

CLARK COUNTY
DEPARTMENT OF AIR QUALITY AND
ENVIRONMENTAL MANAGEMENT
500 South Grand Central Parkway, Box 555210, Las Vegas, Nevada 89155
Part 70 Operating Permit
Source: 395
Issued in accordance with the
Clark County Air Quality Regulations (AQR)

ISSUED TO: REPUBLIC SERVICES, REPUBLIC DUMPCO, INC.

SOURCE LOCATION:

Republic Dumpco, Inc.
Apex Waste Management Center
East of Interstate 15/US 93 Junction
Apex Valley, Nevada
T18S, R64E, Sections 18 and 19
T18S, R63E, section 24
Hydrographic Basins Number: 216/217

COMPANY ADDRESS:

770 East Sahara Avenue
Las Vegas, Nevada 89104

NATURE OF BUSINESS:

SIC Code 4953: Refuse System
SIC Code 1442: Construction Sand and Gravel
NAICS: 562212: Solid Waste Landfill
NAICS: 212321: Construction Sand and Gravel Mining

RESPONSIBLE OFFICIAL:

Name: Todd Whittle
Title: Area Environmental Manager
Phone: (702) 599-5537
Fax Number: (702) 599-5585

Permit Issuance Date: December 31, 2010 Expiration Date: December 30, 2015

**ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY AND ENVIRONMENTAL
MANAGEMENT**



Tina Gingras
Assistant Director, Clark County DAQEM

EXECUTIVE SUMMARY

Republic Services – Republic Dumpco, Inc. (Republic) is under SIC Codes 4953 – Refuse System and 1442 – Construction Sand and Gravel and NAICS Codes 562212 – Solid Waste Landfill and 212321 – Construction Sand and Gravel Mining. Republic is located in Apex, East of interstate 15/US 93 Junction. The legal description of the source’s location is as follows: portions of T18S, R64E, Section 18 and 19 and T18S, R63E, Section 24 in Apex Valley, Clark County, Apex, Nevada. Republic is situated in Hydrographic Areas 216 and 217 (Apex Valley: Garnet Valley and North Hidden Valley). Apex Valley is designated as nonattainment area for 8-hour ozone (regulated through NO_x and VOC) and is PSD for PM₁₀, CO, SO₂.

Republic is a major source for PM₁₀, NO_x, SO_x, HAP, H₂S and minor source for CO and VOC. Republic serves as the primary municipal solid waste landfill for Clark County since October of 1993. The types of material the landfill accepts includes municipal solid waste, petroleum contaminated soil, asbestos, construction debris, sewage sludge, septic waste, medical waste and dead animal waste. Republic has a gas capture and collection system with an internal combustion enclosed combustor (Callidus Flare) capable of burning at 29.40 MMBtu/hr or 1,000 cubic foot per minute (EU: W07). The landfill gas capture and collection system is designed to capture approximately 75 percent of the landfill gas generated, leaving approximately 25 percent as fugitive emissions. This Part 70 Operating Permit is issued based on the Title V Renewal application submitted on January 30, 2007.

The following table summarizes the source PTE for each regulated air pollutant for all emission units addressed by this Part 70 Operating Permit:

Source-Wide PTE (tons per year)¹

	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP	TCS (H ₂ S)
Non-fugitive PTE	266.89	12.27	112.03	59.72	177.18	9.93	3.32	0.00
Landfill Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	32.89	32.16	147.27
Major Source Thresholds	100	100	100	100	100	100	10/25²	1³

¹Not a source-wide emission limit; values are used for determining the source status.

²Ten (10) tons for any individual HAP or 25 tons for combination of all HAPs.

³H₂S major threshold per AQR 12.2.19 (amended 10/07/04).

Pursuant to AQR 12.5.2.7 (AQR 19.4.2), all terms and conditions in Sections I through IV, and the attachments in this operating permit are federally enforceable unless explicitly denoted otherwise.

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I. ACRONYMS

Table I-1: Acronyms

Acronym	Term
AQR	Clark County Air Quality Regulations
A/L	Air to Liquid Ratio
ATC	Authority to Construct
bhp	Brake Horse Power
°C	Degrees Celsius
CAAA	Clean Air Act, as amended
CARB	California Air Resources Board
CEMS	Continuous Emissions Monitoring System
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
DAQEM	Clark County Department of Air Quality & Environmental Management
EPA	United States Environmental Protection Agency
EF	Emission Factor
EO	Executive Order
EU	Emission Unit
EVR	Enhanced Vapor Recovery
°F	Degrees Fahrenheit
GDO	Gasoline Dispensing Operation
GPM	Gallons per Minute
HAP	Hazardous Air Pollutant
HP	Horse Power
H ₂ S	Hydrogen Sulfide
kW	kilowatt
LANDGem	Landfill Gas Emissions Model
LFG	Landfill Gas
m ³ /yr	Cubic meter per year
Mg/yr	Megagram per year
MMBtu	Millions of British Thermal Units
MMscf	Million Standard Cubic Foot
M/N	Model Number
MSWL	Municipal Solid Waste Landfill
NAICS	North American Industry Classification System
NMOC	Non-Methane Organic Compounds
NO _x	Nitrogen Oxides
NRS	Nevada Revised Statutes
OP	Operating Permit
PM _{2.5}	Particulate Matter less than 2.5 microns
PM ₁₀	Particulate Matter less than 10 microns
ppm	Parts per Million
ppmvd	Parts per Million, Volumetric Dry
PTE	Potential to Emit
QA/AC	Quality Assurance/Quality Control
RMP	Risk Management Plan
SCC	Source Classification Codes
scf	Standard Cubic Feet
scfm	Standard Cubic Feet per minute
SIC	Standard Industrial Classification
SIP	State Implementation Plan
S/N	Serial Number
SO _x	Sulfur Oxides

Acronym	Term
SSM	Startup, Shutdown, and Malfunction
TCS	Toxic Chemical Substance
tpy	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emission Evaluation
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound

II. GENERAL CONDITIONS

A. General Requirements

1. The Permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act (Act) and is grounds for enforcement action; for permit termination, revocation and reissuance or modification; or for denial of a permit renewal application. [AQR 12.5.2.6(g)(1)/AQR 19.4.1.6.a]
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 not be affected and shall remain valid. [AQR 12.5.2.6(f)/AQR 19.4.1.5]
3. The Permittee shall pay all permit fees pursuant to AQR Section 18. Failure to pay Part 70 permit fees may result in citations or suspensions or revocation of the Part 70 Permit. [AQR 12.5.2.6(h)/AQR 19.4.1.7]
4. The permit does not convey any property rights of any sort, or any exclusive privilege. [AQR 12.5.2.6(g)(4)/AQR 19.4.1.6.d]
5. The Permittee shall not hinder, obstruct, delay, resist, interfere with, or attempt to interfere with the Control Officer, or any individual to whom authority has been duly delegated for the performance of any duty by the AQR. [AQR 5.1]
6. The Permittee owning, operating, or in control of any equipment or property who shall cause, permit, or participate in any violation of the AQR shall be individually and collectively liable to any penalty or punishment imposed by and under the AQR. [AQR 8.1]
7. Any Permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. [AQR 12.5.2.2/AQR 19.3.2]
8. The Permittee may request confidential treatment of any records in accordance with AQR. Emission data, standards or limitations [all terms as defined in 40 CFR 2.301(a) or other information as specified in 40 CFR 2.301 shall not be considered eligible for confidential treatment. The Administrator and the Control Officer shall each retain the authority to determine whether information is eligible for confidential treatment on a case-by-case basis. [AQR 12.5.2.6(g)(5)/AQR 19.3.1.3 and 40 CFR 2.301]

B. Modification, Revision, Renewal Requirements

1. The Permittee shall not make a modification, as defined in AQR Section 0, to the existing source prior to receiving an ATC from the Control Officer. [AQR 12.4]
2. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for the permit modification, 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)/AQR 19.4.1.6.c]
3. Any request for a permit revision must comply with the requirements of AQR Section 12.5. [AQR 12.5.2]
4. The Permittee shall not build, erect, install or use any article, machine, equipment or process, the use of which conceals an emission, which would otherwise constitute a violation of an applicable requirement. [AQR 80.1 and 40 CFR 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)/AQR 19.4.1.11]*
6. For purposes of permit renewal, the Permittee shall submit a timely and complete application. A timely application is one submitted between six (6) months and 18 months prior to the date of permit expiration. *[AQR 12.5.2.1/AQR 19.3.1.1.c]*
7. Permit expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with AQR in which case the permit shall not expire and all terms and conditions of the permit shall remain in effect until the renewal permit has been issued or denied. *[AQR 12.5.2.11/AQR 19.5.3.2]*

C. Reporting/Notifications/Providing Information Requirements

1. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the Control Officer along with a claim of confidentiality. *[AQR 12.5.2.6(g)(5)/AQR 19.4.1.6]*
2. The Permittee shall allow the Control Officer or an authorized representative, upon presentation of credentials:
 - a. entry upon the Permittee's premises where the source is located, or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - b. access to inspect and copy, at reasonable times, any records that must be kept under conditions of the permit;
 - c. access to inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. access to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. *[AQR 4.3, 12.5.2.8(b)/AQR 19.4.3.2]*
3. 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 which are or may be discharged by such source, and type or nature of control equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from 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 4.4]*

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 to maintain compliance with the terms and conditions of this permit. *[AQR 12.5.2.6(g)(2)/AQR 19.4.1.6.b]*

2. Any person who violates any provision of this Operating Permit, 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 DAQEM is guilty of a civil offense and shall pay civil penalty levied by the Air Pollution Control Hearing Board/Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. *[AQR 9.1]*
3. Any person aggrieved by an order issued pursuant to AQR 9.1 is entitled to review as provided in Chapter 233B of NRS. *[AQR 9.12]*
4. The Permittee of any stationary source or emission unit that fails to demonstrate compliance with the emissions standards or limitations shall submit a compliance plan to the Control Officer pursuant to AQR Section 10. *[AQR 10.1]*
5. The Permittee shall comply with the requirements of 40 CFR 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. *[AQR 13.1.7]*
6. Requirements for compliance certification with terms and conditions contained in the Operating Permit, including emission limitations, standards, or work practices, are as follows:
 - a. the Permittee shall submit compliance certifications annually in writing to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) and the Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each year will be due 30 days after the Operating Permit issuance anniversary date;
 - b. compliance shall be determined in accordance with the requirements detailed in AQR, record of periodic monitoring, or any credible evidence; and
 - c. the compliance certification shall include:
 - i. identification of each term or condition of the permit that is the basis of the certification;
 - ii. the Permittee's compliance status and whether compliance was continuous or intermittent;
 - iii. methods used in determining the compliance status of the source currently and over the reporting period consistent with AQR; and
 - iv. other specific information required by the Control Officer to determine the compliance status of the source. *[AQR 12.5.2.8(e)(3)/AQR 19.4.3.5]*
7. The Permittee shall submit annual emissions inventory reports based on the following: *[AQR 18.6.1]*
 - a. The annual emissions inventory shall be submitted by DAQEM no later than March 31 after the reporting year.
 - b. The report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.

8. The Permittee shall report to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) any upset, breakdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit. The report shall be in two parts as specified below: [AQR 25.6.1 and AQR 12.1.4.1(d)(3)(B)]
 - a. within twenty-four (24) hours of the time the Permittee first learns of the excess emissions, the report shall be communicated by phone (702) 455-5942, fax (702) 383-9994, or email.
 - b. within seventy-two (72) hours of the notification required by paragraph (a) above, the detailed written report containing the information required by AQR Section 25.6.3 shall be submitted.
9. The Permittee shall report to the Control Officer deviations that do not result in excess emission, with the semi-annual reports. Such reports shall include the probable cause of deviations and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B)/AQR 19.4.1.3]
10. The Permittee shall include a certification of truth, accuracy, and completeness by a responsible official when submitting any application form, report, or compliance certification pursuant to this Operating Permit. This certification and any other certification required shall state, "Based on the information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." This statement shall be followed by the signature and printed name of the responsible official certifying compliance and the date of signature. [AQR 12.5.2.6(l)/AQR 19.3.4]

E. Performance Testing Requirements

1. Upon request of the Control Officer, the Permittee shall test or have tests performed to determine the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the DAQEM regulations 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 4.5]
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 4.6]
3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) not less than 45 nor more than 90 days prior to the anticipated date of the performance test. [AQR 12.5.2.8]
4. The Permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA. [40 CFR 60.8(b)]
5. The Permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. [AQR 12.5.2.8]
6. The Control Officer may require additional or more frequent performance testing. [AQR 4.5]

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

A. Emission Units

- The stationary source covered by this Part 70 OP consists of the emission units and associated appurtenances summarized in Tables III-A-1 and III-A-2. [NSR ATC/OP Modification 4, Revision 1, Section IV-A (12/03/08), NSR ATC Modification 5, Revision 0, Section IV-A-1 (12/31/10), NSR ATC Modification 6, Revision 0, Section IV-A, (02/27/09), Modification 8, Revision 1, Section IV-A, (05/13/10)]

Table III-A-1: List of Emission Units for the Aggregate Plant

EU	Description	Rating (tph)	Make	Model #	Serial #
Primary Plant					
A01	Mining/Excavation	4,825			
A02	Grizzly 1	1,650			
A04	Grizzly to Primary Crusher 1	600	Crush Boss	HSI 400	6356511
	Primary Crusher 1				
	Primary Crusher 1 to Belt 1				
A07	2 Belt System (Drop from Grizzly and Belt 1 to Belt 2)	1,650			
A08	Grizzly 2	600			
A09	Grizzly 2 to Primary Crusher 2	600	Crush Boss	HSI 400	6356536
	Primary Crusher 2				
	Primary Crusher 2 to Belt 3				
A12	3 Belt System (Grizzly to Belt 2, Belt 3 to Belt 4 and Belt 4 to Belt 5)	1,650			
	2 Belt Transfers (Belt 2 to Belt 5 and Belt 5 to Stacker S1)	2,500			
A16	Stacker S1	2,500			
A17	7 Belt System (Belt Feeders 6, 7 and 8 to Belt 9, Belt 9 to Belt 10, Belt 10 to Belt 11, Belt 11 to Belt 12 and Belt 12 to Stacker S2)	2,500			
A22	Stacker S2	2,500			
Gabion Plant					
A23	Belt 12 to Belt 13 (From Primary Plant)	415			
A25	Belt 13 to Gabion Screen SC1	415	TelSmith	6x16 TD	275M101C1607
	Gabion Screen SC1				
	Gabion Screen SC1 to Belt 14				
	Gabion Screen SC1 to Belt 15				
	Gabion Screen SC1 to Belt 16				
A27	Belt 14	210			
A28	Stacker S3	210			
A30	Belt 15	105			
A31	Stacker S4	105			
A33	Belt 16	105			

EU	Description	Rating (tph)	Make	Model #	Serial #
A34	Stacker S5	105			
Secondary Plant					
A35	Belt Feeder 17 to Belt 18	1,525			
A37	Belt 18 to Triple Deck Screens SC2 and SC3	900	JCI	6x20 TD	SAD1554A
	Triple Deck Screen SC2				
	Screen SC2 to Belt 19				
	Screen SC2 to Belt 21				
	Screen SC2 to Belt 26				
A38	Screen SC2 to Belt 31	900	JCI	6x20 TD	96H02B32
	Triple Deck Screen SC3				
	Screen SC3 to Belt 21				
A40	Screen SC3 to Belt 32	900			
	2 Belt System (Belt 19 to Belt 20 and Belt 20 to Stacker S6)				
A42	Belt 32 to Belt 20	900			
	Stacker S6	900			
A44	2 Belt System (Belt 21 to Belt 22 and Belt 22 to Stacker S7)	300			
	Additional Transfer from SC3 (via Belt 21) Included				
A46	Stacker S7	300			
A47	2 Belt Feeders to Belt 25	500			
A49	2 Belt System (Belt 26 to Belt 27 and Belt 27 to Stacker S8)	500			
A51	Stacker S8	500			
A52	2 Belt Feeders to Belt 30	500			
A58	Belt 31 to HSI 1 Crusher	600	Crush Boss	HSI 400	101400
	HSI 1 Crusher				
	HSI 1 Crusher to Belt 33				
A60	Recirculation Belt 33				
Sand Plant					
A62	Belt 25 to VSI Crusher 1	200	CEMCO	70	AVE0195170
	Belt 35 to VSI Crusher 1				
	VSI Crusher 1				
	VSI Crusher 1 to Belt 34				
A65	Belt 34 to Screen SC4	300	JCI	6x20 TD	96H05D32
	Screen SC4				
	Screen SC4 to Belt 35				
	Screen SC4 to Belt 39				
A69	3 Belt System (Belt 36 to Belt 37, Belt 37 to Belt 38 and Belt 38 to Stacker S9)	210			
A72	Stacker S9	210			

EU	Description	Rating (tph)	Make	Model #	Serial #
A74	3 Belt System (Belt 39 to Belt 40, Belt 40 to Belt 41 and Belt 41 to Stacker S10)	200			
A77	Stacker S10	200			
Cone Plant					
A79	Belt 30 to Cone Crusher 1	300	Nordberg	HP 300	30310657
	Cone Crusher 1				
	Cone Crusher 1 to Belt 42				
A82	Belt 42 to Screens SC5 and SC6	450	JCI	6x20 TD	99H03K32
	Triple Deck Screen SC5				
	Screen SC5 to Belt 43				
	Screen SC5 to Belt 49				
A83	Triple Deck Screen SC6	450	JCI	7x20 TD	43J0491
	Screen SC6 to Belt 45				
A85	2 Belt System (Belt 43 to Belt 44 and Belt 44 to Stacker S11)	210			
A87	Stacker S11	210			
A89	4 Belt System (Belt 45 to Belt 46, Belt 46 to Belt 47, Belt 47 to Belt 48 and Belt 48 to Stacker S12)	300			
A93	Stacker S12	300			
A95	2 Belt System (Belt 49 to Belt 50 and Belt 50 to Belt 30)	250			
A98	4 Belt System (Belt 51 to Belt 52, Belt 52 to Belt 53, Belt 53 to Belt 54 and Belt 54 to Stacker S13)	450			
	Belt 53 to Belt 55	150			
A102	Stacker S13	450			
A104a	Belt 55 to VSI Crusher 2	150	CEMCO	80	ADEV0399180V
	VSI Crusher 2				
	VSI Crusher 2 to Belt 39				
Wash Plant					
A106	Belt Feeder 56 to Belt 57	1,200			
A108	Belt 57 to Screens SC7 and SC8	605	JCI	6x20 TD	96H01B32
	Triple Deck Screen SC7				
	Screen SC7 to Sand Screw 1				
	Screen SC7 to Belt 61				
A109	Triple Deck Screen SC8	605	Cedar Rapids	TSS 6203-32	54400
	Screen SC8 to Sand Screw 2				
	Screen SC8 to Belt 60				
	Screen SC8 to Belt 61				
A112	Sand Screw 1 to Belt 58	70			
A113	Sand Screw 2 to Belt 58	70			

EU	Description	Rating (tph)	Make	Model #	Serial #
A114	2 Belt System (Belt 58 to Belt 59 and Belt 59 to Stacker S14)	140			
A116	Stacker S14	140			
A118	Belt 60 to Stacker S15	550			
A119	Stacker S15	550			
A122	2 Belt System (Belt 61 to Belt 62 and Belt 62 to Storage Hopper)	415			
A124	Storage Hopper to Belt 63	415			
A125	Belt 63 to Rock Truck	415			
A126	Rock Truck Dumping	415			
Landfill Cover Plant					
A127	Blasting	24,200 ft ² /hr			
A128	Grizzly 3	1,800			
A130	Grizzly 3 to Primary Crusher 2	400	Crush Boss	400	400504
	Primary Crusher 2				
	Primary Crusher 2 to Belt 64				
A133	Grizzly 3 to Belt 64	1,400			
	2 Belt System (Belt 64 to Belt 65 and Belt 65 to Belt 66)	1,800			
A136	Belt 66 to Screen SC9	1,800	Cedar Rapids	8x20 TD	46531
	Belt 75 to Screen SC9				
	Screen SC9				
	Screen SC9 to Belt 67				
	Screen SC9 to Belt 70				
	Screen SC9 to Belt 72				
Screen SC9 to Belt 74					
A138	3 Belt System (Belt 67 to Belt 68, Belt 68 to Belt 69 and Belt 69 to Stacker S16)	1,000			
A141	Stacker S16	1,000			
A143	2 Belt System (Belt 70 to Belt 71 and Belt 71 to Stacker S17)	500			
A145	Stacker S17	500			
A147	2 Belt System (Belt 72 to Belt 73 and Belt 73 to Stacker S18)	300			
A149	Stacker S18	300			
A151	Belt 74 to Cone Crusher 2	200	Svedala	S-3000	03JA08802
	Cone Crusher 2				
	Cone Crusher 2 to Belt 75				

Table III-A-2: List of Emission Units for the MSWL

EU	Description	Rating	Make	Model #	Serial #
H01	Haul Road, Paved (2.0 miles Round Trip)	1,237,592 VMT/yr			
H02	Haul Road, Unpaved	321,920 VMT/yr			

EU	Description	Rating	Make	Model #	Serial #
W01	Soil Treatment Bulk Material Unloading	20,000 tpy			
	Stationary Grizzly Deck				
	Material Transfer to Soil Treatment Cell				
	Soil Transfer from Soil Treatment Cell				
W02	Soil Treatment Waste Processing	20,000 tpy			
W03	Industrial Waste Cover Material Dumping	435,000 tpy			
	Transfer to Face Cover Material				
W04	Industrial Waste VOC from Landfill Gas	200,000 tpy			
W05	Cover Material Handling for Waste Placement	1,090,951 tpy			
W06	1-2,500 aboveground gasoline storage tank, Regular	61,771 gal/yr			
W07	Enclosed Combustion LFG Flare	29.4 MMBtu/hr	Callidus	G8844	
W08	Waste Placement	13,008,600 tpy			
W09	Stockpiles: Active/Inactive (cover material)	123.11 acres			
W100	Fugitive Emissions from Landfill (based on 2006 Estimates)	N/A			
W200	Diesel Generator: DOM 1994	2,593 hp	CAT	3516	5SJ00130
W201	Diesel Generator: DOM 1996	2,593 hp	CAT	3516	7RN00440
W203	Diesel Generator: DOM 1998	1,072 hp	CAT	3412CDITA	2WJ02059
W204	Diesel Generator: DOM 1998	1,108 hp	CAT	3412CDITA	2WJ01887
W205	Diesel Tipper Engine: DOM Pre-2006	150 hp	CAT	3208	35601941
W206	Diesel Generator: DOM Pre-2006	188 bhp	Cummins	6CT8.3-G2	F99093314
W207	Diesel Generator: DOM Pre-2006	188 bhp	Cummins	6CT8.3-G2	F99093315
W208	Diesel Generator: DOM Pre-2006	77 bhp	Isuzu	QD145 "6BD1"	3647886
W209	Diesel Generator: DOM Pre-2006	315 hp	CAT	3406	90U16559
W210	Diesel Tipper Engine: DOM 2007	173 bhp	CAT	3056E	35603786
W211	Diesel Tipper Engine: DOM 2007	173 bhp	CAT	3056E	35603782
W212	Diesel Tipper Engine: DOM 2007	115 hp	John Deere	4045H	PE4045H63 8663

B. Emission Limitations and Standards

1. Emission Limits

Aggregate Plant

- a. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table III-B-1 in any consecutive 12-month period. *[NSR ATC/OP Modification 4, Revision 1, Section IV-B (12/03/08), NSR ATC Modification 5, Revision 0, Section IV-B-2 (12/31/10), NSR ATC Modification 6, Revision 0, Section IV-B, (02/27/09), Modification 8, Revision 1, Section IV-A-2, (05/13/10)]*

Table III-B-1: PTE Aggregate Plant (tons per year)

EU	PM ₁₀	EU	PM ₁₀	EU	PM ₁₀
A01	0.32	A46	0.03	A106	0.12
A02	0.03	A47	0.07	A108	0.01
A04	0.04	A49	0.09	A109	0.01
A07	0.18	A51	0.05	A112	0.01
A08	0.02	A52	0.09	A113	0.01
A09	0.04	A58	0.02	A114	0.01
A12	0.46	A60	0.05	A116	0.01
A16	0.16	A62	0.02	A118	0.01
A17	1.13	A65	0.59	A119	0.01
A22	0.16	A69	0.03	A122	0.01
A23	0.02	A72	0.01	A124	0.01
A25	0.37	A74	0.07	A125	0.01
A27	0.01	A77	0.02	A126	0.01
A28	0.01	A79	0.02	A128	0.02
A30	0.01	A82	0.74	A130	0.01
A31	0.01	A83	0.74	A133	0.19
A33	0.01	A85	0.03	A136	1.11
A34	0.01	A87	0.01	A138	0.14
A35	0.14	A89	0.14	A141	0.05
A37	1.22	A93	0.03	A143	0.05
A38	1.22	A95	0.05	A145	0.02
A40	0.21	A98	0.15	A147	0.02
A42	0.07	A102	0.03	A149	0.01
A44	0.10	A104a	0.01	A151	0.01

- b. The Permittee shall not discharge into the atmosphere, from any emission unit at the aggregate plant, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes, unless otherwise required by this permit. *[AQR 26.1.1]*
- c. The Permittee shall not discharge into the atmosphere fugitive dust emissions from screens, conveyors and transfer points that commenced construction, modification or reconstruction after April 22, 2008 (EUs: A02, A07, A08, A12, A16, A17, A22, A23, A25, A27, A28, A30, A31, A33, A34, A35, A37, A38, A40, A42, A44, A46, A47, A49, A51, A52, A60, A65, A69, A72, A74, A77, A82, A83, A85, A87, A89, A93, A95, A98, A102, A106, A128, A133, A136, A138, A141, A143, A145, A147 and A149) in excess of an average of 7.0 percent opacity for a period of more than 6 consecutive minutes. *[40 CFR 60, Subpart 000]*
- d. The Permittee shall not discharge into the atmosphere fugitive dust emissions from crushers that commenced construction, modification or reconstruction after April 22, 2008 (EUs: A04, A09, A58, A62, A79, A104a, A130 and A151) in excess of an average of 12.0 percent opacity for a period of more than 6 consecutive minutes. *[40 CFR 60, Subpart 000]*
- e. The Permittee shall not discharge into the atmosphere visible emissions from emission units specified in this document as either an enclosed or wet process (EUs: A108, A109, A112, A113, A114, A116, A118, A119, A122, A124, A125 and A126). *[NSR ATC Modification 5, Revision 0, Condition IV-A-2(e) (12/31/10)]*
- f. The Permittee shall not allow actual stack emissions from each baghouse for emission units that commenced construction, modification or reconstruction after April 22, 2008 to exceed the concentration rates listed in Table III-B-2. *[40 CFR 60, Subpart 000]*

- g. The Permittee shall not allow actual emissions from each emission unit to exceed the mass emission rates listed in Table III-B-2. *[NSR ATC Modification 5, Revision 0, Section IV-A-2(g) (12/31/10)]*

Table III-B-2: Emission Rates and Concentrations Aggregate Plant

EU	PM ₁₀ Mass Emission Rate (pounds per hour)	PM Stack Emission Concentrations	
		(g/dscm)	(gr/dscf)
A04	0.01	0.032	0.014
A09	0.01	0.032	0.014
A58	0.01	0.032	0.014
A62	0.01	0.032	0.014
A79	0.01	0.032	0.014
A104a	0.01	0.032	0.014
A130	0.01	0.032	0.014
A151	0.01	0.032	0.014

Blasting

- h. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table III-B-3 in any consecutive 12-month period. *[NSR ATC/OP Modification 4, Revision 1, Section IV-B (12/03/08), NSR ATC Modification 5, Revision 0, Section IV-A (12/31/10), NSR ATC Modification 6, Revision 0, Section IV-B, (02/27/09), Modification 8, Revision 1, Section IV-A-2, (05/13/10)]*

Table III-B-3: PTE Blasting (tons per year)

EU	PM ₁₀	NO _x	CO
A127	8.31	5.50	29.11

MSWL

- i. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table III-B-4 in any consecutive 12-month period. *[NSR ATC/OP Modification 4, Revision 1, Section IV-B (12/03/08), NSR ATC Modification 5, Revision 0, Section IV-A (12/31/10), NSR ATC Modification 6, Revision 0, Section IV-B, (02/27/09), Modification 8, Revision 1, Section IV-A-2, (05/13/10)]*

Table III-B-4: PTE MSWL (tons per year)

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
H01	93.69	0.00	0.00	0.00	0.00	0.00	0.00
H02	121.85	0.00	0.00	0.00	0.00	0.00	0.00
W01	0.26	0.00	0.00	0.00	0.00	0.00	0.00
W02	0.00	0.00	0.00	0.00	0.00	2.78	0.00
W03	2.18	0.00	0.00	0.00	0.00	0.00	0.00
W04	0.00	0.00	0.00	0.00	0.00	0.19	0.00
W05	3.97	0.00	0.00	0.00	0.00	0.00	0.00
W06	0.00	0.00	0.00	0.00	0.00	0.40	0.10
W07	8.37	8.37	4.89	0.27	169.98	0.26	0.09
W08	1.04	0.00	0.00	0.00	0.00	0.00	0.00
W09	3.58	0.00	0.00	0.00	0.00	0.00	0.00
W200	0.02	0.02	2.77	0.25	0.02	0.08	0.03
W201	1.38	1.38	37.54	20.90	1.11	3.54	1.53
W203	0.50	0.50	15.23	2.44	0.33	0.40	0.45
W204	0.29	0.29	9.93	1.67	0.22	0.26	0.30

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
W205	0.55	0.55	7.83	1.69	1.09	0.67	0.13
W206	0.20	0.20	5.47	0.45	0.14	0.14	0.20
W207	0.20	0.20	5.47	0.45	0.14	0.14	0.20
W208	0.01	0.01	0.07	0.02	0.01	0.01	0.01
W209	0.02	0.02	0.30	0.06	0.01	0.03	0.01
W210	0.26	0.26	6.35	0.79	1.55	0.35	0.17
W211	0.26	0.26	6.35	0.79	1.55	0.35	0.17
W212	0.21	0.21	4.33	0.83	1.03	0.33	0.02

- j. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table III-B-5 in any consecutive 12-month period. *[NSR ATC/OP Modification 4, Revision 1, Section IV-B (11/04/08), NSR ATC Modification 5, Revision 0, Section IV-B (12/31/10), NSR ATC Modification 6, Revision 0, Section IV-B, (02/27/09), Modification 8, Revision 1, Section IV-A-2, (05/13/10)]*

Table III-B-5: PTE MSWL Fugitive Emissions (tons per year)

EU	Description	Pollutant	Maximum Emissions
			tons/year
W100	Fugitive Emissions from Landfill (based on 2006 Estimates)	VOC (including HAP)	32.89
		HAP (Not including H ₂ S)	32.16
		TCS (only H ₂ S)	147.27

- k. The Permittee shall not allow actual emissions from each emission unit to exceed the emission rates and concentrations listed in Tables III-B-6. *[NSR ATC Modification 4, Revision 1, Section IV-A(10) (11/04/08)]*

Table III-B-6: Emission Rates MSWL (pounds per hour)

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
W07	1.91	1.91	1.12	0.06	38.81	0.06	0.01

- l. The Permittee shall maintain paved haul roads so not to discharge into the atmosphere fugitive dust emissions in excess of an average opacity of 20 percent for a period of more than 6 consecutive minutes (EU: H01). *[AQR 26.1.1]*
- m. The Permittee shall maintain the unpaved haul roads so not to discharge into the atmosphere fugitive dust emissions in excess of an average opacity of 20 percent for a period of more than 6 consecutive minutes (EU: H02). *[AQR 26.1.1]*
- n. The Permittee shall not discharge into the atmosphere, from any emission unit at the MSWL, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes, unless otherwise required by this permit. *[AQR 26.1.1]*
- o. The Permittee shall calculate fugitive emissions from the landfill on the assumption that 25 percent of the LFG generated is not captured by the capture and collection system. Recalculation of the fugitive emissions from the landfill shall be carried out, based on the actual amount of refuse in place; every five years (estimated fugitive emissions were calculated in 2006). *[AQR 12.5.2.6(a)/AQR 19.4.1.1]*
- p. As of May 3, 2013, the Permittee shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart ZZZZ at all times (EUs: W200, W201, W203 through W209). *[40 CFR 63.6605(a)]*

- q. The Permittee shall not discharge into the atmosphere emissions from the diesel engines (EUs: W210, W211 and W212) in excess of 9.2 g/kW-hr (6.9 g/hp-hr) of NO_x. [40 CFR 60.4202(a)]

2. Production Limits

Aggregate Plant

- a. The Permittee shall limit the amount of material processed at the aggregate plant to the production rates listed in Table III-B-1. [NSR ATC Modification 5, Revision 0, Condition IV-A-3(a)(12/31/10)]

Table III-B-7: Maximum Allowable Production Throughputs

EU	Description	Plant	tons/year
A01	Mining/ Excavation	Primary Plant	7,000,000
A25	Gabion Screen	Gabion Plant	1,000,000
A37	Triple Deck Screen SC2	Secondary Plant	3,300,000
A38	Triple Deck Screen SC3	Secondary Plant	3,300,000
A62	VSI Crusher	Sand Plant	1,600,000
A79	Cone Crusher 1	Cone Plant	2,000,000
A108	Triple Deck Screen SC7	Wash Plant	3,500,000
A109	Triple Deck Screen SC8	Wash Plant	3,500,000
A130	Primary Crusher 2	Landfill Cover Plant	1,000,000
A136	Screen SC9	Landfill Cover Plant	3,000,000

- b. The Permittee shall limit the total amount of surface area blasted to 1,733,886 ft² in any consecutive 12-month period. [NSR ATC Modification 5, Revision 0, Condition IV-A-3(b) (12/31/10)]

MSWL

- c. The Permittee shall limit the total vehicles miles traveled (VMT) on paved roads to 1,237,592 miles traveled in any consecutive 12-month period (EU: H01). [NSR ATC Modification 5, Revision 0, Condition IV-A-3(c) (12/31/10)]
- d. The Permittee shall limit the total vehicles miles traveled (VMT) on unpaved roads to 321,920 miles traveled in any consecutive 12-month period (EU: H02). [NSR ATC Modification 5, Revision 0, Condition IV-A-3(d) (12/31/10)]
- e. The Permittee shall limit the Soil Treatment Operation to 20,000 tons of treated material in any consecutive 12-month period (EU: W01 and W02). [NSR ATC/OP Modification 4, Revision 1, Condition IV-A-6 (11/04/08)]
- f. The Permittee shall limit the Industrial Waste Facility placement to 200,000 tons of treated material in any consecutive 12-month period (EU: W04). [NSR ATC/OP Modification 4, Revision 1, Condition IV-A-7 (11/04/08)]
- g. The Permittee shall limit the Industrial Waste Facility cover material to a total of 435,000 tons in any consecutive 12-month period (EU: W03). [NSR ATC/OP AQR 12.5.2.6(a)/AQR 19.4.1.]
- h. The Permittee shall not accept waste containing more than one (1) percent biodegradable waste at the Industrial Waste facility. If the calculated NMOC emission rate is greater than 50 megagrams per year, the facility shall install a collection and control system per 40 CFR 60 Subpart WWW (EU: W04). [NSR ATC/OP Modification 4, Revision 1, Condition IV-B-30 (11/04/08)]

- i. The Permittee shall limit the Cover Material Handling for waste placement to a total of 1,090,951 tons in any consecutive 12-month period (EU: W05). *[AQR 12.5.2.6(a)/AQR 19.4.1.1]*
- j. The Permittee shall limit the throughput of gasoline products through the fuel storage tank to a total of 61,771 gallons in any consecutive 12-month period (EU: W06). *[NSR ATC Modification 8, Revision 1, Conditions IV-A-3(a and b) (05/13/10)]*
- k. The Permittee shall limit the actual flow of landfill gas through EU: W07 so as to not exceed the rated flow of 1,000 standard cubic feet per minute (scfm), unless the Permittee receives approval from DAQEM for a higher flow rate by demonstrating that exceeding the maximum flow rate does not result in any emissions greater than those listed in Tables III-B-4 and III-B-6. *[NSR ATC/OP Modification 4, Revision 1, Condition IV-A-10 (11/04/08)]*
- l. The Permittee shall not exceed the maximum amount of throughput for the Waste Placement of 13,008,600 tons in any consecutive 12-month period (EU: W08). *[NSR ATC, Modification 5, Revision 0, Condition IV-A-3(e) (12/31/10)]*
- m. The Permittee shall limit the total area of stockpiles to not more than 77.03 acres of active stockpiles and 46.08 acres of inactive stockpiles (EU: W09). *[NSR ATC, Modification 5, Revision 0, Condition IV-A-3(f) (12/31/10)]*
- n. The Permittee shall limit the operation of the generator (EU: W200) to a total of 100 hours in any consecutive 12-month period. *[NSR ATC Modification 5, Revision 0, Condition IV-A-3(g) (12/31/10)]*
- o. *The Permittee shall limit the operation* of the generator (EU: W201) to a total of 3,200 hours in any consecutive 12-month period. *[NSR ATC Modification 5, Revision 0, Condition IV-A-3(h) (12/31/10)]*
- p. *The Permittee shall limit the operation* of the generator (EU: W203) to a total of 2,500 hours in any consecutive 12-month period. *[NSR ATC Modification 5, Revision 0, Condition IV-A-3(i) (12/31/10)]*
- q. The Permittee shall limit the operation of the generator (EU: W204) to a total of 1,400 hours in any consecutive 12-month period. *[NSR ATC Modification 5, Revision 0, Condition IV-A-3(j) (12/31/10)]*
- r. The Permittee shall limit the operation of the Tipper Engine (EU: W205) to a total of 4,380 hours in any consecutive 12-month period. *[NSR ATC Modification 5, Revision 0, Condition IV-A-3(k) (12/31/10)]*
- s. The Permittee shall limit the operation of each well generator (EUs: W206 and W207) to a total of 4,387 hours per generator in any consecutive 12-month period. *[NSR ATC Modification 5, Revision 0, Condition IV-A-3(l) (12/31/10)]*
- t. The Permittee shall limit the operation of the generator (EU: W208) to a total of 100 hours in any consecutive 12-month period. *[NSR ATC Modification 5, Revision 0, Condition IV-A-3(m) (12/31/10)]*
- u. The Permittee shall limit the operation of the generator (EU: W209) to a total of 75 hours in any consecutive 12-month period. *[NSR ATC Modification 5, Revision 0, Condition IV-A-3(n) (12/31/10)]*

3. Emission Controls

Aggregate Plant

- a. The Permittee shall apply wet suppression to maintain moisture content and control emissions within allowable limits at the aggregate plant. Each mineral processing emission unit that is not connected to baghouse controls or part of the wet process shall incorporate an effective water spray system that is maintained in good operating condition at all times. *[AQR 41.1.1]*
- b. The Permittee shall not cause or allow fugitive dust to become airborne without taking reasonable precautions and shall not cause or allow the discharge of fugitive dust in excess of 100 yards from the point of origin or beyond the lot line of the property on which the emissions originate, whichever is less. *[AQR 41.1.1.1(a)]*
- c. The Permittee shall use baghouses to control particulate emissions at all times the processing equipment is operating (EUs: A04, A09, A58, A62, A79, A104a, A130 and A151). *[NSR ATC Modification 5, Revision 0, Condition IV-B-3 (12/31/10)]*
- d. The Permittee shall maintain each of the baghouses in good operating condition to achieve a particulate control efficiency of 99.0 percent (EUs: A04, A09, A58, A62, A79, A104a, A130 and A151). *[NSR ATC Modification 5, Revision 0, Condition IV-B-4 (12/31/10)]*
- e. The Permittee shall maintain an effective seal around each of the baghouses and the pressure drop across each baghouse shall be maintained within the limits specified by the manufacturer. *[NSR ATC Modification 5, Revision 0, Condition IV-B-5 (12/31/10)]*
- f. The Permittee shall operate emissions control devices for individual emission units as indicated in Table III-B-8. *[NSR ATC Modification 5, Revision 0, Condition IV-B-6 (12/31/10)]*

Table III-B-8: Summary of Add-On Control Devices For Aggregate Processing

EU	Device Type	Manufacturer	Model #	Serial #	Pollutant
A04	Baghouse	Donaldson Torit	CPV-12	2797228	PM ₁₀
A09	Baghouse	Donaldson Torit	CPV-12	2797228	PM ₁₀
A58	Baghouse	SiloAir – DCC	VS20KS3	98-1296/01	PM ₁₀
A62	Baghouse	SiloAir – DCC	VS20KS3	98-1296/02	PM ₁₀
A79	Baghouse	PneumaFil	85168	643	PM ₁₀
A104a	Baghouse	PneumaFil	85168	643	PM ₁₀
A130	Baghouse	Donaldson Torit	CPV-12	2797229	PM ₁₀
A151	Baghouse	SiloAir – DCC	VS20KS3	99-1141/01	PM ₁₀

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- g. The Permittee shall maintain a minimum of 1.5 percent moisture in the contaminated soil prior to unloading from the truck at the Soil Treatment facility (EU: W01 and W02). *[NSR ATC/OP Modification 4, Revision 1, Condition IV-B-29 (11/04/08)]*
- h. The Permittee shall maintain a minimum of two (2) percent moisture during soil transfer operation at the Soil Treatment facility (EU: W01 and W02). *[NSR ATC/OP Modification 4, Revision 1, Condition IV-B-29 (11/04/08)]*

- i. The Permittee shall maintain at least 2.5 percent moisture content in materials less than 0.25 inch in diameter for the cover material transfer operations (EU: W05). *[NSR ATC/OP Modification 4, Revision 1, Condition IV-B-28 (11/04/08)]*
- j. The Permittee shall perform all applicable requirements contained in 40 CFR 63 Subpart CCCCCC for the GDO (EU: W06) [Applicable 1/10/2011]. *[NSR ATC Modification 8, Revision 1, Condition IV-B-1 (05/13/10)]*
- k. The Permittee shall apply the following control requirements to the Phase I Vapor Recovery system (EU: W06) [Applicable 1/10/2011]: *[NSR ATC Modification 8, Revision 1, Condition IV-B-2 (05/13/10)]*
 - i. The OPW Phase I Vapor Recovery System shall be constructed in accordance with the "Two-Point Phase I Vapor Recovery System" drawing, and shall use components specified in the current CARB EO G-70-142 series.
 - ii. The highest point of discharge from a submerged fill-pipe shall be no more than 6.0 inches from the tank bottom.
 - iii. Pursuant to AQR Section 12 (amended 10/07/04); all Phase I vapor recovery equipment shall be installed and operated in accordance with the manufacturer's specifications and certification requirements.
 - iv. All Phase I vapor recovery equipment shall be maintained to be leak free, vapor tight, and in good working order.
 - v. All Phase I vapor recovery equipment shall have a CARB-certified device, which prevents loosening or over tightening of the Phase I product adaptor.
 - vi. Each system that has a pressure/vacuum vent valve installed must also meet the standards as outlined in the current CARB EO G-70-142 series.
- l. The Permittee shall operate the LFG collection system such that all collected gases are vented to control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii) *[40 CFR 60.753(e)]*.
- m. The Permittee shall operate the enclosed combustor (Callidus Flare) (EU: W07) to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million (ppm) by volume, dry basis as hexane at 3 percent oxygen. *[40 CFR 60.752(b)(2)(iii)(B)]*
- n. The Permittee shall be subject to the requirements in III-B-3(l) if the collected gas from the MSWL is routed to a treatment system that processes the collected gas for subsequent sale or use, emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR 60.752(b)(2)(iii)(A) or (B). *[40 CFR 60.752(b)(2)(iii)(C)]*
- o. The Permittee shall operate the LFG collection system such that gas is collected from each area, cell, or group of cells in the MSWL in which solid waste has been in place for: *[40 CRF 60.753(a)(1)]*
 - i. 5 years or more if active; or
 - ii. 2 years or more if closed or at final grade.
- p. The Permittee shall operate the LFG collection system with negative pressure at the wellheads except under the following conditions: *[40 CFR 60.753(b)]*
 - i. a fire or increased temperature;
 - ii. use of a geomembrane or synthetic cover. The Permittee shall develop acceptable limits in the design plan; or

- iii. a decommissioned well. A well may experience a static positive pressure after shutdown to accommodate for declining flows. All design changes shall be approved by the Control Officer.
- q. The Permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55° C and with a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well if there is supporting data that the elevated parameter does not cause fire or significantly inhibit anaerobic decomposition by killing methanogens, upon obtaining written authorization from the Control Officer. *[40 CFR 60.753(c)]*
- r. The Permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. *[40 CFR 60.753(d)]*
- s. In the event the collection or control system is inoperable, the Permittee shall shut down the gas mover system and close all valves in the collection and control system that contributes to the venting of gas to the atmosphere within 1 hour. *[40 CFR 60.753(e)]*
- t. The Permittee shall operate the enclosed combustor (Callidus Flare) (EU: W07) with the flame present at all times when the collected gas is routed to the system. *[40 CFR 60.753(f)]*
- u. If the operational requirements in Conditions III-B-3-q through t are not met, the Permittee shall initiate the following corrective actions: *[40 CFR 60.753(g)]*
 - i. Action shall be initiated to correct the exceedance within 5 calendar days of the initial exceedance or insufficient air flow measurement; and
 - ii. If correction of the exceedance, or the negative pressure cannot be achieved, without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance.
- v. The Permittee shall operate the enclosed combustor (Callidus Flare) at a minimum temperature of 1,500° F, or at a temperature corresponding to the maximum control of LFG obtained from the most recent performance test (EU: W07). *[40 CFR 60.752(b)(2)(iii)(B)(2)]*
- w. The Permittee shall route all collected gas from the MSWL to the control system which shall maintain a 98 percent NMOC control efficiency, at all times. *[NSR ATC/OP Modification 4, Revision 1, Condition IV-B-33 (11/04/08)]*
- x. The Permittee shall install additional control system(s) for SO₂ emission from the enclosed combustor (Callidus Flare) (EU: W07) when the LFG flow exceeds 1,000 scfm or the heat rate of LFG exceeds 29.4 MMBtu/hour unless the Permittee receives approval from the Control Officer for a different flow rate by demonstrating that exceeding 1,000 scfm or 29.4 MMBtu/hour does not result in any emission rate greater than those listed in Table III-B-2. *[NSR ATC/OP Modification 4, Revision 1, Condition IV-B-45 (11/04/08)]*
- y. Except during periods of start-up, shut-down or malfunction, the Permittee shall apply controls specified in this section. Periods of start-up, shut-down and malfunction shall not exceed five (5) days for the collection system and shall not exceed one (1) hour for treatment and control devices. *[40 CFR 60.755(e)]*
- z. The Permittee shall maintain a copy of the approved SSM plan dated 01/16/04 on site. Any changes that need to be made to the SSM plan must be submitted to the

Control Officer for review and approval prior to making the change. [40 CFR 63.1960]

- aa. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall under all conditions, maintain and operate the source in a manner consistent with good air pollution control practice for minimizing emissions as required by 40 CFR 63.6. Determination of whether acceptable operation and maintenance procedures are being used shall be based on information available to the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 63.1960]
- bb. The Permittee shall not cap or remove the collection and control system until all of the following conditions are met: [40 CFR 60.752(b)(2)(v)]
 - i. The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Control Officer as provided in 40 CFR 60.757(d);
 - ii. The collection and control system shall have been in operation a minimum of 15 years; and
 - iii. Following the procedures specified in 40 CFR 60.754(b), the calculation NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be not less than 90 days apart, and no more than 180 days apart.
- cc. The Permittee shall operate the three generator IC engines with turbochargers (EUs: W200, W203, W204). [NSR ATC/OP Modification 4, Revision 1, Condition IV-B-48 (11/04/08)]
- dd. The Permittee shall operate the generator IC engine with a turbocharger and aftercooler (EU: W201). [NSR ATC/OP Modification 4, Revision 1, Condition IV-B-48 (11/04/08)]
- ee. The Permittee shall operate the tipper IC engines with turbochargers and aftercoolers (EUs: W206 and W207). [NSR ATC/OP Modification 4, Revision 1, Condition IV-B-48 (11/04/08)]
- ff. As of May 3, 2013, the Permittee shall minimize all RICE engines' time spent at idle during startup and minimize all engines' startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards are applicable to all time other than start up (EUs: W205 through W209). [40 CFR 63.6625(h)]
- gg. As of May 3, 2013, the Permittee shall only use diesel fuel in each engine with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume (EUs: W200, W201, W203, W204, and W209). [40 CFR 63.6604]
- hh. As of May 3, 2013, the Permittee shall comply with the following emission limitations for the four Caterpillar diesel powered IC engines (EUs: W200, W201, W203, and W204): [40 CFR 63.6600(d)]
 - i. limit the concentration of CO in the exhaust to 23 ppmvd or less at 15 percent oxygen; or
 - ii. reduce the CO emission by 70 percent or more from the currently permitted emission limits.

- ii. As of May 3, 2013, the Permittee shall limit the concentration of CO in the exhaust to 230 ppmvd or less 15 percent oxygen for the diesel powered IC engines (EUs: W205 through W207 inclusive). *[40 CFR 63.6600(d)]*
- jj. As of May 3, 2013, the Permittee shall comply with the following work and management practices the Isuzu diesel powered IC engine (EU: W208): *[40 CFR 63.6600(d)]*
 - i. change the oil and filter every 1,000 hours of operation or annually, whichever comes first;
 - ii. inspect the air filter every 1,000 hours of operation or annually whichever comes first; and
 - iii. inspect all belts and hoses ever 500 hours of operation or annually whichever comes first.
- kk. As of May 3, 2013, the Permittee shall comply with the following emission limitations for the Caterpillar diesel powered IC engine (EU: W209): *[40 CFR 63.6600(d)]*
 - i. limit the concentration of CO in the exhaust to 49 ppmvd or less at 15 percent oxygen; or
 - ii. reduce the CO emissions by 70 percent or more from the currently permitted emission limit.
- ll. As of May 3, 2013, the Permittee shall comply with either condition (EUs: W201, W203 through W209 inclusive): *[40 CFR 63.6625(g)]*
 - i. Install a closed crankcase ventilation system that prevents crankcase emission from being emitted to the atmosphere; or
 - ii. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.
 - a. the Permittee shall follow manufacturer's specified maintenance requirements for operating and maintaining the open crankcase ventilation system and replace the crankcase filters as specified.
- mm. As of May 3, 2013, the Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instruction or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions (EUs: W200, W201, W203, W204 through W209). *[40 CFR 63.6625(e)]*
- nn. As of May 3, 2013, the Permittee shall install non-resettable hour meters on all reciprocating IC engines (EUs: W200, W201, W203, W204 through W209). *[40 CFR 63.6625(e)]*
- oo. As of May 3, 2013, the Permittee shall at all times operate and maintain the reciprocating IC engines, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records,

and inspection of the source (EUs: W200, W201, W203, W204 through W209). [40 CFR 63.6605(b)]

- pp. The Permittee shall use only diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume in the diesel engines (EUs: W210, W211 and W212). [40 CFR 60.4207(a)]
- qq. The Permittee shall operate in such a manner that odors will not cause a nuisance. [AQR 43] (Local enforceability only)
- rr. The Permittee shall comply with the control requirements contained in this section. If there is inconsistency between standards or requirements, the most stringent standard or requirement shall apply. [AQR 12.5.2.6(a)]

C. Monitoring

Aggregate Plant

1. This source is required to comply with the monitoring requirements in 40 CFR 60, Subpart OOO. [NSR ATC Modification 5, Revision 0, Condition IV-C-1-Aggregate Plant (12/31/10)]
2. The Permittee shall perform at least one visual emissions observation on each emission unit in the aggregate plant each day. Daily visual observations shall include the aggregate plants, which include control device stacks, (EUs: A01, A02, A04, A07, A08, A09, A12, A16, A17, A22, A23, A25, A27, A28, A30, A31, A33, A34, A35, A37, A38, A40, A42, A44, A46, A47, A49, A51, A52, A58, A60, A62, A65, A69, A72, A74, A77, A79, A82, A83, A85, A87, A89, A93, A95, A98, A102, A104a, A106, A127, A128, A130, A133, A136, A138, A141, A143, A145, A147, A149 and A151) while operating, to demonstrate compliance with the opacity limits. If visible emissions that appear to exceed the opacity limit(s) are observed, the opacity of emissions shall be visually determined in accordance with 40 CFR 60 Appendix A: Reference Method 9. Corrective actions shall be taken to minimize any emissions as soon as practicable [AQR 26.1]
3. The Permittee shall inspect the water spray system daily and investigate and correct any problems before resuming operations [NSR ATC Modification 5, Revision 0, Condition IV-C-3-Aggregate Plant (12/31/10)]
4. The Permittee shall conduct daily monitoring of the pressure drop across each baghouse cell with the installation and operation of a pressure differential (Magnahelic) gauge per manufacturer's specifications. [NSR ATC Modification 5, Revision 0, Condition IV-C-4-Aggregate Plant (12/31/10)]
5. 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 controlling particulate emissions, the processing of material shall cease until such repairs to the baghouse are completed. [NSR ATC Modification 5, Revision 0, Condition IV-C-5-Aggregate Plant (12/31/10)]
6. The Permittee shall have a standard operating procedures (SOP) 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. [NSR ATC Modification 5, Revision 0, Condition IV-C-6-Aggregate Plant (12/31/10)]

MSWL

7. The Permittee shall perform at least one visual emissions observation on each emission unit in the MSWL each day. Daily visual observations shall include the haul roads, waste processing, cover material, LFG flare, waste placement, stockpiles and generator engines (EUs: H01, H02, W01, W02, W03, W05, W07, W08, W09, W200, W201, W203, W204, W205, W207, W208, W209, W210, W211 and W212) while operating, to demonstrate compliance with the opacity limits. If visible emissions that appear to exceed the opacity limit(s) are observed, the opacity of emissions shall be visually determined in accordance with 40 CFR 60 Appendix A: Reference Method 9. Corrective actions shall be taken to minimize any emissions as soon as practicable. *[AQR 26.1]*
8. The Permittee shall demonstrate compliance with the minimum moisture content by conducting and recording bi-weekly sampling and analysis of materials less than 0.25 inch in diameter in accordance with ASTM Standard C 566-89: Standard Test Method for Total Moisture Content of Aggregate by Drying (EU: W02). *[NSR ATC/OP Modification 4, Revision 1, Condition IV-E-4 (11/04/08)]*
9. The Permittee shall demonstrate compliance with the annual maximum VOC emission specified in this permit for the Soil Treatment facility by recording the amount and VOC content of contaminated soil received on a daily basis. The Permittee will calculate the total VOC emission using "Chemdat8" emission factor, as described in the permit application for every consecutive 12-month period (EU: W02). *[NSR ATC/OP Modification 4, Revision 1, Condition IV-E-10 (11/04/08)]*
10. The Permittee shall demonstrate compliance annually with the maximum allowable biodegradable waste (one (1) percent of the total allowed waste of 200,000 tons/year) at the Industrial Waste facility by monitoring and recording percentage of biodegradable wastes dumped at the Industrial Waste facility (EU: W03). *[NSR ATC/OP Modification 4, Revision 1, Condition IV-E-11 (11/04/08)]*
11. The Permittee shall demonstrate compliance for the NMOC emission rate for the Industrial Waste facility by calculating the NMOC emission rate on an annual bases to ensure that the rate does not trigger the requirements in 40 CFR 60, Subpart WWW, using the procedures specified in 40 CFR 60.754 (EU: W03 and W04). *[NSR ATC/OP Modification 4, Revision 1, Condition IV-E-12(11/04/08)]*
12. The Permittee shall conduct daily inspection to the GDO equipment to ensure that the equipment is maintained and operated in a vapor tight and leak free manner, pursuant to the manufacturer's specifications (EU: W06) *[Applicable 1/10/2011]. [NSR ATC Modification 8, Revision 1, Condition IV-C-1 (05/13/10)]*

Surface Methane Monitoring (EU: W100)

13. The Permittee shall monitor, on a quarterly basis, surface concentrations of methane using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the following specifications: *[40 CFR 60.755(c)(1)]*
 - a. the portable analyzer shall meet the instrument specification provided in 40 CFR 60 Appendix A: Method 21, Section 3, except the "methane" shall replace references to VOC;
 - b. the calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air;

- c. the instrument evaluation procedures of 40 CFR 60 Appendix A: Method 21, Section 4.4 shall be used to meet the performance evaluation requirements in Section 3.1.3; and
 - d. the calibration procedures provided in 40 CFR 60 Appendix A: Method 21, Section 4.2 shall be followed immediately before commencing a surface monitoring survey.
14. The Permittee shall monitor surface concentrations of methane on a quarterly basis around the perimeter of the collection area of the MSWL and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The Permittee may establish an alternative traversing pattern that ensures equivalent coverage. *[40 CFR 60.753(d)]*
15. The Permittee shall develop a surface monitoring design plan that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. This plan must be submitted to the Control Officer for review within 180 days of issuance of this permit and available during inspection. *[40 CFR 60.753(d) and AQR 12.5.3.6/AQR 19.4.1.1]*
16. The Permittee shall determine the methane background concentration by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. *[40 CFR 60.755(c)(2)]*
17. The Permittee shall perform quarterly surface emission monitoring in accordance with 40 CFR 60 Appendix A: Method 21, Section 4.3.1, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. *[40 CFR 60.755(c)(3)]*
18. The Permittee shall record any reading of 500 ppm or more of methane above background at any location as a monitored exceedance and shall take the following actions. As long as the following actions are taken, the exceedance is not a violation of the operation requirements of 40 CFR 60.753(d). *[40 CFR 60.755(c)(4)]*
 - a. The Permittee shall mark and record the location of each monitored exceedance.
 - b. The Permittee shall perform cover maintenance or make adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance and shall re-monitor the location within 10 calendar days of detection the exceedance.
 - c. If the re-monitoring of the location shows a second exceedance, the Permittee shall take additional corrective action and shall monitor the location again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the Permittee shall take the action specified in Condition III-C-18-(e) (that is e), and no further monitoring of that location is required until the action specified in Conditions (that is e) has been taken.
 - d. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm above background at the 10-day re-monitoring specified in Condition III-C-18-(b) and (c) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows as exceedance, the actions specified in Condition III-C-18(c) and (e) shall be taken.
 - e. For any location where monitored methane concentration equals or exceeds 500 ppm above background 3 times within a quarterly period, the Permittee shall install a new well or other collection device within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the

blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

19. The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. *[40 CFR 60.755(c)(5)]*

Post Construction Ambient Air Monitoring

20. The Permittee shall monitor Ambient Air for PM₁₀ and H₂S. Placement and operation of the monitors shall be consistent with the relevant provision of 40 CFR 53. The Permittee shall submit quarterly reports of the data collected from the existing Anderson Beta Gauge PM₁₀ analyzer or equivalent unit. The Permittee is required to install an H₂S monitor that satisfies EPA requirements and guidelines. Quarterly reports of H₂S monitoring shall be submitted to Control Officer. *[NSR ATC/OP Modification 4, Revision 1, Condition IV-D (11/04/08)]*

LFG Collection and Control System Monitoring

21. The Permittee shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead of the active gas collection system: *[40 CFR 60.756(a)(1) through (3)]*
 - a. measure the gauge pressure in the gas collection header on a monthly basis as provide in 40 CFR 60.755(a)(3);
 - b. monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis using Method 3C, as provided in 40 CFR 60.755(a)(5); and
 - c. monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5).
22. The Permittee shall measure the gauge pressure in the gas collection header at each individual well monthly. If a positive pressure exists, action shall be initiated to correct the exceedance with 5 calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedance of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Control Officer for approval. *[40 CFR 60.755(a)(3)-(5)]*

LFG Control Enclosed Combustor (Callidus Flare) Monitoring (EU: W07)

23. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications the following equipment on the enclosed combustor (Callidus Flare):
 - a. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater. *[40 CFR 60.756(b)]*
 - b. A device that records flow to or bypass of the control device. The Permittee shall either: *[40 CFR 60.756(b)]*
 - i. install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

- ii. secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
 - c. A continuous emission monitoring system (CEMS) shall be installed if the Permittee calculates an exceedance of any emission limit for the enclosed combustor (Callidus Flare) using continuous monitoring of the LFG flow rate and the enclosed combustor (Callidus Flare) operating temperature within 180 days. *[NSR ATC/OP Modification 4, Revision 1, Condition IV-E-15 (11/04/08)]*
24. The Permittee, after the installation of a collection and control system, shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60.752(b)(2)(v), using the equation in 40 CFR 60.754(b). *[40 CFR 60.754(b)]*
- a. The Permittee shall use the flow rate of landfill gas by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions in 40 CFR 60 Appendix A: Method 2E, Section 4.
 - b. The Permittee shall determine the average NMOC concentration by collecting and analyzing landfill gas samples from the common header pipe before the gas moving or condensate removal equipment using the procedures in 40 CFR 60 Appendix A: Method 25C or Method 18.
 - c. The Permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.
25. The Permittee shall ensure compliance with the provisions of 40 CFR 60, Subpart IIII contained within this document by demonstrating all of the following: *[40 CFR 60.424211(b)]*
- a. operation of the diesel engines (EUs: W210, W211 and W212) according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer; and
 - b. the keeping of records of engine manufacturer data indicating compliance with the emission standards.

D. Testing

Aggregate Plant

- 1. Compliance with the opacity standards of this permit shall be demonstrated, in part, through performance testing in accordance with 40 CFR 60 Reference Method 9 (Standards for Opacity). *[NSR ATC Modification 5, Revision 0, Condition IV-D-1-Aggregate Plant (12/31/10)]*
- 2. The Permittee shall conduct performance testing for opacity standards on all emission units in the aggregate plant except mining and blasting (EUs: A02, A04, A07, A08, A09, A12, A16, A17, A22, A23, A25, A27, A28, A30, A31, A33, A34, A35, A37, A38, A40, A42, A44, A46, A47, A49, A51, A52, A58, A60, A62, A65, A69, A72, A74, A77, A79, A82, A83, A85, A87, A89, A93, A95, A98, A102, A104a, A106, A128, A130, A133, A136, A138, A141, A143, A145, A147, A149 and A151) according to the following conditions: *[NSR ATC Modification 5, Revision 0, Condition IV-D-2-Aggregate Plant (12/31/10)]*
 - a. The Permittee is required to comply with the performance testing requirements of 40 CFR 60, Subpart OOO.

- b. Subsequent performance testing shall be conducted every five years.
- 3. Compliance with the mass emission standards of this permit and concentration standards in 40 CFR 60, Subpart OOO shall be demonstrated through performance testing in accordance with 40 CFR 60 Reference Method 5 or 17. *[40 CFR 60.675(b)(1)]*
- 4. The Permittee shall conduct performance testing on the baghouse stack exhaust points (EUs: A04, A09, A58, A62, A79, A104a, A130 and A151) according to the following conditions: *[NSR ATC Modification 5, Revision 0, Condition IV-D-4-Aggregate Plant (12/31/10)]*
 - a. The Permittee is required to comply with the performance testing requirements of 40 CFR 60, Subpart OOO.
 - b. Subsequent performance testing shall be conducted every five years.
- 5. Subsequent performance testing shall be conducted every five years on or before the anniversary date of the initial performance test in accordance with Table III-D-1. *[NSR ATC Modification 5, Revision 0, Condition IV-D-5-Aggregate Plant (12/31/10)]*

TABLE III-D-1: Performance Test Frequency

Emission Units	Description	Test Method	Pollutant	Frequency
A02, A04, A07, A08, A09, A12, A16, A17, A22, A23, A25, A27, A28, A30, A31, A33, A34, A35, A37, A38, A40, A42, A44, A46, A47, A49, A51, A52, A58, A60, A62, A65, A69, A72, A74, A77, A79, A82, A83, A85, A87, A89, A93, A95, A98, A102, A104a, A106, A128, A130, A133, A136, A138, A141, A143, A145, A147, A149 and A151	Aggregate Plant	EPA Method 9	Opacity	Initially and every 5 years
A04, A09, A58, A62, A79, A104a, A130 and A151	Process A Crushers	EPA Method 5 or Method 17	PM	Initially and every 5 years

MSWL

- 6. The Permittee shall conduct performance testing using the following procedures on the GDO equipment (EU: W06) pursuant to AQR Subsection 12.8.1 (amended 10/07/04). *[NSR ATC Modification 8, Revision 1, Condition IV-D-1 (05/13/10)]*
- 7. The Permittee shall follow the general performance testing requirements for the GDO equipment (EU: W06) as of 1/10/2011. *[NSR ATC Modification 8, Revision 1, Condition IV-D-2 (05/13/10)]*
 - a. Each performance tests shall be conducted in accordance with the applicable CARB Test Procedure that is required by the CARB EO.
 - b. The source shall give a 7-day written prior notice of the date of the test to the Control Officer, Compliance Division.
 - c. Any prior approved scheduled performance test cannot be canceled and/or rescheduled except with the prior approval of the Control Officer, Compliance Division.

- d. Within 7 days from the end of an initial or annual performance test, the source shall submit a report containing the results of such test to the Control Officer, Compliance Division.
- e. The report shall have, as the first page of text, a signed Certification of Performance Test Result.
- f. Each performance test shall be conducted by a DAQEM approved Certified Phase II Vapor Recovery Tester, as defined in AQR Subsection 52.2.
- g. If any performance test fails, then the affected portion of the GDO will be tagged "Out of Order" until corrective action has been taken and the retest passed.
- h. If the source fails a performance test, the Control Officer shall be notified within 24 hours or by 12:00 p.m. (Noon) of DAQEM's next business day, whichever is soonest. Repairs to correct the defects shall be made and a retest scheduled with the Control Officer. The retest shall be scheduled within 10 calendar days of the failed test. If the repairs and retest cannot be accomplished within 10 calendar days, the source must submit the reasons and a proposed date for retesting in writing to the Control Officer for approval.
- i. The source shall conduct performance tests listed in Table III-D-2:

Table III-D-2: Required Performance Test Criterion

Description	CARB Test Procedure	Standard
Pressure decay/leak: vapor control system including nozzles and underground tanks	TP-201.3	Initial: 2" wc Final: Reference Value

- 8. The Permittee shall conduct an Annual Performance Test: Vapor Recovery System for the GDO equipment (EU: W06) as of 1/10/2011 on a frequency as follows: *[NSR ATC Modification 8, Revision 1, Condition IV-D-4 (05/13/10)]*
 - a. Annual performance testing shall be accomplished prior to the anniversary date of the previous performance test that the source passed.
 - b. Pursuant to AQR Section 4, The Control Officer may require additional testing.
- 9. The Permittee shall implement changes to the GDO equipment (EU: W06) existing vapor recovery system if any performance test results indicate such changes are necessary to maintain compliance with Modification 8, Revision 1 ATC [Applicable 1/10/2011]. *[NSR ATC Modification 8, Revision 1, Condition IV-D-5 (05/13/10)]*
- 10. The Permittee shall demonstrate compliance annually with the 40 CFR 60 Subpart WWW reduction efficiency of 98 weight-percent or the outlet concentration level of 20 ppmv for the enclosed combustor (Callidus flare) in accordance with 40 CFR 60 Appendix A: Method 25, 25C, or 18. Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm as hexane), Method 25A should be used in place of Method 25. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) (EU: W07). *[40 CFR 60.754(d)]*
- 11. The Permittee shall demonstrate annual compliance with the flare opacity standard of 20 percent by performing a 40 CFR 60 Appendix A: Method 9 in accordance with AQR Section 26 (EU: W07). *[NSR ATC/OP Modification 4, Revision 1, Condition IV-E-2 (11/04/08)]*

12. As of May 3, 2013, the Permittee shall performance test the IC engines per the requirements of 40 CFR 63.6610 and 63.6620 (EUs: W200, W201, W203 and W204). [40 CFR 63.6610 and 63.6620]
13. As of May 3, 2013, the Permittee shall performance test the IC engines per the requirements in 40 CFR 63.6612 (EUs: W205 through W209 inclusive). [40 CFR 63.6612]
14. As of May 3, 2013, the Permittee shall perform subsequent testing every 8,760 hours or every three years, whichever comes first (EUs: W200, W201, W203 and W204). [40 CFR 63.6615]
15. As of May 3, 2013, if the Permittee elects to reduce the CO emission of IC engines by 70 percent of the permitted emission limit according to the emissions limitations specified in Section III-B-3, the Permittee shall follow the methods for calculating the percent reduction according to the procedures detailed in 40 CFR 63.6620(e)(1) (EUs: W200, W201, W203 and W204). [40 CFR 63.6620]
16. As of May 3, 2013, the Permittee shall select to comply with the emission limitation to reduce CO as specified in Conditions in III-B-3(i) through (iii), without the use of an oxidative catalyst the Permittee shall petition the Control Officer for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Control Officer. [40 CFR 63.6620(f)]
17. As of May 3, 2013, the Permittee shall submit a Notification of Intent to conduct a performance test to the Control Officer, DAQEM Compliance Division at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1) (EUs: W200, W201, W203, W204 through W209 inclusive). [40 CFR 63.6645(f)]
18. As of May 3, 2013, the Permittee shall conduct initial performance tests in Table III-D-3 within 180 days after the compliance date that is specified for your stationary RICE in 40 CFR 63.6595 and according to the provisions in 40 CFR 63.7(a)(2) (EUs: W200, W201, W203, W204 through W209 inclusive). [40 CFR 63.6610(a) and 63.6612]

Table III-D-3: Performance Test Methods for EU: W200, 201, 203, and 204 through W209

Reference	EPA Test Method
40 CFR Part 60 Appendix A	Method 10, or ASTM Method D6522-00
40 CFR Part 63 Appendix A	Method 320, or ASTM D6348-03

E. Record Keeping

Aggregate Plant

1. The Permittee shall comply with all applicable record keeping requirements of 40 CFR 60, Subpart OOO and any other applicable regulations. [AQR 19.4.1.3(b)/12.5.2.6(d)(2)]
2. The Permittee shall maintain records on site that include at a minimum: [AQR 19.4.1.3(b)/12.5.2.6(d)(2)]
 - a. monthly and 12-month rolling total throughput for EUs: A01, A25, A36, A38, A62, A79, A108, A109, A130 and A136 A137;
 - b. daily and 12-month rolling total amount of surface area blasted (EU: A127);
 - c. daily inspections of water spray systems;
 - d. daily baghouse pressure differential (EUs: A108, A109, A112, A113, A114, A116, A118, A119, A122, A124, A125 and A126);

- e. monthly inspection and maintenance of baghouses;
- f. dates and time when visible emission observations are taken and the steps taken to make any necessary corrections to bring opacity into compliance; and
- g. performance test results

MSWL

3. The Permittee shall maintain records on site that include at a minimum: [AQR 19.4.1.3(b)/12.5.2.6(d)(2)]
- a. 12-month rolling total amount of Vehicle Miles Traveled on the Paved and Unpaved Haul Roads (EUs: H01 and H02);
 - b. monthly and 12-month rolling total amount of material treated at the Soil Treatment facility (EUs: W01 and W02);
 - c. monthly and 12-month rolling total amount of material treated at the Industrial Waste facility (EUs: W03 and W04);
 - d. annual NMOC emission rate from the Industrial Waste facility calculated using the procedures specified in 40 CFR 60.754(a) to demonstrate that the Industrial Waste facility does not trigger the requirements per 40 CFR 60 Subpart WWW;
 - e. annual acceptance rate for the MSWL with the current amount of solid waste in-place, and the year-by-year acceptance rate per 40 CFR 60.758(a);
 - f. monthly and 12-month rolling total amount of cover material used (EU: W05);
 - g. monthly and 12-month rolling total amount of gasoline in gallons (EU: W06);
 - h. results of the quarterly surface concentration monitoring for methane (EU: W100);
 - i. results of the quarterly background concentration monitoring for methane (EU: W100);
 - j. reading and location of each surface monitoring exceedances during the surface concentration monitoring for methane (EU: W100);
 - k. corrective actions taken and re-monitoring of any surface monitoring exceedance (EU: W100);
 - l. monthly measurements of the gauge pressure in the gas collection header;
 - m. monthly concentration of nitrogen and oxygen in the landfill gas;
 - n. monthly temperature of the landfill gas;
 - o. corrective actions taken if any exceedances were observed during the monthly wellhead monitoring for pressure, temperature or nitrogen/oxygen concentration;
 - p. monthly landfill cover integrity and repairs implemented;
 - q. quarterly calculated average of the hourly and rolling 12-month total LFG flow (in cubic feet or cubic meters) through the gas collection and control system;
 - r. monthly estimates of enclosed combustor (Callidus Flare) (EU: W07) emissions and a 12-month rolling total to be recorded;
 - s. a quarterly summary of the hours of operation of the enclosed combustor (Callidus Flare) (EU: W07);
 - t. continuous monitoring records of the combustion flare temperature (EU: W07);
 - u. calculated quarterly average of the flow rate and heat input to the enclosed combustor (Callidus Flare) (EU: W07) in MMBtu per hour and in 12-month rolling total;

- v. a quarterly summary describing the deviations, if any, per the SSM plan in the capture and control system;
 - w. the magnitude and duration of malfunctions, excess emissions, monitoring system downtimes, corrective actions taken, etc. during the enclosed combustor (Callidus Flare) operation, as required by 40 CFR 60.7;
 - x. monthly and 12-month rolling total amount of waste placement (EU: W08);
 - y. 12-month rolling total hours of operation for the diesel engines (EUs: W200, W201, and W203 through W209)
 - z. sulfur content of diesel fuel used for engine;
 - aa. cetane index or aromatic content (in percent by volume) of diesel fuel combusted in EUs: W210, W211 and W212;
 - bb. The Permittee shall submit the reports listed in Table 7 of 40 CFR Part 63 Subpart ZZZZ, as applicable and according to the requirements specified in 63.6650 by May 3, 2013 (EUs: W200, W201, W203 through W209 inclusive); and
 - cc. performance test results
4. The Permittee shall maintain records on site: i.e. daily self-inspection records, daily logs, etc., or a copy thereof, for the Phase I, that at minimum shall contain the following information (EU: W06): *[NSR ATC Modification 8, Revision 1 Condition IV-E-4 (05/13/10)]*
- a. a record of any maintenance on any part of the Phase I equipment, including a general description of the maintenance;
 - b. the date and time the equipment was taken out-of-service;
 - c. the date of repair or replacement;
 - d. a general description of the part location (e.g., pump, tank, nozzle number, etc.)
 - e. a description of the problem; and
 - f. the results of the daily inspections.

5. The Permittee shall maintain records for annual reports that include: *[40 CFR 60.757(f)]*
 - a. value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d);
 - b. description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756;
 - c. description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating;
 - d. all periods when the collection system was not operating in excess of 5 days;
 - e. the location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month;
 - f. the date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of 40 CFR 60.755.
6. All inspections, visible emission checks, and testing required under monitoring, logs, reports, and records shall include 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)/AQR 19.41.3(b)]*
7. Records and data required by this Operating Permit to be maintained by Permittee may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. *[AQR 4.4 and AQR 12.5.2.8/AQR 19.4.3.2]*
8. Should this stationary source, as defined in 40 CFR 68.3, become subject to the accidental release prevention regulation in Part 68, then the Permittee shall submit an RMP by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR 70 or 71. *[AQR 12.5.2.6(d)/AQR 19.4.1.3]*
9. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement was taken or data was entered and shall be made available to DAQEM upon request. *[AQR 12.5.2.6(d)/AQR 19.4.1.3(b)]*
10. The Control Officer reserves the right to require additional requirements concerning records and record keeping for this source. *[AQR 12.5.2.6(d)/AQR 19.4.1.3(b)]*

F. Reporting

1. All report submissions shall be addressed to the attention of the Control Officer. *[AQR 12.5.2.8(e)(4), 21.4 and 22.4]*
2. All reports shall contain the following: *[AQR 12.5.2.6(d)/AQR 19.4.1.3(c)]*
 - a. a certification statement on the first page, i.e., "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate and complete." (A sample form is available from DAQEM); and
 - b. a certification signature from a responsible official of the company and the date certification.

3. The Permittee shall include deviations specified in 40 CFR 63.1965 in its quarterly and annual reports. Specified deviations include periods when:
 - a. a deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of Subpart WWW are exceeded; and
 - b. a deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
4. The Permittee shall submit quarterly reports to the Control Officer in accordance with the following requirements: *[AQR 12.5.2.6(d)/AQR 19.4.1.3(c)]*
 - a. The report shall include the items listed in Conditions III-E-2-a and b, Conditions III-E-3-a through bb, and Condition III-E-5.
 - b. The report shall include summaries of any permit deviations, their probable cause and corrective or preventative actions taken.
 - c. The report shall be based on a calendar quarter, which includes partial calendar quarters.
 - d. The report shall be received by DAQEM within 30 calendar days after the reporting period.
5. The Permittee shall submit annual emissions inventory reports based on the following: *[AQR 18.6.1]*
 - a. The annual emissions inventory shall be submitted to DAQEM no later than March 31 after the reporting year.
 - b. The annual emissions inventory report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.
6. Regardless of the date of issuance of this Operating Permit, the source shall comply with the schedule for report submissions outlined in Table III-F-1:

Table III-F-1: Required Submission Dates for Various Reports

Required Report	Applicable Period	Due Date ¹
Quarterly Report for 1 st Calendar Quarter	January, February, March	April 30 each year
Quarterly Report for 2 nd Calendar Quarter	April, May, June	July 30 each year
Quarterly Report for 3 rd Calendar Quarter	July, August, September	October 30 each year
Quarterly Report for 4 th Calendar Quarter, Any additional annual records required.	October, November, December	January 30 each year
Annual Compliance Certification Report	12 Months	30 days after the Operating Permit issuance anniversary date
Annual Emission Inventory Report	Calendar Year	March 31 each year
Excess Emission Notification	As Required	Within 24 hours of the time the Permittee first learns of the excess emissions
Excess Emission Report	As Required	Within 72 hours of the Excess Emission Notification
Deviation Report	As Required	Along with quarterly and semi-annual reports

Required Report	Applicable Period	Due Date ¹
Performance Testing	As Required	Within 60 days from the end of the test

¹ Each report shall be received by DAQEM on or before the due date listed. If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

- The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit emission limits, applicable permit requirements, and requirements of applicable federal regulations. [AQR 4.4 and AQR 12.5.2.6(d)/AQR 19.4.1.3(c)]

G. Mitigation

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

IV. OTHER REQUIREMENTS

- 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 CFC or HCFC compound as a working fluid, unless such fluid has been approved for sale in such use by the Administrator. The Permittee shall keep record of all paperwork relevant to the applicable requirements of 40 CFR 82 on site. [40 CFR 82]

**ATTACHMENT 1
 APPLICABLE REGULATIONS**

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:

- NRS, Chapter 445B.
- 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 Air Quality Standards
AQR Section 12 Through June 30, 2010	Preconstruction Review for New or Modified Stationary Sources
AQR Section 12.5	Part 70 Operating Permit Requirements
AQR Section 13.2(b)(62) AQR Section 13.2(b)(85) AQR Section 13.2(b)(109)	National Emission Standards for Hazardous Air Pollutants: NESHAP – Subpart AAAA: Municipal Solid Waste Landfills Subpart ZZZZ: Stationary Reciprocating Internal Combustion Engines Subpart CCCCCC: Gasoline Dispensing Facilities

Citation	Title
AQR Section 14.1.74 AQR Section 14.1.82 AQR Section 14.1.90	Standards of Performance for New Stationary Sources (NSPS) – Subpart OOO: Nonmetallic Mineral Processing Plants Subpart WWW: Municipal Solid Waste Landfill Subpart IIII: Stationary Compression Ignition Internal Combustion Engines
AQR Section 18	Permit and Technical Service Fees
AQR Section 19 Through June 30, 2010	40 CFR Part 70 Operating Permits
AQR Section 24 Through June 30, 2010	Sampling and Testing - Records and Reports
AQR Section 25	Affirmative Defense for Excess Emissions due to Malfunctions, Startup and Shutdown
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 28	Fuel Burning Equipment
AQR Section 29	Sulfur Contents of Fuel Oil
AQR Section 40	Prohibition of Nuisance Conditions
AQR Section 41	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 55 Through June 30, 2010	Preconstruction review for New or Modified Stationary Sources in the 8-Hour Ozone Nonattainment Area
AQR Section 60	Evaporation and Leakage
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention

3. CAAA, Authority: 42 U.S.C. 7401, et seq.
4. Applicable 40 CFR Subsections:

Citation	Title
40 CFR 52.21	Prevention of Significant Deterioration (PSD)
40 CFR 52.1470	SIP Rules
40 CFR 60	Appendix A, Method 9 or equivalent, (Opacity)
40 CFR 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions
40 CFR 60, Subpart OOO	Standards of Performance for New Stationary Sources (NSPS) – Nonmetallic Mineral Processing Plants
40 CFR 60, Subpart WWW	Standards of Performance for New Stationary Sources (NSPS) – Municipal Solid Waste Landfill
40 CFR 60, Subpart IIII	Standards of Performance for New Stationary Sources (NSPS) – Compression Ignition Internal Combustion Engines
40 CFR 63, Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfill
40 CFR 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines
40 CFR 68	Risk Management Plan
40 CFR 70	Federally Mandated Operating Permits
40 CFR 82	Protection of Stratospheric Ozone