1, III-H-1, III-I-1, III-J-1, and III-K-1. *[AQR 12.5.2.3]*

A. RAW MATERIAL STORAGE AND HANDLING

1. Emission Units

a. The raw material storage and handling process consists of the emission units listed in Table III-A-1.

Table III-A-1: List of Emission Units

EU	Description	Rated Capacity	Manufacturer
A01	Coke Rail Car Unloading		TIMET design
A02	Coke Storage Silo #1		TIMET design
A03	Coke Storage Silo #2		TIMET design
A04	Rutile Ore Rail Car Unloading		TIMET design
A04a	Rutile Belt Conveyor		TIMET design
A06	Rutile Transfer into Silo #2		TIMET design
A07	Rutile Transfer into Silo #3		TIMET design
A09	Rutile Transfer Bins (2) Offloading		TIMET design
A10	Rutile Transfer from Silos to Stockpile		TIMET design
A11	Rutile Transfer from Stockpile to Hoppers		TIMET design

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-A-2 below in any consecutive 12-month period. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-A-2: Emission Unit PTE (tons per year) – Raw Materials Storage and Handling

EU	Conditions[1]	Control	Control Efficiency	PM_{10}	$PM_{2.5}$
A01	15,000 tons/year	Enclosure	50%	0.23	0.21
A02	5,000 tons/year	Inside Building	75%	0.04	0.04
A03	10,000 tons/year	Inside Building	75%	0.08	0.07
A04	50,000 tons/year	Enclosure	50%	0.75	0.70
A04a	50,000 tons/year	Inside Building	75%	0.38	0.35
A06	25,000 tons/year	Inside Building	75%	0.19	0.18
A07	25,000 tons/year	Inside Building	75%	0.19	0.18
A09	50,000 tons/year	Inside Building	75%	0.38	0.32
A10	45,000 tons/year	Inside Building	75%	0.34	0.32
A11	45,000 tons/year	Inside Building	75%	0.34	0.32
			Total	**2.89**	**2.70**

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit the amount of rutile ore unloaded and processed in the facility to 50,000 tons per any consecutive 12-month period. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. The permittee shall limit the amount of coke unloaded from rail cars to 15,000 tons per any consecutive 12-month period. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

4. Control Requirements

a. The permittee shall use enclosures during unloading of coke from rail cars (EU: A01) to control particulate emissions. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. The permittee shall maintain and operate railcar unloading of coke (EU: A01) with enclosures that have a particulate control efficiency of at least 50 percent. *[AQR 12.5.2.6]*

c. The permittee shall perform storage and transfer of coke inside the enclosed building (EUs: A02 and A03) to control particulate emissions to at least 75 percent at all times the processing equipment is operating. *[AQR 12.5.2.6]*

d. The permittee shall use enclosures during railcar unloading of rutile ore (EU: A04) to control particulate emissions. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

e. The permittee shall maintain and operate railcar unloading of rutile ore (EU: A04) with enclosures that have a particulate control efficiency of at least 50 percent. *[AQR 12.5.2.6]*

f. The permittee shall perform storage and transfer of rutile ore inside the enclosed building (EUs: A04a, A06, A07, A09, A10, and A11) to control particulate emissions to at least 75 percent at all times the processing equipment is operating. *[AQR 12.5.2.6]*

g. The permittee shall take measures to control fugitive dust (e.g. wet, chemical or organic suppression, enclosures, etc.) at material transfer points, stockpiles, truck loading stations and roads throughout the facility in order to continuously comply with the 20 percent opacity limit required by AQR 26.1. The Control Officer may at any time (subject to the provisions of the AQR) require additional water sprays or other controls at pertinent locations if an inspection indicates that opacity limits are being exceeded. *[AQR 26.1]*.

h. The permittee shall take measures to abate fugitive dust from becoming airborne and to prevent the discharge of visible fugitive dust which extends more than 100 yards from the point of origin or beyond the nearest property line, whichever is less. *[AQR 41.1.1.1]*

i. The permittee shall not cause or allow the handling, transporting, or storage of any material in a manner that allows or may allow controllable particulate matter to become airborne. *[AQR 41.1.2]*

j. The permittee shall ensure that all trucks, regardless of ownership, loaded with materials with the potential to produce fugitive emissions are properly covered and/or suppressants shall be applied to prevent visible emissions. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

5. Monitoring

a. The permittee shall conduct daily visual emissions checks and observations on the process while operating. *[AQR 12.5.2.6(d)]*

b. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

c. If a plume appears to exceed the opacity standard, the permittee shall *[AQR 12.5.2.6(d)]*:

   i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

   ii. If practical, have a certified visible emissions observer take an observation of the plume using EPA Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

d. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

e. The permittee shall demonstrate compliance with the limits of rutile ore and coke consumed in the facility through recordkeeping and reporting. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

6. Testing

a. No performance testing requirements have been identified for this process. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at minimum, the following information *[AQR 12.5.2.6(d)]*:

   i. Dates and times when visible emissions checks and observations were made, and the corrective steps taken to bring opacity into compliance;

   ii. Sulfur content of each shipment of rutile ore received;

   iii. Sulfur content of each shipment of coke received;

   iv. Records of all inspections, maintenance, and repairs as specified in this document; and

   v. Monthly calculation of emissions for each emission unit, with consecutive 12-month totals for each pollutant.

b. The permittee shall maintain on-site and report the following information semiannually *[AQR 12.5.2.6(d)]*:

   i. Monthly, consecutive 12-month total amount of rutile ore processed;

ii. Monthly, consecutive 12-month total amount of coke processed; and

iii. Monthly. consecutive 12-month total emissions for each pollutant for the raw material storage and handling process.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

B. CHLORINATION PROCESS

1. Emission Units

a. The chlorination process consists of the emission units listed in Table III-B-1.

Table III-B-1: List of Emission Units

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
B11	Chlorinator #81		TIMET design		
B12	Chlorinator #82		TIMET design		
B13	Chlorinator #83		TIMET design		
B14	Chlorinator #84		TIMET design		
B15	Chlorinator #85		TIMET design		
B16	Chlorinator #86		TIMET design		
B17	Chlorinator #87		TIMET design		
B18	Chlorinator #88		TIMET design		
B01	Caustic Scrubbing Tower #1 Vent (Tower #84)				
B02	Caustic Scrubbing Tower #2 Vent (Tower #83)				
B03	Caustic Scrubbing Tower #3 Vent (Tower #82)				
B04	Caustic Scrubbing Tower #4 Vent (Tower #81)				
B05	Venturi Scrubber Exhaust Stack (2 scrubbers, 4 blowers)	2,970 cfm total	Ducon Oriclone	Type VO, Size 42	
B06a	CO Burner/Boiler exhausting through SO_2 Scrubber	18.5 MMBtu/hr	Clever Brooks	CB700350200	OL102330
B06b	SO_2 Scrubber	N/A	MECS	Dynaware	
B09	Natural Gas Steam Boiler	6.7 MMBtu/hr	Kewanee	A3S-200-G11	AN861008
B10	Thermal Oxidizer (alternative control device for CO boiler)	6.0 MMBtu/hr	North American	2942-22-33AW	GS-2953
B19	Natural Gas Boiler – Rental Unit	Up to 14.7 MMBtu/hr	Varies	Varies	Varies

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
B20	Chlorinator dust loading in roll-off bins controlled by wet scrubber	1,700 cfm	New York Blower Company	H06909	
B21	Truck hauling of chlorinator dust roll-offs in/out of facility	0.5 mile paved			

b. The units or activities listed in Table III-B-2 are present at this source, but are insignificant units or activities pursuant to AQR 12.5.2.5.

Table III-B-2: List of Insignificant Units and Activities

Description	Rated Capacity	Manufacturer	Model #	Serial #
Ammonia Refrigeration System (EU: M02)	2,900 lbs NH_3	Frick of York	RFX-101N	0407YFMNWHGA03 York - 154837

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-B-3 below in any consecutive 12-month period. *[NSR ATC/OP 19, Modification 13 (05/08/2006), Renewal Permit (5/28/2019)]*

Table III-B-3: Emission Unit PTE (tons per year) – Chlorination Process

EU	Conditions[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	Cl_2	HCl	COS	H_2SO_4
B11	8,760 hrs/yr	100% Emissions vented to Caustic Scrubbing Tower #1, Venturi Scrubbers, CO Boiler, and SO_2 Scrubber										
B12	8,760 hrs/yr											
B13	8,760 hrs/yr	100% Emissions vented to Caustic Scrubbing Tower #2, Venturi Scrubbers, CO Boiler, and SO_2 Scrubber										
B14	8,760 hrs/yr											
B15	8,760 hrs/yr	100% Emissions vented to Caustic Scrubbing Tower #3, Venturi Scrubbers, CO Boiler, and SO_2 Scrubber										
B16	8,760 hrs/yr											
B17	8,760 hrs/yr	100% Emissions vented to Caustic Scrubbing Tower #4, Venturi Scrubbers, CO Boiler, and SO_2 Scrubber										
B18	8,760 hrs/yr											
B01	8,760 hrs/yr	100% Emissions vented to EU: B05 except during upset/breakdown resulting in venting at one or more Caustic Towers										
B02	8,760 hrs/yr											
B03	8,760 hrs/yr											
B04	8,760 hrs/yr											
B05	8,760 hrs/yr	100% Emissions vented to EUs: B06a,b										
B06a,b	8,760 hrs/yr	25.62	19.47	8.94	266.61	30.29	0.00	0.00	0.74	5.08	0.31	3.77
B09	8,760 hrs/yr	0.22	0.22	1.07	2.18	0.02	0.16	0.06	0.00	0.00	0.00	0.00
B10	8,760 hrs/yr	100% Emissions included in EU: B06a,b										
B19	8,760 hrs/yr	0.05	0.05	0.24	0.24	0.01	0.03	0.01	0.00	0.00	0.00	0.00
B20	8,760 hrs/yr	0.07	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B21	500 VMT/yr	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		**26.00**	**19.82**	**10.25**	**269.03**	**30.32**	**0.19**	**0.07**	**0.74**	**5.08**	**0.31**	**3.77**

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

b. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-B-4. *[NSR ATC/OP 19, Modification 13 (05/08/2006), Renewal Permit (5/28/2019)]*

Table III-B-4: Emission Unit PTE (pounds per hour) – Chlorination Process

EU	Conditions	NO_x	CO	SO_2	Cl_2	HCl	COS	H_2SO_4
B06a/b	1 hour	2.04	60.80	6.90	0.17	1.16	0.07	0.86
B10	1 hour	1.14	0.45	27.66	0.02	0.14	0.07	0.00
B19	1 hour	0.54	0.55	0.00	0.00	0.00	0.00	0.00

c. The permittee shall calculate excess emissions from deviations based on Table III-B-5. *[AQR 12.5.2.6, Renewal Permit (5/28/2019)]*

Table III-B-5: Deviation Emissions (pounds per hour)—Four Chlorinators Operation

EU	Conditions	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	HCl	Cl_2	COS	H_2SO_4
B01	1 hour	0.01	0.01	0.05	532.73	0.01	0.34	0.04	9.12	0.01
B02	1 hour	0.01	0.01	0.05	532.73	0.01	0.34	0.04	9.12	0.01
B03	1 hour	0.01	0.01	0.05	532.73	0.01	0.34	0.04	9.12	0.01
B04	1 hour	0.01	0.01	0.05	532.73	0.01	0.34	0.04	9.12	0.01
B05	1 hour	0.01	0.01	0.22	2,029	0.01	1.36	0.16	36.48	0.01

d. The permittee shall not allow actual emissions from permit deviations to exceed the calculated emissions listed in Table III-B-6 below in any consecutive 12-month period. *[AQR 12.5.2.6, Renewal Permit (5/28/2019)]*

Table III-B-6: Excess Emission Threshold (tons per year)

EU	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	HCl	Cl_2	COS	H_2SO_4
All	0.08	0.06	0.19	39.17	6.21	0.02	0.05	0.70	0.15

e. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

f. The permittee shall limit the controlled CO emissions from normal operation of the Chlorination Process to 60.8 pounds per hour or 266.61 tons per year. These limits shall include emissions from the CO boiler (EU: B06a), SO_2 scrubber (EU: B06b) and the thermal oxidizer (EU: B10). *[AQR 12.5.2.6]*

g. The permittee shall vent CO boiler off-gas to the SO_2 scrubber (EU: B06b) for SO_2 control. The controlled SO_2 emission from the Chlorination Process shall not exceed 6.90 pounds per hour or 30.29 tons per year. The annual emission limits indicated in this Part 70 OP include emissions from the CO boiler and the SO_2 scrubber (EUs: B06a and EU: E06b) as well as from the thermal oxidizer (EU: B10). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

h. During the scheduled semiannual maintenance of the CO boiler (EU: B06a) and the SO_2 scrubber (EU: B06b), the chlorination off-gas shall be diverted to the thermal oxidizer (EU: B10) and the emissions from the Chlorination Process shall be limited to the emission rates in Table III-B-7. The SO_2 value is based on using 0.8 percent by weight sulfur coke (based on coke feed blended average). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-B-7: Upset/Breakdown Uncontrolled Emissions (pounds per hour)

EU	Conditions	NO_x	CO	SO_2	HCl	Cl_2	COS	H_2SO_4
B06a	1 hour	0.24	60.80	27.66	0.82	0.08	0.07	1.82
B10	1 hour	1.14	0.45	27.66	0.14	0.02	0.07	1.12

[1] Remedial measures for any upset/breakdown situation shall be in accordance with AQR 25.

i. The permittee shall not allow actual emissions from the individual emission units to exceed the concentrations listed in Table III-B-8.

Table III-B-8: Allowable Emission Concentrations

EU	O_2 Correction Standard	NO_x (ppmvd[1])	CO (ppmvd[1])
B19	3 percent	30.0	50.0

[1]ppmvd = parts per million, volumetric dry.

3. Production Limitations

a. The permittee shall not operate a rental package boiler that has a rated heat input of more than 14.7 MMBtu/hr (EU: B19). *[AQR 12.5.2.6]*

b. The permittee shall limit the operation of the rental package boilers up to 876 hours per any consecutive 12-month period. (EU: B19). *[AQR 12.5.2.6]*

c. The permittee shall limit the VMT to 500 miles per any consecutive 12-month period (EU: B21). *[AQR 12.5.2.6]*

4. Control Requirements

a. The permittee shall limit chlorine emissions from the chlorinator process (EUs: B11–B18) to less than one pound per hour by directing all off-gas to a three stage scrubber system. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. During normal operation of the chlorination process, the off-gas flow from the chlorinators (EUs: B11–B18) shall be completely enclosed and/or controlled by seal pots located at the base of each caustic tower. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

c. If the control devices (the CO boiler, SO_2 scrubber, or thermal oxidizer) are not operating, the permittee shall immediately take remedial measures. Any period when the control devices are not operating shall be considered an upset/breakdown, and release of off-gas from the caustic scrubbers (EUs: B01–B04) or from the Venturi scrubber exhaust stack (EU: B05) shall be considered excess emissions unless otherwise specified by Condition III-B-2(d). *[AQR 25.2.1]*

d. The permittee shall direct all chlorination off-gas to the CO boiler (EU: B06a) or thermal oxidizer (EU: B10) to reduce CO emissions from the chlorination process by at least 97.0 percent. Every five years, in accordance with testing conditions, the permittee shall test chlorinator off-gas upstream of the CO boiler (EU: B06a) and at the scrubber stack (EU: B06b) to verify compliance with this condition. *[AQR 12.5.2.6]*

e. If the CO boiler (EU: B06a) and the thermal oxidizer (EU: B10) break down simultaneously, the permittee shall include calculated uncontrolled emissions during such upset/breakdown and malfunction situations in the annual emissions calculations. The resulting emissions shall be calculated using the emission factors for EUs: B01–B05 listed in Table III-B-5, and shall be based on the number of chlorinators in operation. *[AQR 12.5.2.6]*

f. The permittee shall operate the CO boiler (EU: B06a) at a minimum temperature of 1,400ºF except during periods of upset, startup, or shutdown. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

g. The permittee shall vent all CO boiler off-gas to the SO_2 scrubber (EU: B06b). *[AQR 12.5.2.6]*

h. The permittee shall, during SO_2 scrubber (EU: B06b) maintenance or breakdown, vent chlorination off-gas through the CO boiler exhaust make-up damper (EU: B06a) or thermal oxidizer (EU: B10). The permittee shall include calculated uncontrolled emissions during such upset/breakdown and malfunction situations in the annual emissions inventory. The resulting emissions shall be calculated using the emission factors listed in Table III-B-7. *[AQR 12.5.2.6]*

i. The permittee shall maintain and operate the Kewanee boiler (EU: B09) with burners that have a manufacturer's maximum emission rate of 30 ppm NO_x (adjusted to 3% O_2). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

j. The permittee shall maintain and operate the Kewanee boiler (EU: B09) with burners that have a manufacturer's maximum emission rate of 100 ppm CO (adjusted to 3% O_2). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

k. The permittee shall use a thermal oxidizer (EU: B10) to control CO emissions from the chlorination off-gas when the CO boiler is bypassed during all periods of scheduled maintenance of the CO boiler. The permittee shall also use the thermal oxidizer during all upset/breakdowns or malfunctions of the CO boiler whenever practically feasible if the anticipated duration of the event exceeds four hours. The resulting emissions shall be calculated using the emission factors listed in Table III-B-7, and shall be based on the number of chlorinators in operation. *[AQR 12.5.2.6]*

l. The permittee shall operate the thermal oxidizer (EU: B10) at a minimum temperature of 1400ºF except during periods of upset, startup, or shutdown. *[AQR 12.5.2.6]*

m. The permittee shall only combust natural gas in any of the rental package boilers (EU: B19). *[AQR 12.5.2.6]*

n. The permittee shall operate and maintain any of the rental package boilers in accordance with manufacturer's specifications and good combustion practices (EU: B19). *[AQR 12.5.2.6]*

o. The permittee shall maintain and operate the rental package boiler (EU: B19) with burners that have a manufacturer's maximum emission rate of 30 ppm NO_x (adjusted to 3% O_2). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

p. The permittee shall maintain and operate the rental package boiler (EU: B19) with burners that have a manufacturer's maximum emission rate of 50 ppm CO (adjusted to 3% O_2). *[AQR 12.5.2.6]*

q. The permittee shall operate the wet scrubber at all times when the chlorinator dust is transferred into the roll-off bins (EU: B20). *[AQR 12.5.2.6]*

r. The permittee shall maintain the dust loading operation scrubber per manufacturer's specifications (EU: B20). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

s. The permittee shall treat the haul roads to control visible emissions within the allowable opacity limits. Treatment shall consist of watering, chemical or organic dust suppression, gravelling, or equivalent control measures (EU: B21). *[AQR 12.5.2.6]*

t. The permittee shall sweep and/or rinse as necessary all paved roads accessing or located at the landfill to remove all observable deposits (EU: B21). *[AQR 12.5.2.6]*

5. Monitoring

a. The permittee shall conduct weekly visual emissions checks and observations on the process while operating. *[AQR 12.5.2.6(d)]*

b. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

c. If a plume appears to exceed the opacity standard, the permittee shall *[AQR 12.5.2.6(d)]*:

   i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

   ii. If practical, have a certified visible emissions observer take an observation of the plume using EPA Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

d. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

e. The permittee shall install, calibrate, maintain, operate, and certify CEMS for CO and SO_2 on the common exhaust stack of the CO boiler/SO_2 scrubber (EUs: B06a and B06b). The CEMS shall include an automated data acquisition and handling system that shall monitor and record at least the following data: *[AQR 12.5.2.6(d)]*

   i. Hourly averages of exhaust gas concentration of CO and SO_2;

   ii. Exhaust gas flow rate (by direct or indirect methods);

iii. Hours of operation;

iv. Hourly, daily, and semiannual accumulated mass emissions of CO and SO_2; and

v. Hours of downtime of the CEMS.

f. The permittee is required to do a RATA on CEMS for the CO boiler/SO_2 scrubber (EUs: B06a and B06b) to demonstrate compliance with the CEMS requirements on an annual basis. *[AQR 12.5.2.6(d)]*

g. The permittee shall evaluate performance of the CO boiler (EU: B06a) by continuous monitoring of the operating temperature of the CO boiler. The permittee shall demonstrate compliance with the minimum operating temperature of 1400ºF except during periods of upset, startup, or shutdown. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

h. The permittee shall demonstrate compliance with the PM_{10} emissions from the chlorination dust loading operation by maintaining records of the amount of dust transferred and the number of round trips of the disposal truck. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

i. The permittee shall demonstrate compliance with the requirements for use of low-sulfur coke (< 0.8 percent sulfur) during any scheduled maintenance to the CO boiler and SO_2 scrubber through recordkeeping and reporting. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

j. The permittee shall conduct a burner efficiency test (boiler tune-up) and inspection once each calendar year on the Kewanee boiler (EU: B09). This burner efficiency test is to be conducted in accordance with the manufacturer's recommendations and specifications for good combustion practices. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

k. The permittee shall monitor the emissions from deviations monthly. *[AQR 12.5.2.6]*

l. The permittee shall monitor the monthly hours of operation of the boiler (EU: B19). *[AQR 12.5.2.6]*

m. The permittee shall monitor the monthly fuel consumption by the boiler (EU: B19). *[40 CFR Part 60.48c(g)(2)]*

n. The permittee shall conduct a burner efficiency test (boiler tune-up) and inspection twice each calendar year, at least five months apart but no more than seven, on the rental package boiler (EU: B19). This test will be conducted in accordance with the manufacturer's recommendations and specifications for good combustion practices. The permittee may provide manufacturer's emission guarantees as an alternative method to determine burner efficiency upon prior approval from the Control Officer.

o. The permittee may replace one contemporaneously-required burner efficiency test with a performance test that has acceptable results (EU: B19).

p. The permittee shall monitor the number of VMT onsite by vehicles entering and leaving (EU: B21).

6. Testing

a. Performance testing is subject to 40 CFR Part 60 (as amended) and the *Clark County Guidelines for Performance Testing (9/20/2018*). Performance testing shall be the initial method for determining compliance with emission limitations set forth in this permit. *[AQR 12.5.2.6(d)]*

b. The permittee shall demonstrate compliance with the emission limits specified for the chlorination process by performance testing the CO boiler (EU: B06a) for NO_x once every five years. *[NSR ATC/OP 19, Modification 13 (05/08/2006)] Local Only*

c. The permittee shall demonstrate compliance with the emission limits specified for the chlorination process by performance testing the SO_2 scrubber (EU: B06b) for Cl_2, HCl, and H_2SO_4 once every five years. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

d. The permittee shall demonstrate the 97.0 percent CO emissions reduction by performance testing of the chlorinator off-gas of the CO boiler (EU: B06a) and SO_2 scrubber stack (EU: B06b) for CO once every five years. *[AQR 12.5.2.6(d)]*

e. The permittee shall conduct performance testing for the thermal oxidizer (EU: B10) every five years to demonstrate compliance with the emission standards for CO, SO_2, Cl_2, COS, and NO_x in Table III-B-9. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-B-9: Performance Testing Protocol Requirements

Test Point	Pollutant	Method
SO_2 Scrubber Exhaust	HCl and Cl_2	EPA Method 26 or pre-approved equivalent
SO_2 Scrubber Exhaust	H_2SO_4	EPA Method 18 or pre-approved equivalent
SO_2 Scrubber Exhaust	CO	EPA Method 10 or pre-approved equivalent
CO Boiler Exhaust Scrubber Stack	NO_X	Chemiluminescence Analyzer (EPA Method 7E) or pre-approved equivalent
Thermal Oxidizer Stack	CO	EPA Method 10 or pre-approved equivalent
Thermal Oxidizer Stack	SO_2	EPA Method 6 or pre-approved equivalent
Thermal Oxidizer Stack	NO_x	Chemiluminescence Analyzer (EPA Method 7E) or pre-approved equivalent
Thermal Oxidizer Stack	Cl_2	EPA Method 26 or pre-approved equivalent
Thermal Oxidizer Stack	COS	EPA Method 15A or pre-approved equivalent
Stack Gas Parameters	—	EPA Methods 1, 2, 3, and 4 or pre-approved equivalent

f. The permittee shall conduct performance testing on the rental package boiler according to the following conditions (EU: B19): *[AQR 12.5.2.6(d)]*

i. The permittee shall conduct initial performance tests within 60 days of achieving the maximum production rate at which the source will be operated, but no later than 180 days after initial startup.

ii. The permittee shall use the performance testing methodologies for rental boiler (EU: B19) listed in Table III-B-10 every five years, and no later than 90 days after the anniversary date of the last performance test. The Control Officer will consider approving a request for alternative performance test methods if the permittee proposes any in writing in the performance test protocols.

Table III-B-10: Performance Testing Protocol Requirements

EU	Test Point	Pollutant	Method	Frequency
B19	Boiler Exhaust Outlet Stack	NO_x	EPA Method 7E	5 years
B19	Boiler Exhaust Outlet Stack	CO	EPA Method 10	
B19	Stack Gas Parameters	—	EPA Methods 1, 2, 3A, and 4	

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at a minimum, the following information: *[AQR 12.5.2.6(d)]*

i. Dates and times when visible emissions checks and observations were made, and the corrective steps taken to bring opacity into compliance;

ii. Daily records of number of chlorinators in use and hours of operation of each chlorinator;

iii. The weighted average sulfur content of coke used during any scheduled semiannual maintenance of the CO boiler and the SO_2 scrubber (EUs: B06a and B06b);

iv. Monthly amount of dust transferred from chlorinator dust cyclones into roll-off bins;

v. Daily hours of operation of the CO boiler (EU: B06a);

vi. Operating temperature monitoring data for the CO boiler burner (EU: B06a);

vii. Record of maintenance of the CO boiler and the SO_2 scrubber (EUs: B06a and B06b);

viii. Amount of low-sulfur coke (<0.8% sulfur) consumed during any maintenance periods;

ix. Daily hours of operation of the thermal oxidizer (EU: B10) during off-gas combustion operation, and separately during idling;

x. Daily records of the VMT (EU: B21);

xi. Log of control measures applied to paved roads;

xii. Records of all inspections, maintenance, and repairs as specified in this document;

xiii. Records of the manufacturer's emission guarantees for the on-site rental package boiler (EU: B19);

xiv. Records of operation, including unit specifications, start date, and duration of operation, of each rental package boiler (EU: B19);

xv. Monthly calculation of emissions, with consecutive 12-month totals for each pollutant and emission unit;

xvi. Records of RATA performed on CEMS for the CO boiler and the SO_2 scrubber (EUs: B06a and B06b); and

xvii. Records of burner efficiency and performance testing as specified in this permit.

b. The permittee shall maintain on-site and report the following information semiannually: *[AQR 12.5.2.6(d)]*

i. Monitoring data produced by the CEMS for SO_2 and CO emissions at the scrubber stack from the CO boiler and the SO_2 scrubber (EUs: B06a and B06b);

ii. Monthly, consecutive 12-month hours of operation for the boiler (EU: B19);

iii. Monthly, consecutive 12-month VMT traveled (EU: B21);

iv. Monthly, consecutive 12-month total emissions for each pollutant in the chlorination process; and

v. Monthly, consecutive 12-month total calculated emissions of each pollutant from deviations.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

C. PURIFICATION PROCESS

1. Emission Units

a. The purification process consists of the emission units listed in Table III-C-1.

Table III-C-1: List of Emission Units

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
C01	Purification #2 Scrubber	300 cfm	PVS		
C04	Hot Oil Expansion Tank Vent				
C05	Hot Oil Heater – South	1.0 MMBtu/hr	American Hydrotherm	Northern American	
C05a	Hot Oil Heater – North	1.5 MMBtu/hr	Maxon		
C07	Fugitive (valves, flanges, seals)				
M15	Pure $TiCl_4$ Storage Tanks (10) West				

b. The units or activities listed in Table III-C-2 are present at this source, but are insignificant units or activities pursuant to AQR 12.5.2.5.

Table III-C-2: List of Insignificant Units and Activities

Description	Rated Capacity	Manufacturer	Model #	Serial #
Natural Gas Hot Oil Heater	0.9 MMBtu/hr	HOH-American Hydrotherm	Power Flame NPM30-12-120	5077
Continuous Sludge Holoflite Dryers (2)		Joy Manufacturing	D-2420-6	
Header Blowout Vent		Rupture Disc		

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-C-3 below in any consecutive 12-month period. *[NSR ATC/OP 19, Modification 13 (05/08/2006) & AQR 12.5.2.6]*

Table III-C-3: Emission Unit PTE (tons per year) – Purification Process

EU	Rating	Conditions[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	HCl
C01	300 ft^3/min	8,760 hrs/yr	5.66	5.09	0.00	0.00	0.00	0.00	0.00	0.96
C04	4,160 ft^3/week	8,760 hrs/yr	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00
C05	1 MMBtu/hr	8,760 hrs/yr	0.04	0.04	0.43	0.36	0.01	0.02	0.01	0.00
C05a	1.5 MMBtu/hr	8,760 hrs/yr	0.05	0.05	0.66	0.53	0.01	0.04	0.01	0.00
C07	0.13 lb/hr $TiCl_4$	8,760 hrs/yr	0.25	0.23	0.00	0.00	0.00	0.00	0.00	0.45
M15		125,000,000 lb/yr	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00
		Total	**6.02**	**5.43**	**1.09**	**0.89**	**0.02**	**0.44**	**0.02**	**1.41**

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

b. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-C-4. *[AQR 12.5.2.6]*

Table III-C-4: Emission Unit PTE (pounds per hour) – Purification Process

EU	Rating	Conditions	PM_{10}	HCl
C01	300 cfm	1 hour	1.30	0.22

c. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit the amount of pure $TiCl_4$ to 125,000,000 pounds in any consecutive 12-month period in the pure $TiCl_4$ storage tanks (EU: M15). *[AQR 12.5.2.6]*

4. Control Requirements

a. The permittee shall operate PVS scrubber all the times the purification operation is performed (EU: C01), except for Condition III-C-4-b. *[AQR 12.5.2.6]*

b. The purification process may operate without the PVS scrubber control for short periods of time during maintenance or repair if necessary. The short-term emissions from the uncontrolled purification operation shall not exceed 1.30 pounds per hour for PM_{10} and 0.22 pounds per hour for HCl. The annual emissions from the purification, including the emissions during the uncontrolled operation, shall be limited to the PTE in Table III-C-3. *[AQR 12.5.2.6]*

5. Monitoring

a. The permittee shall conduct weekly visual emissions checks and observations on the process while operating. *[AQR 12.5.2.6(d)]*

b. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

c. If a plume appears to exceed the opacity standard, the permittee shall: *[AQR 12.5.2.6(d)]*

   i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

   ii. If practical, have a certified visible emissions observer take an observation of the plume using U.S. Environmental Protection Agency (EPA) Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

d. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

e. The permittee shall monitor the amount of Pure $TiCl_4$ processed (EU: M15). *[AQR 12.5.2.6(d)]*

6. Testing

a. The permittee shall conduct performance testing on the PVS purification scrubber (EU: C01) to demonstrate compliance with the HCl and PM_{10} emission limits. The permittee shall conduct performance tests once every five years. *[NSR ATC/OP 19, Modification 13 (05/08/2006)] Local Only*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at minimum, the following information: *[AQR 12.5.2.6(d)]*

   i. Dates and times when visible emissions checks and observations are made, and the corrective steps taken to bring opacity into compliance;

   ii. Records of all inspections, maintenance, and repairs as specified in this document;

   iii. Hours of operation of the purification scrubber (EU: C01);

   iv. Records of performance testing; and

   v. Monthly calculation of emissions for each emission unit with consecutive 12-month totals for each pollutant.

b. The permittee shall maintain on-site and report the following information semiannually *[AQR 12.5.2.6(d)]*:

   i. Monthly consecutive 12-month total amount of pure $TiCl_4$ processed (EU: M15); and

   ii. Monthly consecutive 12-month total emissions for each pollutant for the purification process.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

D. VACUUM DISTILLATION PROCESS

1. Emission Units

a. The vacuum distillation process consists of the emission units listed in Table III-D-1.

Table III-D-1: List of Emission Units

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
E01	VDP Scrubber (20 furnaces)		MECS	Dynaware	
E02	General Arc Welding				
E03	Emergency Engine; DOM: pre-1993	1,290	Mitsubishi	S12-NPTA	10950
	Emergency Generator	825 kW	Marathon	574RSL403BWW	YB3877293
E05a	VDP Cooling Tower – East	4,800 gpm	Phoenix	2FT-20.2/24.7-50-P5	
E05b	VDP Cooling Tower – West	7,000 gpm	Evapco	24-924B	
E06	VDP Fugitives Emissions from 42 Furnaces				
E07	Electric Sponge Dryer	3,800 cfm	General Kinematics		
	Sponge Dryer Cyclone		Airecon	12-1	L-5817
M16	Pure $TiCl_4$ Storage Tanks, J-1 to J-5 Area - Wet Scrubber	100 acfm at 2.5 psig	Advanced Air Technologies	Orion	051091

b. The units or activities listed in Table III-D-2 are present at this source, but are insignificant units or activities pursuant to AQR 12.5.2.5.

Table III-D-2: List of Insignificant Units and Activities

Description	Rated Capacity	Manufacturer	Model #	Serial #
Diesel Storage Tank (EU: E04)	1,600 gallons	Mark Steel Corp.		

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-D-3 in any consecutive 12-month period, except for emission units intended only for use in emergencies. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-D-3: Emission Unit PTE (tons per year) – Vacuum Distillation Process

EU	Rating	Conditions[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	HCl	Cl_2
E01	20 furnaces	8,760 hrs/yr	2.54	2.16	0.00	0.00	0.00	0.00	0.00	0.66	0.35
E02	20,000 lbs electrodes	10.3 lb/1,000 lb electrodes	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E03	1,290 hp	500 hrs/yr	0.23	0.23	7.74	1.77	0.01	0.23	0.01	0.00	0.00
E05a	4,800 gpm	8,760 hrs/yr	0.37	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E05b	7,000 gpm	8,760 hrs/yr	0.54	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E06	42 stations		23.30	20.98	0.00	0.00	0.00	0.00	0.00	0.07	0.00
E07	3,800 acfm	8,760 hrs/yr	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M16			0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total			**27.11**	**24.04**	**7.74**	**1.77**	**0.01**	**0.23**	**0.01**	**0.73**	**0.35**

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit the operation of the emergency generator (EU: E03) for testing and maintenance purposes to 100 hours per year. The permittee may operate the emergency generators up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The emergency generator cannot be used for peak shavings or demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. *[Subpart ZZZZ (63.6585 and 63.6640)]*

b. The permittee shall limit amount of vacuum distilled titanium sponge to 16,000 tons per any consecutive 12-month period (EU: E06). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

4. Control Requirements

a. The permittee shall operate the VDP scrubber (EU: E01) in conjunction with the VDP operation. The VDP may operate without scrubber control for short periods of time during maintenance or repair if necessary. The short-term emissions from the uncontrolled VDP operation shall not exceed 0.58 pounds per hour for PM_{10}, 0.30 pounds per hour for HCl, and 0.16 pounds per hour for Cl_2. *[AQR 12.5.2.6]*

b. The permittee shall operate and maintain the emergency generator set in accordance with manufacturer's specifications (EU: E03). *[AQR 12.5.2.6]*

c. The permittee shall operate the cooling towers with drift eliminators that have a manufacturer's maximum drift rate of 0.001 percent (EUs: E05a and E05b). *[AQR 12.5.2.6]*

d. The permittee shall limit the TSD content of each cooling tower's circulation water to 7,500 ppm (EUs: E05a and E05b). *[AQR 12.5.2.6]*

e. The permittee shall operate and maintain each of the cooling towers in accordance with manufacturer's specifications (EUs: E05a and E05b). *[AQR 12.5.2.6]*

f. The permittee shall operate the dry cyclone scrubber at all the times the General Kinematics electric sponge dryer is in operation (EU: E07). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

g. The permittee shall maintain and operate the dry cyclone scrubber (EU: E07) with a PM_{10} control efficiency of at least 72.0 percent, in accordance with manufacturer's specifications. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

5. Monitoring

a. The permittee shall conduct weekly visual emissions checks and observations on the process while it is operating. *[AQR 12.5.2.6(d)]*

b. The permittee shall conduct a visual emissions check and observation of the diesel-fired emergency generator (EU: E03) whenever it is operated for testing and maintenance, but at least quarterly. *[AQR 12.5.2.6]*

c. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

d. If a plume appears to exceed the opacity standard, the permittee shall *[AQR 12.5.2.6(d)]*:

i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

ii. If practical, have a certified visible emissions observer take an observation of the plume using U.S. Environmental Protection Agency (EPA) Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

e. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

f. The permittee shall demonstrate compliance with the Cl_2, HCl, and PM_{10} emission limits specified for the VDP by monitoring the VDP scrubber (EU: E01). Monitoring of the VDP scrubber shall be performed per the parameters in Table III-D-4. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-D-4: Monitoring Parameters for VDP Scrubber

Parameter	Equipment	Operating Range	Control Limits
Scrubber Solution pH AI-1108	Glass membrane electrode	0-14 pH	>6.0 pH
Inlet Pressure to the Blower PI-1105	Pressure sensor and transmitter	0 - (-75") WC	<-25" WC
Scrubber Inlet Pressure PI-1101	Pressure sensor and transmitter	0 - (-50") WC	<-15" WC
Upper Jet Flow Rate FI-1112	Concentric square edge orifice and pressure transmitter	0 – 800 gpm	>400 gpm
Lower Jet Flow Rate FI-1110	Concentric square edge orifice and pressure transmitter	0 – 800 gpm	>400 gpm

g. The permittee shall operate the diesel-fired emergency generator (EU: E03) with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented.

h. The permittee shall monitor the TDS in the cooling tower recirculation water monthly using a conductivity meter, or any other device approved in advance by the Control Officer (EUs: E05a and E05b). *[AQR 12.5.2.6(d)]*

i. The permittee shall monitor the amount of titanium sponge produced (EU: 06). *[AQR 12.5.2.6(d)]*

6. Testing

a. No performance testing requirements have been identified for this process. Compliance shall be demonstrated through continuous monitoring of the operational parameters of the VDP scrubber. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at a minimum, the following information: *[AQR 12.5.2.6(d)]*

i. Dates and times when visible emissions checks and observations are made, and the corrective steps taken to bring opacity into compliance;

ii. Records of all inspections, maintenance, and repairs as specified in this document;

iii. Monthly TDS test results of the cooling tower;

iv. Monthly hours of operation of VDP;

v. Monthly hours of operation of the VDP scrubber (EU: E01); and

vi. Weekly VDP scrubber critical monitoring parameters listed in Table III-D-4.

b. The permittee shall maintain on-site and report the following information semiannually: *[AQR 12.5.2.6(d)]*

i. Date and duration of operation of the diesel-fired emergency generator for testing, maintenance, and nonemergency use (EU: E03);

ii. Date and duration of operation of emergency generator for emergency use, including documentation justifying use during the emergency (EU: E03);

iii. Monthly, consecutive 12-month total amount of titanium sponge produced (EU: E06); and

iv. Monthly, consecutive 12-month total emissions for each pollutant for the vacuum distillation process.

c. The permittee shall include for all inspections, logs, visible emission checks, and tests required under monitoring, recordkeeping, and reporting at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). *[AQR 12.5.2.6(d)]*

d. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

e. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

E. MAGNESIUM RECOVERY PROCESS

1. Emission Units

a. The magnesium recovery process consists of the emission units listed in Table III-E-1.

Table III-E-1: List of Emission Units

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
G01	Emergency Chlorine Scrubber		US Filter		
G03	Magnesium Recovery Fugitives				
G04a	Sulfuric Acid Tank West	7,500 gal			
G04b	Sulfuric Acid Tank North	2,100 gal			
G20	Cooling Tower	4,500 gpm	CTI		
G21	Bi-Pole Cell Natural Gas Heaters – 19	1.5 MMBtu/hr	Hauck		
	Cell 1-2 - installed 11/12/2014; Cell 1-3 - installed 10/15/2015; Cell 1-4 - installed 07/12/2017;Cell 1-5 - installed 09/15/2015; Cell 2- 3- installed 12/15/2016; Cell 2-4 - installed 10/10/2017;Cell 2-5 - installed 05/26/2016; Cell 3-3 - installed 06/17/2017; Cell 3-4 - installed 11/09/2016; Cell 3-5 - installed 02/23/2016;Cell 4-2 - installed 08/13/2016; Cell 4-3 -installed 10/13/2017; Cell 4-4 - installed 04/06/2017;Cell 5-2 - installed 05/07/2017; Cell 5-3 - installed 02/01/2017; Cell 5-4 - installed 05/20/2018; Cell 6-3 - installed 04/21/2016; Cell 6-4 - installed 10/05/2016; Cell 6-5 - installed 08/15/2017				
G22	Emergency Engine; DOM: 2018	350 hp	Caterpillar	C9	S9PO1736
	Emergency Generator	250 kW		SD250	G5A09852

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-E-2 below in any consecutive 12-month period, except for emission units intended only for use in emergencies. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-E-2: Emission Unit PTE (tons per year) – Magnesium Recovery Process

EU		Conditions[1]	PM_{10}	$PM_{12.5}$	NO_x	CO	SO_2	VOC	HAP	Cl_2	H_2SO_4
G01	780 lbs Cl_2	1 event/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00
G03[2]	36.64 lbs/day	8,760 hrs/yr	6.70	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G04a,b		600,000 lb/yr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
G20	4,500 gpm	8,760 hrs/yr	0.35	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00

EU		Conditions[1]	PM_{10}	$PM_{12.5}$	NO_x	CO	SO_2	VOC	HAP	Cl_2	H_2SO_4
G21	1.5 MMBtu/hr – 19 units	8,760 hrs/yr	0.94	0.94	12.23	10.29	0.07	0.67	0.24	0.00	0.00
G22	350 hp	500 hrs/yr	0.02	0.02	0.56	0.07	0.01	0.01	0.01	0.00	0.00
		Total	**8.01**	**7.21**	**12.79**	**10.36**	**0.08**	**0.68**	**0.25**	**1.45**	**0.01**

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.
[2]28.80 lbs/day for $MgCl_2$ transfer; 7.70 lbs/day for other activities, and 0.14 lbs/cell anode change = 36.64 lbs/day

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit the operation of the emergency generator (EU: G22) for testing and maintenance purposes to 100 hours per year. The permittee may operate the emergency generator up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The emergency generator(s) cannot be used for peak shavings or demand response. *[40 CFR Part 60, Subpart IIII]*

4. Control Requirements

a. The permittee shall operate and maintain the emergency chlorine scrubber (EU: G01) to a control efficiency of at least 99.0 percent. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. The permittee shall operate the cooling tower with drift eliminators that have a manufacturer's maximum drift rate of 0.001 percent (EU: G20). *[AQR 12.5.2.6]*

c. The permittee shall limit the TDS content of the cooling tower circulation water to 7,500 ppm (EU: G20). *[AQR 12.5.2.6]*

d. The permittee shall operate and maintain the cooling tower in accordance with the manufacturer's specifications (EU: G20). *[AQR 12.5.2.6]*

e. The permittee shall operate and maintain the emergency generator set in accordance with the manufacturer's specifications (EU: G22). *[AQR 12.5.2.6]*

5. Monitoring

a. The permittee shall conduct weekly visual emissions checks and observations on the process while operating. *[AQR 12.5.2.6(d)]*

b. The permittee shall conduct a visual emissions check of the diesel-fired emergency generator (EU: G22) whenever it is operated for testing and maintenance, but at least quarterly. *[AQR 12.5.2.6]*

c. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

d. If a plume appears to exceed the opacity standard, the permittee shall *[AQR 12.5.2.6(d)]*:

i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

ii. If practical, have a certified visible emissions observer take an observation of the plume using U.S. Environmental Protection Agency (EPA) Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

e. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

f. The permittee shall monitor the TDS of the cooling tower recirculation water monthly using a conductivity meter, or another device approved in advance by the Control Officer (EU: G20). *[AQR 12.5.2.6(d)]*

g. The permittee shall operate the diesel-fired emergency generator (EU: G22) with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented. *[AQR 12.5.2.6(d)]*

6. Testing

a. No performance testing requirements have been identified for this process. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at minimum, the following information *[AQR 12.5.2.6(d)]*:

i. Dates and times when visible emissions checks and observations are made, and the corrective steps taken to bring opacity into compliance;

ii. Monthly TDS test results of the cooling towers;

iii. Hours of operation of the chlorine scrubber in actual emergency situations (EU: G01);

iv. Monthly throughput of sulfuric acid;

v. Monthly calculation of emissions for each emission unit, with consecutive 12-month totals for each pollutant; and

vi. A record of all inspections, maintenance, and repairs as specified in this document.

b. The permittee shall maintain on-site and report the following information semiannually: *[AQR 12.5.2.6(d)]*

i. Hours of operation of the emergency generator (EU: G22);

ii. Date and duration of operation of the diesel-fired emergency generator for testing, maintenance, and nonemergency use (EU: G22);

iii. Date and duration of operation of the emergency generator for emergency use, including documentation justifying use during the emergency (EU: G22); and

iv. Monthly, consecutive 12-month total emissions for each pollutant for the magnesium recovery process.

c. The permittee shall include for all inspections, logs, visible emission checks, and tests required under monitoring, recordkeeping, and reporting at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). *[AQR 12.5.2.6(d)]*

d. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

e. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

F. BLENDING PROCESS

1. Emission Units

a. The blending process consists of the emission units listed in Table III-F-1.

Table III-F-1: List of Emission Units

EU	Description	Rating	Make	Model #	Serial #
H01	Sponge Blending System #1 – South Wall Unit 12		Ducon	Type SDW, size 10	
H02	Sponge Blending System #2 - South Wall Unit 12		Ducon	Type SDW, size 10	
H03	Sponge Blending System #3 – South Wall Unit 12		Ducon	Type SDW, size 10	
H04	Sponge Blending System #4 – South Wall Unit 12		Ducon	Type SDW, size 10	
H05	Splitter System – North Wall Unit 12		Ducon	Type SDW, size 10	
H06	Blending Sampler Dust Collector – North Wall Unit 12		Ducon	Type SDW, size 10	
H07	Sponge Blending System #7 – East Wall Unit 12		Murphy Rogers	MRC 985-D	1541

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-F-2 below in any 12-month consecutive period. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-F-2: Emission Unit PTE (tons per year) – Blending Process

EU	Conditions	Control	PM_{10}	$PM_{2.5}$
H01		99.0 %	0.30	0.27
H02		99.0 %	0.30	0.27
H03		99.0 %	0.30	0.27
H04		99.0 %	0.30	0.27
H05		99.0 %	0.30	0.27
H06		99.0 %	0.30	0.27
H07		99.0 %	0.30	0.27
		Total	**2.10**	**1.89**

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit the throughput of each dry cyclone dust collector of the sponge blending system to 15,000 pounds per hour (EUs: H01–H07). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

4. Control Requirements

a. The permittee shall operate dry cyclone dust collectors at all times the sponge blending operation is performed (EUs: H01–H07). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. The permittee shall operate and maintain all cyclone dust collectors on the sponge blending operation (EUs: H01–H07) such that they have a particulate control efficiency of at least 99.0 percent. *[NSR ATC/OP 19, Modification 13 (05/08/2006) & NSR ATC/OP 19, Modification 14 (06/22/2009)]*

c. The permittee shall maintain all cyclone dust collectors per the manufacturer's specifications (EUs: H01–H07). *[NSR ATC/OP 19, Modification 13 (05/08/2006) & NSR ATC/OP 19, Modification 14 (06/22/2009)]*

5. Monitoring

a. The permittee shall conduct weekly visual emissions checks and observations on the process while operating. *[AQR 12.5.2.6(d)]*

b. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

c. If a plume appears to exceed the opacity standard, the permittee shall: *[AQR 12.5.2.6(d)]*

   i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

ii. If practical, have a certified visible emissions observer take an observation of the plume using EPA Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

d. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

e. The permittee shall comply with monitoring the amount of sponge processed (EUs: H01–H07). *[AQR 12.5.2.6(d)]*

6. Testing

a. No performance testing requirements have been identified for this process. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at minimum, the following information: *[AQR 12.5.2.6(d)]*

i. Dates and times when visible emissions checks and observations were made, and the corrective steps taken to bring opacity into compliance;

ii. Records of all inspections, maintenance, and repairs as specified in this document;

iii. Hours of operation of the dry cyclones (EUs: H01–H07);

iv. Daily amount of sponge processed in the sponge blending system;

v. Duration of upset/breakdown or malfunction, if any, and a report on remedial actions taken during each incidence; and

vi. Monthly calculation for each emission unit of emissions, with consecutive 12-month totals for each pollutant.

b. The permittee shall maintain on-site and report the following information semiannually *[AQR 12.5.2.6(d)]*:

i. Monthly, consecutive 12-month total amount of sponge processed; and

ii. Monthly, consecutive 12-month total emissions for each pollutant for the blending process.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

G. MELT / RECLAIM PROCESS

1. Emission Units

a. The melt/reclaim process consists of the emission units listed in Table III-G-1.

Table III-G-1: List of Emission Units

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
I01	Blending Press & Weld – Press Cyclone (north)		Ducon		
I02	Blending Press & Weld – Weld-Splitter Cyclone (south)		Ducon		
J01	Primary Melt Vacuum Pump and SEV System – 10 pumps		Tuthill		
J02	Secondary Melt Vacuum Pump and SEV System – 5 pumps		SIHI Dry		
J03	Maintenance Stand: Furnace Leak Station – 1 pump		Tuthill		
J04	Crucible Leak Pump Down Station – 2 pumps		Kinney		
J05	Double Melt Weld Chamber - 1 pump		Kinney		
J06	Primary Weld Chamber – 2 pumps		Bush		
K01	Ingot Preparation - Torch Cutting		American Air Filter	Model C, size 1296	AT-60005
L02	Scrap & Reclaim - Crusher/Torch Cutting		Wheelabrator Frye	A130289	
L03	Scrap & Reclaim - Crusher/Torch Cutting		Wheelabrator Frye		
	Unit 8 Alloy Cyclone		Ducon		

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-G-2 below in any 12-month consecutive period. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-G-2: Emission Unit PTE (tons per year) – Melt/Reclaim Process

EU	Conditions[1]	Control	PM_{10}	$PM_{2.5}$
I01	10 lb/shift	99.0 %	0.88	0.79
I02	10 lb/shift	99.0 %	0.88	0.79
J01	10 stations	0.0 %	0.69	0.63
J02	10 stations	0.0 %	0.52	0.47
J03	1 pump	0.0 %	0.09	0.09
J04	2 pumps	0.0 %	0.22	0.18
J05	1 pump	0.0 %	0.09	0.09
J06	2 pumps	0.0 %	0.22	0.18

EU	Conditions[1]	Control	PM_{10}	$PM_{2.5}$
K01		99.0 %	0.02	0.02
L02		99.0 %	0.60	0.54
L03	24 batches/day	99.0 %	0.04	0.04
L04	100,000 lbs/alloy	0.0 %	0.02	0.02
		Total	**4.26**	**3.83**

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit torch cutting to 4 ingots per hour (EU: K01). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. The permittee shall limit scrap and reclaim wheelabrator operation to 14,000 lbs. of scrap per hour (EU: L02). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

4. Control Requirements

a. The permittee shall operate the baghouse at all the times the ingot torch cutting operation is performed (EU: K01). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. The permittee shall maintain and operate the baghouse on the ingot cutting operation (EU: K01) such that it has a particulate control efficiency of at least 99.0 percent. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

c. The permittee shall maintain an effective seal around the baghouses, and the pressure drop across the baghouse within the range of 1.5 to 5.5 inches of water column shall be maintained within the limits specified by the manufacturer (EU: K01). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

d. The permittee shall operate the baghouse at all the times the scrap and reclaim operation is performed (EU: L02). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

e. The permittee shall maintain and operate the baghouse on the wheelabrator (EU: L02) such that it has a particulate control efficiency of at least 99.0 percent. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

f. The permittee shall maintain an effective seal around the baghouses, and the pressure drop across the baghouse within the range of 0.5 to 2.5 inches of water column shall be maintained within the limits specified by the manufacturer (EU: L02). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

g. The permittee shall operate the baghouse at all the times the scrap and reclaim torch cutting operation is performed (EU: L03). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

h. The permittee shall maintain and operate the baghouse on the torch cutting reclaim operation (EU: L03) such that it has a particulate control efficiency of at least 99.0 percent. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

i. The permittee shall maintain an effective seal around the baghouses, and the pressure drop across the baghouse within the range of 6.5 to 8.0 inches of water column shall be maintained within the limits specified by the manufacturer (EU: L03). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

5. Monitoring

a. The permittee shall conduct weekly visual emissions checks and observations on the process while operating. *[AQR 12.5.2.6(d)]*

b. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

c. If a plume appears to exceed the opacity standard, the permittee shall *[AQR 12.5.2.6(d)]*:

i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

ii. If practical, have a certified visible emissions observer take an observation of the plume using U.S. Environmental Protection Agency (EPA) Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

d. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

e. The permittee shall conduct daily monitoring of the pressure drop across each baghouse cell with the installation and operation of a pressure differential (Magnehelic) gauge as provided in this permit. *[AQR 12.5.2.6(d)]*

f. The permittee shall visually inspect the baghouse interior at least monthly for air leaks. Defective baghouse compartments shall be sealed off and repairs completed within 5 working days of the discovery of the malfunction. Should the malfunction cause the baghouse to be ineffective in consecutive particulate emissions, the processing of material shall cease until such repairs to the baghouse are completed. *[AQR 12.5.2.6(d)]*

g. The permittee shall have a standard operating procedure manual for baghouses. The procedures specified in the preventive maintenance documents shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance. *[AQR 12.5.2.6(d)]*

h. The permittee shall conduct weekly visual observations of baghouse and/or stack discharges to verify that visible emissions are not present in excess of allowable opacity limits. If they are, the permittee shall cease operations producing the emissions until the problem is corrected. *[AQR 12.5.2.6(d)]*

i. The permittee shall monitor the number of ingots per hour through the torch cutting operation (EU: K01). *[AQR 12.5.2.6(d)]*

j. The permittee shall monitor the scrap per hour (EU: L02). *[AQR 12.5.2.6(d)]*

6. Testing

a. No performance testing requirements have been identified for this process. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain on-site the following information: *[AQR 12.5.2.6(d)]*

i. Dates and times when visible emissions checks and observations were made, and the corrective steps taken to bring opacity into compliance;

ii. Weekly visual inspection of baghouses for fugitive emissions (EUs: K01, L02 and L03); and

iii. Monthly inspection and maintenance log of baghouses (EUs: K01, L02 and L03).

b. The permittee shall maintain on-site and report the following information semiannually: *[AQR 12.5.2.6(d)]*

i. Monthly, consecutive 12-month total of ingot from torch cutting (EU: K01);

ii. Monthly, consecutive 12-month total of scrap processed (EU: L02); and

iii. Monthly, consecutive 12-month total emissions for each pollutant for the melt/reclaim process.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

H. MISCELLANEOUS PROCESSES

1. Emission Units

a. The miscellaneous process consists of the emission units listed in Table III-H-1.

Table III-H-1: List of Emission Units

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
M01	Unit 7 Wheelabrator Baghouse		US Filter	A14-2515, 2516	
M04	Outdoor Abrasive Blast Area		Donaldson Torit		
M07	Above Ground Gasoline Storage Tank, J-2	500 gallon			
M13	Paint Shop				
M14	Cooling Tower (west of WCF)	4,500 gpm	BAC- Pritchard	4392-2	

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
M17	Emergency Engine; DOM: May 2011	51 hp	Generac	A2400T-GEN	TN4T00136
	Emergency Generator	15 kW		SD015	2110482
M18	Material Management Building for Maintenance Activities				
M19	Maintenance Activities (Portable Scrubber)	10,000 cfm	Club-2550		
M20	Maintenance Activities (Portable Scrubber)	10,000 cfm	Club-3000		

b. The units or activities listed in Table III-H-2 are present at this source, but are insignificant units or activities pursuant to AQR Section 12.5.2.5.

Table III-H-2: List of Insignificant Units and Activities

Description	Make	Model #	Serial #
Diesel Aboveground Storage Tank – 500 gallons (EU: M08)			
Laboratory Fume Hoods, S-11 East and West (EU: M09)			
Laboratory Fume Hoods, K-52 East and South (EU: M10)			

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-H-3 below in any 12-month consecutive period, except for emission units intended only for use in emergencies. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-H-3: Emission Unit PTE (tons per year) – Miscellaneous Processes

EU	Conditions[1]	Control	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
M01		99.0 %	0.21	0.19	0.00	0.00	0.00	0.00	0.00
M04		99.0 %	3.49	3.14	0.00	0.00	0.00	0.00	0.00
M07		0.0 %	0.00	0.00	0.00	0.00	0.00	0.50	0.00
M13	1,750 gallons	0.0 %	0.00	0.00	0.00	0.00	0.00	5.26	2.48
M14	8760 hrs/yr	0.0 %	0.35	0.21	0.00	0.00	0.00	0.00	0.00
M17	500 hrs/yr	0.0 %	0.01	0.01	0.09	0.03	0.01	0.03	0.01
M18			0.00	0.00	0.00	0.00	0.00	0.00	0.00
M19	10,000 cfm	0.0 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M20	10,000 cfm	0.0 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Total	**4.06**	**3.55**	**0.09**	**0.03**	**0.01**	**5.79**	**2.49**

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit usage of the abrasives in the shot blast area to 30 tons in any consecutive 12 months (EU: M01). *[AQR 12.5.2.6]*

b. The permittee shall limit usage of the abrasives in the shot blast area to 500 tons in any consecutive 12 months (EU: M04). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

c. The permittee shall limit throughput of the gasoline storage tank up to 10,000 gallons in any consecutive 12 months (EU: M07). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

d. The permittee shall not allow the consumption of VOC- or HAP-containing paint strippers, paints, basecoats, primers, reducers, thinners, solvents, etc., to exceed either 175 gallons per month or 1,750 gallons per year, based on a weighted average VOC content of 6.0 pounds per gallon and a HAP content that is based on 47 percent of the VOC content. The permittee may alter the VOC/HAP content and usage in gallons such that the allowable emissions are not exceeded (EU: M13). *[AQR 12.5.2.6]*

e. The permittee shall limit the operation of the diesel emergency generators for testing and maintenance purposes to 100 hours per year (EU: M17). The permittee may operate the emergency generator up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The 50 hours per year for nonemergency situations cannot be used for peak shavings or to generate income for the facility. *[40 CFR Part 60.4211(e)]*

f. The permittee shall perform maintenance activities in the building (EU: M18). *[Citation 5(d) Order executed on May 17, 2017]*

g. The permittee shall utilize portable scrubbers for all maintenance activities that cannot be conducted in the building (EUs: M19 and M20). *[Citation 5(f) Order executed on May 17, 2017]*

h. The permittee shall utilize portable scrubbers (EUs: M19 and M20) inside the building (EU: M18). *[Order executed on May 17, 2017]*

4. Control Requirements

a. The permittee shall operate the Unit 7 Wheelabrator baghouse at all the times the shot blasting operations are performed (EU: M01). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. The permittee shall operate and maintain the baghouse on the shot blasting operations (EU: M01) such that it has a particulate control efficiency of at least 99.0 percent. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

c. The permittee shall maintain an effective seal around the Wheelabrator baghouse and the pressure drop across baghouse within the range of 3.0 to 5.0 inches of water column (EU: M01). *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

d. The permittee shall operate the Outdoor Abrasive Blast Area dust collector at all the times the blasting operations are performed (EU: M04). *[AQR 12.5.2.6]*

e. The permittee shall operate and maintain the dust collector on the outdoor blasting operations (EU: M04) in accordance with the manufacturer's specifications. *[AQR 12.5.2.6]*

f. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time (EU: M07). Measures to be taken include, but are not limited to, the following: *[40 CFR Part 63.11116]*

   i. Minimize gasoline spills;

   ii. Clean up spills as expeditiously as practicable;

   iii. Cover all open gasoline containers and all gasoline storage tank fill pipes with a gasketed seal when not in use;

   iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators; and

   v. Provide records documenting gasoline throughput within 24 hours of a Control Officer request.

g. The permittee shall apply all coatings using a high volume, low pressure gun. (EU: M13). *[AQR 12.5.2.6]*

h. The permittee shall not allow open containers to be used for storage or disposal of VOCs- or HAP-containing cloth or paper (excluding masking tape) used for surface preparation and cleanup. *[AQR 12.5.2.6]*

i. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

j. The permittee shall ensure all containers with VOC- or HAP-containing-products remain securely closed, except during product transfer. Containers shall be inspected regularly for leakage, and the contents of any leaking container shall be immediately transferred to an appropriately labeled container that has been specifically designed for storage of the compound. *[AQR 12.5.2.6]*

k. The permittee shall operate the cooling tower (EU: M14) with drift eliminators that have a manufacturer's maximum drift rate of 0.001 percent. *[AQR 12.5.2.6]*

l. The permittee shall limit the TDS concentration in the cooling tower process water (EU: M14) so the TDS concentration shall not exceed 7,500 ppm. *[AQR 12.5.2.6]*

m. The permittee shall operate the generator with turbocharger and direct injection (EU: W04). *[NSR ATC/OP 19, Modification 16 05/08/2006)]*

n. The permittee shall operate and maintain the generator (EU: M17) in accordance with the manufacturer's specifications. [*NSR ATC/OP 19, Modification 16 05/08/2006)]*

o. The permittee shall perform maintenance activities for process equipment that will be washed in the building (EU: M18), such as square ducts, round ducts, spiral heat exchangers (when the unit is being replaced), pipes, small tanks, and heat exchangers (when removed from the process). *[AQR 12.5.2.6]*

p. The permittee shall perform maintenance activities for process equipment that cannot be washed in the building (EU: M18), such as make tanks, larger tanks, secondary condensers, chillers, and other equipment that cannot be removed from the process area due to weight, size, location restriction, and accessibility. *[AQR 12.5.2.6]*

5. Monitoring

a. The permittee shall conduct weekly visual emissions checks and observations on the process while operating. *[AQR 12.5.2.6(d)]*

b. The permittee shall conduct a visual emissions check of the diesel-fired emergency generator (EU: M17) whenever it is operated for testing and maintenance, but at least quarterly. *[AQR 12.5.2.6]*

c. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

d. If a plume appears to exceed the opacity standard, the permittee shall: *[AQR 12.5.2.6(d)]*

i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

ii. If practical, have a certified visible emissions observer take an observation of the plume using EPA Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

e. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

f. The permittee shall conduct daily monitoring of the pressure drop across each baghouse cell with the installation and operation of a pressure differential (magnehelic) gauge, as provided in this permit. *[AQR 12.5.2.6(d)]*

g. The permittee shall visually inspect the baghouse interior at least monthly for air leaks. Defective baghouse compartments shall be sealed off and repairs completed within five working days of the discovery of the malfunction. If the malfunction causes the baghouse to be ineffective in consecutive particulate emissions, the processing of material shall cease until repairs to the baghouse are completed. *[AQR 12.5.2.6(d)]*

h. The permittee shall have a standard operating manual manual for baghouses. The procedures specified in the manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance. *[AQR 12.5.2.6(d)]*

i. The permittee shall conduct weekly visual observations of baghouse and/or stack discharges to verify that visible emissions do not exceed allowable opacity limits. If they do, the permittee shall cease the operation(s) producing the emissions until the problem is corrected. *[AQR 12.5.2.6(d)]*

j. The permittee shall monitor the usage of the abrasive in the shot blast area (EUs: M01 and M04). *[AQR 12.5.2.6(d)]*

k. The permittee shall monitor the gasoline throughput (EU: M07). *[AQR 12.5.2.6(d)]*

l. The permittee shall monitor the TDS in the cooling tower circulating water at least monthly. The permittee shall use the conductivity measurements for TDS monitoring or an equivalent method approved in advance by the Control Officer. *[AQR 12.5.2.6(d)]*

m. The permittee shall maintain records demonstrating the VOC and HAP content of each VOC- or HAP-containing compound. The records shall be kept on-site and made available to the Control Officer upon request (EU: M13). *[AQR 12.5.2.6(d)]*

n. The permittee shall monitor the consumption (in gallons) of each VOC-containing compound (e.g., paint strippers, paints, basecoats, primers, reducers, thinners, solvents, etc.) (EU: M13). *[AQR 12.5.2.6(d)]*

o. The permittee shall operate the diesel-fired emergency generator (EU: M17) with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented. *[AQR 12.5.2.6(d)]*

p. The permittee shall monitor the operations of the portable scrubbers. *[AQR 12.5.2.6(d)]*

6. Testing

a. No performance testing requirements have been identified for this process. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at a minimum, the following information *[AQR 12.5.2.6(d)]*:

i. Dates and times when visible emissions checks and observations were made, and the corrective steps taken to bring opacity into compliance;

ii. Weekly visual inspection of baghouses for fugitive emissions (EU: M01);

iii. Monthly inspection and maintenance log of baghouses (EU: M01);

iv. Records of all inspections, maintenance, and repairs specified in this document;

v. Safety data sheets or records demonstrating the VOC and HAP content for each compound; and

vi. Monthly calculation for each emission unit of emissions, with consecutive 12-month totals for each pollutant.

b. The permittee shall maintain on-site and report the following information semiannually: *[AQR 12.5.2.6(d)]*

i. Monthly, consecutive 12-month total usage of the abrasive in the shot blast (EU: M01);

ii. Monthly, consecutive 12-month total usage of the abrasive in the shot blast (EU: M04);

iii. Monthly, consecutive 12-month total of gasoline throughput (EU: M07);

iv. Monthly, consecutive 12-month total consumption of VOC-containing compounds (e.g., paint strippers, paints, basecoats, primers, reducers, thinners, solvents, etc.) (EU: M13);

v. Date and duration of operation of the diesel-fired emergency generator for testing, maintenance, and nonemergency use (EU: M17);

vi. Date and duration of operation of the emergency generator for emergency use, including documentation justifying use during the emergency (EU: M17); and

vii. Monthly, 12-month consecutive total emissions for each pollutant for the miscellaneous process.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

I. WASTEWATER CONSERVATION FACILITY

1. Emission Units

a. The wastewater conservation facility consists of the emission units listed in Table III-I-1.

Table III-I-1: List of Emission Units

EU	Description	Rated Capacity	Manufacturer	Model #	Serial #
W01	Wastewater Neutralization	130 gal/min			
W02	WCF Chlorine Scrubber	1,000 ft^3/min	Viron International	VCB-1112-BD-FRP-9-CW45-SHP-TEFC-PREM-460-3-60	12764
W03	Wastewater Clarification/ Filtration	130 gal/min			
W04	Emergency Engine; DOM: May 2008	35 hp	John Deere	4024TF281	PE4024R005122
	Emergency Generator	26 kW	Generac	9781650200	2098264
W05	Emergency Engine; DOM: February 2016	217 hp	Caterpillar	469-6214	E5500302
	Emergency Generator	161.6 kW		D125-8	L7C00217

b. The units or activities listed in Table III-I-2 are present at this source, but are insignificant units or activities pursuant to AQR 12.5.2.5.

Table III-I-2: List of Insignificant Units and Activities

Description	Make	Model #	Serial #
Caustic Storage Tank (TK-04A) – 21,879 gallons	Amber Steel		
Caustic Storage Tank (TK-04B) – 21,879 gallons	Amber Steel		
Dilute Caustic Storage Tank (TK-05A) – 11,640 gallons	ID Industries		
Dilute Caustic Storage Tank (TK-05B) – 11,640 gallons	ID Industries		

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-I-3 on a 12-month consecutive basis, except for emission units intended only for use in emergencies. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

Table III-I-3: Emission Unit PTE (tons per year) – Wastewater Conservation Facility

EU	Conditions[1]	Control	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	Cl_2
W01	8,760 hrs/yr	99.95 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
W02	8,760 hrs/yr	99.95 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
W03	8,760 hrs/yr	99.95 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
W04	500 hrs/yr	0.0 %	0.01	0.01	0.09	0.04	0.01	0.02	0.01	0.00
W05	500 hrs/yr	0.0 %	0.01	0.01	0.33	0.07	0.01	0.14	0.01	0.00
		Total	**0.02**	**0.02**	**0.42**	**0.11**	**0.02**	**0.16**	**0.02**	**0.30**

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit the operation of the diesel emergency generators for testing and maintenance purposes to 100 hours per year (EUs: W04 and W05). The permittee may operate the emergency generator up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The 50 hours per year for nonemergency situations cannot be used for peak shavings or to generate income for the facility. *[40 CFR Part 60.4211(e)]*

4. Control Requirements

a. The permittee shall not release or direct the wastewater from the neutralization process to the clarifier until the effluent has been stabilized so that the concentration of Cl_2 is below 0.50 ppm. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

b. The permittee shall operate the chlorine scrubber (EU: W02) so that wastewater stabilization is established and Cl_2 concentrations are reduced to a level below 0.50 ppm. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

c. The permittee shall operate the chlorine scrubber (EU: W02) according to manufacturer specifications in order to maintain an operating efficiency at no less than 99.95% for the removal of Cl_2. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

d. The permittee shall demonstrate compliance with the Cl_2 emission limit from the WCF by submitting the chlorine scrubber's manufacturer certification of 99.95% efficiency to the Control Officer and monitoring the inlet Cl_2 concentrations of the chlorine scrubber (EU: W02) during upset/breakdown or malfunction conditions. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

e. The permittee shall operate and maintain the generator (EUs: W04 and W05) in accordance with manufacturer specifications.

5. Monitoring

a. The permittee shall conduct a visual emissions check of each diesel-fired emergency generator (EUs: W04 and W05) whenever it is operated for testing and maintenance, but at least quarterly. *[AQR 12.5.2.6]*

b. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

c. If a plume appears to exceed the opacity standard, the permittee shall *[AQR 12.5.2.6(d)]*:

i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

ii. If practical, have a certified visible emissions observer take an observation of the plume using EPA Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

d. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

e. The permittee shall place sensor(s) in the wastewater neutralization plant to continually detect concentrations of Cl_2 that result from the processing of wastewater. At a Cl_2 concentration of 0.50 ppm, the chlorine scrubber (EU: W02) shall be automatically activated and receive all Cl_2 emissions that have the potential to escape to the atmosphere. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

f. The permittee shall install a monitoring device at the inlet of the chlorine scrubber (EU: W02) to record Cl_2 concentrations entering the scrubber during its operation. *[NSR ATC/OP 19, Modification 13 (05/08/2006)]*

g. The permittee shall operate each emergency generator (EUs: W04 and W05) with a non-resettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented. *[AQR 12.5.2.6(d)]*

6. Testing

a. No performance testing requirements have been identified for this process. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at minimum, the following information: *[AQR 12.5.2.6(d)]*

i. Dates and times when visible emissions checks and observations were made, and the corrective steps taken to bring opacity into compliance;

ii. Records of all inspections, maintenance, and repairs specified in this document;

iii. Cl_2 concentrations at the inlet and outlet of the chlorine scrubber during upset/breakdown or malfunction conditions in the wastewater neutralization process (EU: W02);

iv. Duration of upset/breakdown or malfunction, if any, and a report on remedial actions taken during each incidence (EU: W02); and

v. Monthly calculation for each emission unit of emissions, with consecutive 12-month totals for each pollutant.

b. The permittee shall maintain on-site and report the following information semiannually *[AQR 12.5.2.6(d)]*:

i. Hours of operation of the diesel generator (EUs: W04 and W05);

ii. Date and duration of operation of the diesel-fired emergency generator for testing, maintenance, and nonemergency use (EUs: W04 and W05);

iii. Date and duration of operation of the emergency generator for emergency use, including documentation justifying its use during the emergency (EUs: W04 and W05); and

iv. Monthly, 12-month consecutive total emissions for each pollutant for the wastewater conservation facility.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

J. GROUNDWATER REMEDIATION SYSTEM

1. Emission Units

a. The groundwater remediation system consists of the emission units listed in Table III-J-1.

Table III-J-1: List of Emission Units

EU	Description	Rating	Make	Model #	Serial #
GW01	Groundwater Remediation System, 8-tray air stripping unit	100 gpm, 850 cfm flow rate	QED	EZ-16	
GW02	Groundwater Remediation System, 8-tray air stripping unit	100 gpm, 850 cfm flow rate	QED	EZ-16	

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-J-2 on a 12-month consecutive basis. *[NSR ATC/OP 19, Modification 16 (11/03/2009) and Minor Revision Application 8/19/2021]*

Table III-J-2: Emission Unit PTE (tons per year) – Groundwater Remediation System

EU	Condition	VOC	HAP
GW01	8,760 hrs/yr	0.35	0.22
GW02			

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall not operate the groundwater remediation systems (EUs: GW01 and GW02) at the same time. *[Minor Revision Application 8/19/2021]*

b. The permittee shall limit the operation of both groundwater remediation systems (EUs: GW01 and GW02) to a combined 8,760 hours in any consecutive 12 months. *[Minor Revision Application 8/19/2021]*

4. Control Requirements

a. Emission controls are not required for this emission unit. *[NSR ATC/OP 19, Modification 16 (11/03/2009)]*

5. Monitoring

a. The permittee shall install a nonresettable hour meter on the air stripper unit (EUs: GW01 and GW02). The permittee will use the data from the meter, along with flow and analytical results, to calculate quarterly emissions. *[NSR ATC/OP 19, Modification 16 (11/03/2009)]*

b. The permittee shall monitor hours of operation of each the groundwater remediation system (EUs: GW01 and GW02). *[AQR 12.5.2.6(d)]*

c. The permittee shall monitor the air stripper emissions (EUs: GW01 and GW02) by conducting analyses using EPA-approved standard methods. A protocol of the test methodologies and of the quality assurance and quality control shall be located at the testing laboratory and be available at the request of the Control Officer. Test methods shall conform with the methods listed in Title 40 of the CFRs. *[NSR ATC/OP 19, Modification 16 (11/03/2009)]*

d. The permittee shall analyze the inlet water stream (influent) for the constituents listed in Table III-J-3. *[NSR ATC/OP 19, Modification 16 (11/03/2009)]*

Table III-J-3: List of Monitored VOCs and HAPs

Chemical Name	CAS Number	Class	Analytical Group
1,4-Dioxane	123911	HAP	SVOA
Phenol	108952	HAP	SVOA
Total Organic Carbon (TOC)	—	VOC	TOC
Diesel-Range Organics	—	VOC	TPH
Gasoline-Range Organics	—	VOC	TPH
Chloroform	67663	HAP	VOA
1,1,2,2,-Tetrachloroethene	79345	HAP	VOA

e. The permittee shall analyze the inlet water stream (influent) of the groundwater remediation systems quarterly (EUs: GW01 and GW02). A more frequent analytical schedule may be requested by the Control Officer. *[NSR ATC/OP 19, Modification 16 (11/03/2009)]*

f. The permittee shall use the results of these analyses to determine compliance with the emissions limitations in Table III-J-2. *[NSR ATC/OP 19, Modification 16 (11/03/2009)]*

6. Testing

a. No performance testing requirements have been identified for this process. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at a minimum, the following information: *[AQR 12.5.2.6(d)]*

i. Records of hours of operation of each groundwater remediation system (EUs: GW01 and GW02);

ii. Records of groundwater remediation system water streams test results for 1,4–dioxane, phenol, total organic carbon, diesel-range organics, gasoline-range organics, chloroform, and tetrachloroethylene;

iii. Monthly calculation for each emission unit of emissions, with consecutive 12-month totals for each pollutant; and

iv. A record of all inspections, maintenance, and repairs as specified in this document.

b. The permittee shall maintain on-site and report the following information semiannually: *[AQR 12.5.2.6(d)]*

i. Monthly, consecutive 12-month total emissions for each pollutant for the groundwater remediation system.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

K. INDUSTRIAL LANDFILL

1. Emission Units

a. The industrial landfill consists of the emission units listed in Table III-K-1.

Table III-K-1: List of Emission Units

EU	Description	Condition
LF01	Landfill Maintenance	3.2 acres
LF02	Haul Road – Paved	0.25 miles RT

2. Emission Limitations

a. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table III-K-2 on a 12-month consecutive basis. *[NSR ATC/OP 19, Modification 16 (11/03/2009)]*

Table III-J-2: Emission Unit PTE (tons per year) – Industrial Landfill

EU	Conditions	PM_{10}	$PM_{2.5}$
LF01	3.2 acres	0.97	0.15
LF02	150 VMT	0.01	0.01
	Total	**0.98**	**0.16**

b. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than six consecutive minutes. *[AQR 26.1]*

3. Production Limitations

a. The permittee shall limit the total landfill area to 3.2 acres at any given time (EU: LF01). *[AQR 12.5.2.6]*

b. The permittee shall limit the VMT to 150 miles per any consecutive 12 months (EU: LF02). *[AQR 12.5.2.6]*

4. Control Requirements

a. The permittee shall treat the haul roads to control visible emissions within the allowable opacity limits. Treatment shall consist of watering, chemical or organic dust suppression, gravelling, or equivalent control measures (EU: LF02). *[AQR 12.5.2.6]*

b. The permittee shall sweep and/or rinse as necessary all paved roads accessing or located at the landfill to remove all observable deposits (EU: LF02). *[AQR 12.5.2.6]*

5. Monitoring

a. The permittee shall conduct daily visual emissions checks and observations on the process while operating. *[AQR 12.5.2.6(d)]*

b. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name. *[AQR 12.5.2.6(d)]*

c. If a plume appears to exceed the opacity standard, the permittee shall *[AQR 12.5.2.6(d)]*:

i. Take immediate action to correct the causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or

ii. If practical, have a certified visible emissions observer take an observation of the plume using EPA Test Method 9 and record the results, then take immediate action to correct the causes of fugitive emissions exceeding allowable opacity limits in accordance with 40 CFR Part 60, Appendix A-4, "Test Methods 6 through 10B: Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources."

d. Visible emissions checks do not require a certified observer unless the visible emissions appear to exceed the allowable opacity limit, and to last more than 30 seconds, but an EPA Method 9 observation establishes that the emissions do not in fact exceed the standard. *[AQR 12.5.2.6(d)]*

e. The permittee shall monitor the number of VMT on-site by vehicles entering and leaving (EU: LF02). *[AQR 12.5.2.6(d)]*

6. Testing

a. No performance testing requirements have been identified for this process. *[AQR 12.5.2.6(d)]*

7. Recordkeeping

a. The permittee shall maintain records on-site that include, at minimum, the following information. *[AQR 12.5.2.6(d)]*

i. Dates and times when visible emissions checks and observations were made, and the corrective steps taken to bring opacity into compliance; and

ii. Monthly calculation for each emission unit of emissions, with consecutive 12-month totals for PM_{10}.

b. The permittee shall maintain on-site and report the following information semiannually: *[AQR 12.5.2.6(d)]*

i. Monthly consecutive 12-month VMT traveled (EU: LF02); and

ii. Monthly consecutive 12-month total emissions for each pollutant for the landfill.

c. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. *[AQR 12.5.2.6(d)]*

d. The permittee shall maintain all records for a period of at least five years from their creation. *[AQR 12.5.2.6(d)]*

L. FUGITIVE DUST

1. Emission Limitations

a. The permittee shall not cause or allow fugitive dust from trackout, which includes accumulation of mud or dirt on curbs, gutters, sidewalks, or paved surfaces, or from the handling, transport, or storage of any material in a manner that allows visible emissions of particulate matter to: *[AQR 94.14(a) & AQR 94.14(e)]*

i. Exceed 20% opacity using the Time Averaged Method (AQR 94.15.2) or the Intermittent Emissions Method (AQR 94.15.3);

ii. Exceed 50% opacity using the Instantaneous Method (AQR 94.15.4);

iii. Extend more than 100 feet; or

iv. Cross a property line.

b. The permittee shall not allow fugitive dust emissions from unpaved parking lots or storage areas of more than 5,000 square feet to exceed: *[AQR 92.4(a)]*

i. 20% opacity based on the Opacity Test Method (AQR 92.6.1); or

ii. 50% opacity based on the Instantaneous Method (AQR 92.6.2).

c. The permittee shall not allow a fugitive dust plume from an unpaved parking lot or storage area of more than 5,000 square feet to cross a property line. *[AQR 92.4(b)]*

2. Control Requirements

d. The permittee shall not allow mud or dirt to accumulate on a paved surface where trackout extends greater than 50 feet in cumulative length or accumulates to a depth greater than 0.25 inches. *[AQR 94.14(d)]*

b. The permittee shall immediately clean any trackout, including trackout less than 50 feet in length or 0.25 inches in depth, and maintain the surface to eliminate emissions of fugitive dust by removing all accumulations of mud or dirt on curbs, gutters, sidewalks, or paved surfaces that cause visible emissions in excess of the emission limits and standards in this permit. *[AQR 94.14(e)]*

c. Except as otherwise required in this section, all trackout shall be cleaned up by the end of the workday or evening shift, regardless of length or depth. *[AQR 94.14(f)]*

d. The permittee shall not use blower devices or dry rotary brushes to remove deposited mud, dirt, or rock from a paved surface. Rotary brushes may be used when sufficient water is applied to limit visible emissions consistent with the emissions limits in this permit. *[AQR 94.14(a)(1)-(3), (b) and (c)]*

e. For stockpiles over eight feet high, the permittee shall: *[AQR 94.14(g)]*

i. Locate the stockpile more than 100 yards from occupied buildings unless approved in advance by the Control Officer.

ii. Blade a road to the top of the stockpile to allow water truck access, or use another means to provide equally effective dust control at the top of the stockpile.

f. The permittee shall implement one or more of the following to maintain fugitive dust control on all disturbed soils to the extent necessary to pass the Drop Ball Test described in AQR 94.15.5: *[AQR 94.12(b)]*

i. Maintain in a sufficiently damp condition to prevent loose particles of soil from becoming dislodged;

ii. Crust over by application of water;

iii. Completely cover with clean gravel;

iv. Treat with a dust suppressant; or

v. Treat using another method approved in advance by the Control Officer.

g. The permittee shall not allow unpaved parking lots or storage areas of more than 5,000 square feet to exceed the following, as determined by Section 92.6.3, except in areas on which clean gravel has been applied. The permittee shall demonstrate compliance as required by the Control Officer. *[AQR 92.4(a)]*

i. 0.33 oz/ft^2 silt loading; or

ii. 6% silt content.

h. The permittee shall control fugitive dust emissions from unpaved parking lots and storage areas of more than 5,000 feet by: *[AQR 92.3.4]*

i. Paving, as defined in AQR 0;

ii. Applying alternate asphalt paving, as defined in AQR 92.2;

iii. Uniformly applying and maintaining clean gravel to a depth of two inches; or

iv. Applying and maintaining an alternative control measure with prior written approval from the Control Officer.

i. Control measures outlined in this permit, and other measures needed for maintaining dust control, shall be implemented 24 hours a day, 7 days a week. *[AQR 94.13(b)]*

IV. REPORTING

1. All report submissions shall be addressed to the attention of the Control Officer. *[AQR 12.5.2.6(d), AQR 14.3, AQR 21.4, & AQR 22.4]*
2. All reports shall contain a certification of truth, accuracy, and completeness by the responsible official. *[AQR 12.5.2.6(d) & AQR 12.5.2.6(l)]*
3. The permittee shall submit semiannual reports to the Control Officer. *[AQR 12.5.2.6(d)]*
4. The following requirements apply to semiannual reports: *[AQR 12.5.2.6(d)]*

a. The report shall include each item listed in Sections III-A-7(b), III-B-7(b), III-C-7(b), III-D-7(b), III-E-7(b), III-F-7(b), III-G-7(b), III-H-7(b), III-I-7(b), III-J-7(b), and III-K-7(b).

b. The report shall include summaries of any permit deviations, their probable cause, and corrective or preventative actions taken.

c. The report shall be submitted to DAQ within 30 calendar days of the end of the reporting period.

5. Regardless of the date of issuance of this permit, the schedule for the submittal of reports to the Control Officer shall be as outlined in Table IV-1. *[AQR 12.5.2.6(d)]*

Table IV-1: Reporting Schedule

Required Report	Applicable Period	Due Date
Semiannual report for 1st half of the year	January, February, March, April, May, June	July 30 each year[1]
Semiannual report for 2nd half of year; any additional annual records required	July, August, September, October, November, December	January 30 each year[1]
Annual Compliance Certification	Calendar year	January 30 each year[1]
Annual Emissions Inventory Report	Calendar year	March 31 each year[1]
Annual Emissions Statement[2]	Calendar year	March 31 each year[1]
Notification of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 24 hours of the permittee learns of the event
Report of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 72 hours of the notification
Deviation Report without Excess Emissions	As required	Along with semiannual reports[1]
Excess Emissions that Pose a Potential Imminent and Substantial Danger	As required	Within 12 hours of the permittee learns of the event
Performance Testing Protocol	As required	No less than 45 days, but no more than 90 days, before the anticipated test date[1]
Performance Testing	As required	Within 60 days of the end of the test[1]
RATA	As required	Within 60 days of end of test[1]

[1]If this date falls on a Saturday, Sunday, or federal or state holiday, submittals are due on the next regularly scheduled business day.
[2] Required only for stationary sources that emit 25 tons or more of nitrogen oxide (NO_X) and/or emit 25 tons or more of volatile organic compounds (VOC) during a calendar year.

6. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and the requirements of applicable federal regulations. *[AQR 4.1 and AQR 12.5.2.6(d)]*

V. MITIGATION

1. The source has no federal offset requirements. *[AQR 59.1.1]*

VI. OTHER REQUIREMENTS

1. Should this stationary source, as defined in 40 CFR Part 68.3, become subject to the accidental release prevention regulations in Part 68, then the permittee shall submit a Risk Management Plan by the date specified in Section 68.10. The permittee shall certify compliance with the requirements of Part 68 as part of the annual compliance certification required by 40 CFR Part 70 or 71. *[AQR 12.5.2.6(d)]*

2. The permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a chlorofluorocarbon or hydrochlorofluorocarbon compound as a working fluid, unless such fluid has been approved for sale in such use by the EPA Administrator. The permittee shall keep records of all paperwork relevant to the applicable requirements of 40 CFR Part 82 on-site. *[40 CFR 82]*

3. Pursuant to AQR 40 and 43, the permittee shall not cause, suffer, or allow the source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

4. The permittee must comply with all of the control requirements listed in this permit. If there is an inconsistency between standards or requirements, the most stringent standard or requirement shall apply. *[AQR 4]*

ATTACHMENT 1

APPLICABLE REGULATIONS

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE

1. NRS, Chapter 445B.
2. Applicable AQR sections:

Citation	Title
AQR Section 0	Definitions
AQR Section 4	Control Officer
AQR Section 5	Interference with Control Officer
AQR Section 8	Persons Liable for Penalties – Punishment: Defense
AQR Section 9	Civil Penalties
AQR Section 10	Compliance Schedule
AQR Section 11	Ambient DAQ Standards
AQR Section 12.4	Authority to Construct Application and Permit Requirements for Part 70 Sources
AQR Section 12.5	Part 70 Operating Permit Requirements
AQR Section 13	National Emission Standards for Hazardous Pollutants
AQR Section 14	New Source Performance Standards
AQR Section 18	Permit and Technical Service Fees
AQR Section 24	Sampling and Testing - Records and Reports
AQR Section 25	Upset/Breakdown, Malfunctions
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 40	Prohibition of Nuisance Conditions
AQR Section 41.1.1.1	Fugitive Dust
AQR Section 41.1.2	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 60	Evaporation and Leakage
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention
AQR Section 92	Fugitive Dust
AQR Section 94	Permitting and Dust Control for Construction Activities

3. Clean Air Act Amendments of 1990 (authority: 42 U.S.C. § 7401, et seq.)
4. Applicable 40 CFR sections:

Citation	Title
40 CFR Part 52.21	Prevention of Significant Deterioration
40 CFR Part 52.1470	State implementation plan rules
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions
40 CFR Part 60	Appendix A, Method 9 or equivalent (opacity)
40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units
40 CFR Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Citation	Title
40 CFR Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
40 CFR Part 63, Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities
40 CFR Part 68	Risk Management Program
40 CFR Part 70	Federally Mandated Operating Permits
40 CFR Part 82	Protection of Stratospheric Ozone