

APR - 1 2014



(Fed-Ex'd)

March 31, 2014

Mr. David Ogulei  
US Environmental Protection Agency  
Region 5  
77 West Jackson Blvd  
Mail Code: AR-18J  
Chicago, IL 60604-3507

Re: Veolia ES Technical Solutions, L.L.C.  
7 Mobile Avenue  
Sauget, IL 62201  
V-IL-1716300103-08-01  
Certification for revisions to Title V Application for Renewal, August 2013 Addendum

Dear Mr. Ogulei,

Enclosed are revised pages to the August 2013 Addendum to Veolia's Application for Title V renewal. These are hard copies of pages that have previously been submitted to you in electronic format. A signed Certification of Truth, Accuracy and Completeness (CTAC) EPA Form 5900-02 has also been included in this submittal package.

If you have questions on this submittal, please call me or Dennis Warchol at (618) 21-2804.

Sincerely,  
Veolia ES Technical Solutions, L.L.C.

A handwritten signature in black ink that reads "Nancy L. Paddock".

Nancy L. Paddock  
Environmental Engineering Specialist

Att.

C: EPA File



OMB No. 2060-0336, Approval Expires 6/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS (CTAC)**

This form must be completed, signed by the "Responsible Official" designated for the facility or emission unit, and sent with each submission of documents (i.e., application forms, updates to applications, reports, or any information required by a part 71 permit).

**A. Responsible Official**

Name: (Last) Harris (First) Douglas  
(MI) \_\_\_\_\_

Title General Manager

Street or P.O. Box #7 Mobile Avenue

City Sauget State IL ZIP 62201 - 1069

Telephone (618.) 271 - 2804 Ext. \_\_\_\_\_ Facsimile (618.) 271 - 2128

**B. Certification of Truth, Accuracy and Completeness** (to be signed by the responsible official)

I certify under penalty of law, based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true, accurate and complete.

Name (signed) *Douglas Harris*

Name (typed) Douglas Harris Date: 3 / 31 / 14

POLLUTANT	PTE (tons/yr)	POLLUTANT	PTE (tons/yr)
PM	12.62	BENZENE	0.36
PM <sub>10</sub>	12.62	BERYLLIUM	0.04
PM <sub>2.5</sub>	12.62	DIOXIN/FURAN	9.97 x 10 <sup>-8</sup>
SO <sub>2</sub>	66.25	HCl/Cl <sub>2</sub>	19.8
NO <sub>x</sub>	74.99	LEAD	0.0968
VOM (OZONE)	15.70	MERCURY	0.03
CO	31.04	METHANOL	0.4069
TOTAL HAPS	21.4	NICKEL	0.0001
ANTIMONY	0.0001	ORGANIC HAP COMPOUNDS	0.5287
ARSENIC	0.04	SELENIUM	0.0002

The current facility's PTE is a summation of the potential to emit of each emission unit.

#### **B. Incinerators: Unit 2, Unit 3, and Unit 4 Emission Standard Requirements**

The regulations applicable to the incinerators are listed below. A listing of any non-applicable requirements and the reasons for the non-applicability are provided in Appendix B.

##### **1. Visible Emissions**

###### **a. Visible Emissions Limitations [35 IAC 212.123(a)]**

The emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission source shall not be caused or allowed, except as allowed by 35 IAC 212.123(b) and 212.124.

###### **b. Fugitive Particulate Matter [35 IAC 212.301 and 212.314]**

The facility shall not cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour.) except as described in 35 IAC 212.314.

## B. List of Air Emission Sources with Regulatory Requirements

Unit Name	Unit Description
Incineration Unit 2	Fixed Hearth Incineration Unit used in the destruction of hazardous waste
Incineration Unit 3	Fixed Hearth Incineration Unit used in the destruction of hazardous waste
Incineration Unit 4	Rotary Kiln Incinerator (Transportable) used in the destruction of hazardous waste
Material Processing Area 1	Material processing/repackaging, repackaging of containerized solid waste
Material Processing Area 2	Material processing/repackaging, repackaging of containerized solid waste
Lab Pack Repack	Material processing/repackaging, repackaging of Lab Packs
Drum Crusher	Drums are crushed
Bulk Feed Building	Temporary storage of bulk solid wastes before being feed to Unit 4
Boiler 1	Steam Boiler used for steam generation at plant
Tank #2	4,931-gallon tank used for the storage of liquid waste
Tank #4	4,931-gallon tank used for the storage of liquid waste
Tank #6	7,200-gallon tank used for the storage of liquid waste
Tank #8	5,820-gallon tank used for the storage of liquid waste
Tank #10	12,869-gallon tank used for the storage of liquid waste
Tank #20	12,869-gallon tank used for the storage of liquid waste
Tank #30	12,869-gallon tank used for the storage of liquid waste
Tank #40	12,869-gallon tank used for the storage of liquid waste
Tank #50	12,869-gallon tank used for the storage of liquid waste
Tank #60	12,869-gallon tank used for the storage of liquid waste
Tank #300	19,850-gallon tank used for the storage of liquid waste
Tank #302	30,000-gallon tank used for the storage of liquid waste
Tank #304	30,000-gallon tank used for the storage of liquid waste
Tank #306	30,000-gallon tank used for the storage of liquid waste
Tank #308	30,000-gallon tank used for the storage of liquid waste
Tank #310	30,000-gallon tank used for the storage of liquid waste
Tank #312	10,000-gallon tank used for the storage of liquid waste
Tank #314	10,000-gallon tank used for the storage of liquid waste
Tank #390	30,000-gallon tank used for storage of No. 2 Diesel Fuel
Emergency Generator 1	#2 Fuel oil-fired (0.4 MMBtu/hr, ≤ 112kW)
Emergency Generator 2	#2 Fuel oil-fired (0.4 MMBtu/hr, ≤ 112kW)

calculated to be 0.8833 pounds VOM per hour and 3.87 tons VOM per year. The detailed calculations are provided below.

Drums crushed per year = 350,400 (40 drums /hour, 8,760 hours/year)

VOM Emission Factor Calculation for Drum Crusher

Emission Factor = Summation of Pounds VOM from **Column I** below  
= 0.0221 pounds per drum

Maximum rate of crushing = 40 drums per hour

Maximum VOM emission rate = 0.0221 x 40 = 0.8833 pounds VOM per hour

Maximum annual VOM rate = 0.8833 x 179 / 2,000 = 0.0790 tons VOM per year

**Potential-To-Emit (PTE)**

Emissions – Volatile Organic Material (VOM)

VOM Emission Factor Calculation for Drum Crusher

Emission Factor = Summation of Pounds VOM from **Column I**  
= 0.0221 pounds per drum

Maximum rate of crushing = 40 drums per hour

Maximum VOM emission rate = 0.0221 x 40 = 0.8833 pounds VOM per hour

Maximum annual VOM rate = 0.8833 x 8,760 / 2,000 = 3.87 tons VOM per year

PTE VOM emissions from drum crushing operations = 3.87 ton VOM/yr

## 10. Tanks

All the tanks emit both VOM and benzene. The actual VOM emissions are those reported in the Annual Air Emissions Report for 2012. The VOM and benzene PTEs were calculated from the emission factor determined using 2012 emission rates and throughputs. The emission factor was then multiplied times the maximum hourly throughput to yield the potential VOM emissions in pounds per hour; and then converted to tons per year using 8,760 hours per year.

Tank Emissions Summary						
Tank Number	Pollutant	Actual Emissions 2012 (lb/yr)	2012 Throughput (10 <sup>3</sup> gals/yr)	Emission Factor (lbs/10 <sup>3</sup> gals)	PTE (Lb/hr)	PTE (Ton/yr)
Tank #2	VOM	1.58	602	0.0026	0.0052	0.0230
	Benzene	0.0015		2.49E-06	4.98E-06	2.18E-05
Tank #4	VOM	1.73	602	0.0029	0.0057	0.0252
	Benzene	0.017		2.82E-05	5.65E-05	2.47E-04
Tank #6	VOM	2.76	3061	0.0009	0.0018	0.0079
	Benzene	0.0027		8.82E-07	1.76E-06	7.73E-06
Tank #8	VOM	2.81	2461	0.0011	0.0023	0.0100
	Benzene	0.0027		1.10E-06	2.19E-06	9.61E-06
Tank #10	VOM	10.68	500	0.0214	0.0427	0.1871
	Benzene	0.0104		2.08E-05	4.16E-05	1.82E-04
Tank #20	VOM	1.12	310	0.0036	0.0072	0.0316
	Benzene	0.0011		3.55E-06	7.10E-06	3.11E-05
Tank #30	VOM	2.33	79	0.0295	0.0590	0.2584
	Benzene	0.0023		2.91E-05	5.82E-05	2.55E-04
Tank #40	VOM	2.42	657	0.0037	0.0074	0.0323
	Benzene	0.0023		3.50E-06	7.00E-06	3.07E-05
Tank #50	VOM	0.7650	764	0.0010	0.0020	0.0088
	Benzene	0.0007		9.46E-07	1.83E-06	8.03E-06
Tank #60	VOM	5.55	950	0.0058	0.0117	0.0512
	Benzene	0.0054		5.68E-06	1.14E-05	4.98E-05
Tank #300	VOM	1.90	580	0.0033	0.0066	0.0287
	Benzene	0.0018		3.10E-06	6.21E-06	2.71E-05
Tank #302	VOM	11.74	543	0.0216	0.0432	0.1894
	Benzene	0.0114		2.10E-05	4.20E-05	1.84E-04
Tank #304	VOM	2.81	434	0.0065	0.0130	0.0567
	Benzene	0.0027		6.22E-06	1.24E-05	5.45E-05
Tank #306	VOM	5.28	466	0.0113	0.0227	0.0993
	Benzene	0.0051		1.09E-05	2.19E-05	9.59E-05
Tank #308	VOM	8.99	355	0.0253	0.0506	0.2218
	Benzene	0.0087		2.45E-05	4.90E-05	2.15E-04
Tank #310	VOM	8.27	282	0.0293	0.0587	0.2569

Tank Emissions Summary						
Tank Number	Pollutant	Actual Emissions 2012 (lb/yr)	2012 Throughput (10 <sup>3</sup> gals/yr)	Emission Factor (lbs/10 <sup>3</sup> gals)	PTE (Lb/hr)	PTE (Ton/yr)
	Benzene	0.0080		2.84E-05	5.67E-05	2.48E-04
Tank #312	VOM	7.71	192	0.0402	0.0803	0.3517
	Benzene	0.0075		3.91E-05	7.81E-05	3.42E-04
Tank #314	VOM	4.64	192	0.0242	0.0483	0.2117
	Benzene	0.0045		2.34E-05	4.69E-05	2.05E-04

### 11. Emergency Generators

An emergency generator that combusts #2 fuel oil is used for emergency power/energy requirements. The generator rating is less than 112 kilowatts or 150.2 horsepower. The maximum hourly design rate is approximately 0.4 MMBtu/hr. The generator is only used in the case of a power outage or natural gas curtailment. Nonemergency operation is limited to maintenance and testing that is necessary to maintain the readiness of the unit.

A second emergency generator is used to operate the fire water pump in the event of an onsite fire. This generator also combusts #2 fuel oil and has a maximum hourly design rate of approximately 0.4 MMBtu/hr (< 112 kilowatt rating).

When operated, the #2 fuel oil combustion generates emissions of PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOM and organic/inorganic HAPs. There are no emission control devices associated with these units.

Emergency Generator Emissions Summary			
Maximum Hourly Heat Input: 0.4 MMBtu/hr (≤ 112 kW, 150.2 Hp)			
Maximum Hours of Operation per year: 500 hr/yr			
Pollutant	Emission Factor (lb/mmbtu)	PTE (lb/hr)	PTE (tons/yr)
CO	0.95	0.38	0.095
VOM	0.35	0.14	0.035
NO <sub>x</sub>	4.41	1.76	0.441
PM <sub>2.5</sub>	0.31	0.124	0.031
PM <sub>10</sub>	0.31	0.124	0.031
PM	0.31	0.124	0.031
SO <sub>2</sub>	0.29	0.116	0.029
Aldehydes	0.07	0.028	0.007
Formaldehyde	0.00118	0.0005	0.0001

EMISSION UNIT ID(S)	APPLICATION REFERENCE FOR APPLICABLE REQUIRMENT	CITATION	COMPLIANCE METHOD
Drum Crusher	Section IV.J.4	40 CFR 71.6(a)(3)(i)(A) and (B)	Routine visible emissions observations are performed and documented.
Drum Crusher	Section IV.J.5	40 CFR 71.6(a)(3)	Records will be retained on site for at least five years.
<b>Boiler: Requirements</b>			
Boiler	Section IV.K.1	35 IAC 216.121	Monitoring/recording of CO concentration during annual tune-up.
Boiler	Section IV.K.2	40 CFR Subpart Dc	Recordkeeping of fuel combusted.
Boiler	Section IV.K.3	35 IAC 212.123(a)	Monitoring/Recordkeeping - Routine visible emissions observations.
Boiler	Section IV.K.4	Construction permit 95080025	NO <sub>x</sub> , CO emission rate calculations based on monitored concentrations during annual tune-up and annual operating hours.
Boiler	Section IV.K.5	40 CFR 63.52	Monitoring/recording of CO concentration during annual tune-up.
Boiler	Section IV.K.6	40 CFR 63 Subpart DDDDD	Work practices for annual tune-up, one-time energy assessment, submission of NOC.
Boiler	Section IV.K.7	40 CFR 71.6(a)(3)(i)(A) and (B)	Annual visible emissions tests are performed and documented.
Boiler	Section IV.K.8	40 CFR 71.6(a)(3)	Records will be retained on site for at least five years.
<b>Emergency Generators: Requirements</b>			
Emergency Generators	Section IV.L.1	40 CFR 63 Subpart ZZZZ	Record of the hours of operation will be retained.
Emergency Generators	Section IV.L.2	40 CFR 63.6602	Work practice procedures for maintenance, inspection and idle operation will be followed.
Emergency Generators	Section IV.L.3	40 CFR 71.6(a)(3)	Records will be retained on site for at least five years.
<b>Gasoline Storage Tank: Requirements</b>			
Gasoline Tank	Section IV.M.1	35 IAC 219.122	The tank is equipped with a submerged loading pipe.
Gasoline Tank	Section IV.M.2	35 IAC 219.583	The tank is equipped with a submerged loading pipe.
Gasoline Tank	Section IV.M.3	40 CFR 71.6(a)(3)	Records will be retained on site for at least five years.

<b>Additional Recordkeeping</b>		
Inspection	As Required by 40 CFR 61 Subpart FF	Quarterly
	Inspection Certification	Quarterly
<b>Tank 390</b>		
Throughput	Supplier invoices	Purchase frequency
<b>Emergency Generators</b>		
Hours of operation and description of use	Install a non-resettable hour meter as required by 40 CFR 63 Subpart ZZZZ	During operation
Inspection	Records of inspection of air cleaner, hoses and belts as required by 40 CFR 63 Subpart ZZZZ	Annually
Startup, Shutdown Malfunction time and duration	Operating record and maintenance records for oil and filter changes as required by 40 CFR 63 Subpart ZZZZ	Per Occurrence and annually

Veolia utilizes an extensive preventative maintenance (PM) program to keep equipment operational and prevent breakdowns and failures. This includes aspects such as documenting detailed maintenance histories on equipment, routine inspection, and lubrication programs for high-wear equipment and non-destructive testing of piping and vessels using techniques like ultrasound to assess integrity. The frequency of these activities varies depending upon the equipment, PM activity, and the incinerator's shutdown schedule.

## B. Reporting Requirements

Veolia reports information as required by the Hazardous Waste Combustor MACT standard, 40 CFR 63. Unit 2, 3, 4, Material Processing Area 1 and 2, Bulk Feed Building, Lab Pack Repack Area and all tanks that are used for the storage of liquid waste are also subject to requirements of 40 CFR 61 Subpart FF (Benzene NESHAP). In addition to the general reporting requirements summarized in the following tables, these units comply with all applicable reporting requirements as required by 40 CFR 61 Subpart FF.

<b>General Reporting Requirements</b>	
<b>Reference</b>	<b>Report</b>
63.10(d)(4)	Compliance progress reports, if required as a condition of an extension of the compliance date granted under Sec. 63.6(i).
63.10(d)(5)(i)	Periodic startup, shutdown, and malfunction reports.
63.10(d)(5)(ii)	Immediate startup, shutdown, and malfunction reports.
63.10(e)(3)	Excessive emissions and continuous monitoring system performance report and summary report.
63.1206(c)(2)(ii)(B)	Startup, shutdown, and malfunction plan.
63.1206(c)(3)(vi)	Excessive exceedances reports.
63.1206(c)(4)(iv)	Emergency safety vent opening reports.

<b>Reporting Requirements</b>		
Visual Inspections and Monitoring	Quarterly inspection certification as Required by 40 CFR 61 Subpart FF	Quarterly
<b>Tank 390</b>		
Emissions Inventory	Annual Emissions Report	Annual
<b>Emergency Generators</b>		
Emission Inventory	Annual Emissions Report	Annual

Veolia reports to the IEPA each occurrence of an AWFCO due to the combustion zone pressure being greater than allowable setpoints when evidence of visible emissions during the AWFCO exists. In addition, any failure to perform the work practice standards for the emergency generators will be reported.

U.S. ENVIRONMENTAL PROTECTION AGENCY  
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

## FORM PTE - POTENTIAL TO EMIT SUMMARY

INSTRUCTIONS: Complete this form once for the facility. You may find it helpful to complete form EMISS for each emissions unit before completing this form. For each emissions unit with emissions that count towards applicability, list the emissions unit ID and the PTE for the air pollutants listed below. If there are other air pollutants not listed below for which the source is a major source, provide attachments naming the air pollutant and showing calculation of the total for that pollutant. Round values to the nearest tenth of a ton. Add all values together in each column and enter the total in the space provided at the bottom of the table. Also report these totals in section J of form GIS.

Emissions Unit ID	Regulated Air Pollutants and Pollutants for which the Source is Major						
	NOx (tons/yr)	VOC (tons/yr)	SO2 (tons/yr)	PM10 (tons/yr)	CO (tons/yr)	Lead (tons/yr)	HAP (tons/yr)
Unit 2	4.0	0.9	7.7	2.53	6.6	0.0202	4.166
Unit 3	4.0	0.9	7.7	2.53	6.6	0.0202	4.166
Unit 4	61.6	3.1	50.76	7.15	13.86	0.0564	11.78
Lab Pack Repack		1.45					0.2418
Material Processing 1		0.2387					0.0495
Material Processing 2		0.2387					0.0495
Drum Crusher		3.87					0.9356
Tank 2		0.0230					2.18E-05
Tank 4		0.0252					2.47E-04
Tank 6		0.0079					7.73E-06
Tank 8		0.0100					9.61E-06
Tank 10		0.1871					1.82E-05
Tank 20		0.0316					3.11E-05
Tank 30		0.2584					2.55E-04
Tank 40		0.0323					3.07E-05
Tank 50		0.0088					8.03E-06

TOTALS

TOTAL

ON

2<sup>ND</sup>

FORM

U.S. ENVIRONMENTAL PROTECTION AGENCY  
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

## FORM PTE - POTENTIAL TO EMIT SUMMARY

INSTRUCTIONS: Complete this form once for the facility. You may find it helpful to complete form **EMISS** for each emissions unit before completing this form. For each emissions unit with emissions that count towards applicability, list the emissions unit ID and the PTE for the air pollutants listed below. If there are other air pollutants not listed below for which the source is a major source, provide attachments naming the air pollutant and showing calculation of the total for that pollutant. Round values to the nearest tenth of a ton. Add all values together in each column and enter the total in the space provided at the bottom of the table. Also report these totals in section J of form **GIS**.

Emissions Unit ID	Regulated Air Pollutants and Pollutants for which the Source is Major						
	NOx (tons/yr)	VOC (tons/yr)	SO2 (tons/yr)	PM10 (tons/yr)	CO (tons/yr)	Lead (tons/yr)	HAP (tons/yr)
Tank 60		0.0512					4.98E-05
Tank 300		0.0287					2.71E-05
Tank 302		0.1894					1.84E-04
Tank 304		0.0567					5.45E-05
Tank 306		0.0993					9.59E-05
Tank 308		0.2218					2.15E-04
Tank 310		0.2569					2.48E-04
Tank 312		0.3517					3.42E-04
Tank 314		0.2117					2.05E-04
Bulk Solids Storage		2.56					0.0188
Fugitive Equipment Leaks		0.0738					0.0001
Boiler 1	4.51	0.248	0.027	0.343	3.79	0.00002	0.0037
Emergency Generator #1	0.441	0.035	0.029	0.031	0.095		0.0071
Emergency Generator #2	0.441	0.035	0.029	0.031	0.095		0.0071
TOTALS	74.99	15.63	66.25	12.62	30.85	0.0968	21.4

U.S. ENVIRONMENTAL PROTECTION AGENCY  
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

## FORM EMISS - EMISSIONS CALCULATIONS

INSTRUCTIONS: Use this form to calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form GIS. If form FEE does not need to be submitted with the application, do not calculate actual emissions.

A. Emissions Unit ID Unit 2 (1 of 2)

## B. Identification and Quantification of Emissions

Instructions: First, list each air pollutant that is either regulated at the unit or present in major amounts. Second, list any other regulated pollutant (for fee calculation) emitted at the unit that have not already been listed. Each HAP added to the list in this step may be simply listed as "HAP". Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each listed air pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives, including those that do not count towards applicability, when calculating actual emissions. At a minimum, round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values. Attach examples of calculations that illustrates the methodology used.

Air Pollutants (including regulated air pollutants and pollutants for which the source is major)	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
PM/PM10/PM2.5		0.5775	2.53	
HCl/CL2		0.9340	4.09	
NOx		NA	4.0	
CO		2.31	6.6	
SO2		NA	7.7	
VOM		8.0	0.90	
Hg		0.0026	0.00114	7439-97-6
As		0.0018	0.0081	7440-38-2
Be		0.0018	0.0081	7440-41-7
Cd		0.0046	0.0202	7440-43-9
Cr		0.0018	0.0081	7440-47-3
Sb		0.0000342	0.000015	7440-31-5

U.S. ENVIRONMENTAL PROTECTION AGENCY  
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

## FORM EMISS - EMISSIONS CALCULATIONS

INSTRUCTIONS: Use this form to calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form GIS. If form FEE does not need to be submitted with the application, do not calculate actual emissions.

A. Emissions Unit ID Unit 3 (1 of 2)

## B. Identification and Quantification of Emissions

Instructions: First, list each air pollutant that is either regulated at the unit or present in major amounts. Second, list any other regulated pollutant (for fee calculation) emitted at the unit that have not already been listed. Each HAP added to the list in this step may be simply listed as "HAP". Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each listed air pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives, including those that do not count towards applicability, when calculating actual emissions. At a minimum, round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values. Attach examples of calculations that illustrates the methodology used.

Air Pollutants (including regulated air pollutants and pollutants for which the source is major)	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
PM/PM10/PM2.5		0.5775	2.53	
HCl/CL2		0.9340	4.09	
NOx		NA	4.0	
CO		2.31	6.6	
SO2		NA	7.7	
VOM		8.0	0.90	
Hg		0.0026	0.00114	7439-97-6
As		0.0018	0.0081	7440-38-2
Be		0.0018	0.0081	7440-41-7
Cd		0.0046	0.0202	7440-43-9
Cr		0.0018	0.0081	7440-47-3
Sb		0.0000342	0.000015	7440-31-5

U.S. ENVIRONMENTAL PROTECTION AGENCY  
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

## FORM EMISS - EMISSIONS CALCULATIONS

INSTRUCTIONS: Use this form to calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form GIS. If form FEE does not need to be submitted with the application, do not calculate actual emissions.

A. Emissions Unit ID Unit 4 (1 of 2)

## B. Identification and Quantification of Emissions

Instructions: First, list each air pollutant that is either regulated at the unit or present in major amounts. Second, list any other regulated pollutant (for fee calculation) emitted at the unit that have not already been listed. Each HAP added to the list in this step may be simply listed as "HAP". Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each listed air pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives, including those that do not count towards applicability, when calculating actual emissions. At a minimum, round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values. Attach examples of calculations that illustrates the methodology used.

Air Pollutants (including regulated air pollutants and pollutants for which the source is major)	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
PM		1.63	7.15	
HCl/CL2		2.64	11.57	
NOx		NA	61.6	
CO		6.52	13.86	
SO2		NA	50.76	
VOM		8.0	3.1	
Hg		0.0073	0.0319	7439-97-6
As		0.0052	0.0226	7440-38-2
Be		0.0052	0.0226	7440-41-7
Cd		0.0129	0.0564	7440-43-9
Cr		0.0052	0.0226	7440-47-3
Sb		0.0000111	0.0000486	7440-31-5

U.S. ENVIRONMENTAL PROTECTION AGENCY  
 APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

FORM EMISS - EMISSIONS CALCULATIONS

INSTRUCTIONS: Use this form to calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form GIS. If form FEE does not need to be submitted with the application, do not calculate actual emissions.

A. Emissions Unit ID Boiler #1

B. Identification and Quantification of Emissions

Instructions: First, list each air pollutant that is either regulated at the unit or present in major amounts. Second, list any other regulated pollutant (for fee calculation) emitted at the unit that have not already been listed. Each HAP added to the list in this step may be simply listed as "HAP". Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each listed air pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives, including those that do not count towards applicability, when calculating actual emissions. At a minimum, round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values. Attach examples of calculations that illustrates the methodology used.

Air Pollutants (including regulated air pollutants and pollutants for which the source is major)	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
CO		0.864	3.79	
VOM		0.057	0.248	
NOx		1.03	4.51	
PM2.5		0.078	0.343	
PM10		0.078	0.343	
Part		0.078	0.343	
NH3		0.033	0.144	
SOx		0.006	0.027	
Lead		0.00001	0.00002	
HAP		0.001	0.0037	

