

**TV FER/EIS Emissions Report (201436) for 2010**  
**Bond Road Landfill**  
**1431473443**  
**April 08, 2011**

# 2010 Emissions Summary Report : 201436

Oct 9 2011, 16:13:48

**- Report Data**

Report Category: TV

Submitted Date: 04/08/2011

Reporting Year: 2010

Approved Date 04/11/2011

Reporting State Approved

**- Reports Included**

FER: X

ES:

EIS: X

**- Facility Emissions**

Pollutant	Code	\$	Fugitive Amount	Stack Amount	Total	Units
PE (Cond) - Primary PM Condensable Portion Only (All Less than 1 Micron)	PM-CON		0.	0.	0.	TONs
SO2 - Sulfur Dioxide	SO2	X	0.	0.	0.	TONs
NOx - Nitrogen Oxides	NOX	X	0.	0.	0.	TONs
Organic Compounds	OC	X	0.48	0.	0.48	TONs
Pb - Lead	7439921	X	0.	0.	0.	TONs
PE (Filt) - Primary PM, Filterable Portion Only	PM-FIL	X	1.30054	0.	1.30054	TONs
PM10 (Filt) - Primary PM10, Filterable Portion Only	PM10-FIL		0.340271	0.	0.340271	TONs
PM2.5 (FILT) - Primary PM2.5, Filterable Portion Only	PM25-FIL		0.0400388	0.	0.0400388	TONs
VOC - Volatile Organic Compounds	VOC		0.43	0.	0.43	TONs
Ammonia	NH3		0.19	0.	0.19	TONs
CO - Carbon Monoxide	CO		0.2	0.	0.2	TONs
Total of Chargable Pollutants					1.78054	TONS

**- Attachments**

Description	Type	Public Document	Trade Secret Document	Trade secret Justification

**- Notes**

User Name	Date	Note

## Emission Units Without Detailed Emissions

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Emission Unit	Why Excluded	Company Equipment ID
F007	Did Not Operate	150 Ton/hr Portable Soil Shredding Operation
F008	Did Not Operate	250 Ton/hr Portable Soil Shredding Operation
F009	Did Not Operate	Portable 400 Tons/hr Soil/Stone Crusher
F010	Did Not Operate	Crushed Soil/Stone Storage Piles
F011	Did Not Operate	Crushed Soil/Stone Misc. Material Handling Operations
F012	Did Not Operate	75 Tons/hr Portable Compost Tub Grinder
F013	Did Not Operate	50 Tons/hr Portable Compost Screener
F014	Exemption Status = De minimis	Storage Piles
F015	Did Not Operate	Composting Operations Storage Piles and Windrows
F016	Did Not Operate	Portable Tire Shredder
L001	Exemption Status = De minimis	Cold Cleaner
P007	Did Not Operate	Unit #80040 (P007)
P008	Did Not Operate	Unit #GEN2 (P008)
P009	Did Not Operate	1.12 MMBTU/hr Diesel Engine
P010	Did Not Operate	Unit #80189 (P010)
P011	Did Not Operate	3.5 MMBTU/hr Diesel Engine (for Portable Tire Shredder)
P014	Did Not Operate	Unit #80053 (P014)
P015	Did Not Operate	Unit #215 (P015)
P016	Exemption Status = Permit Exempt	Landfill Ground Water Remediation Vents
P017	Exemption Status = De minimis	Pump Gasoline IC Engine (8 HP)
P018	Exemption Status = De minimis	Pump Gasoline IC Engine (5.5 HP)
T001	Exemption Status = De minimis	Leachate Tank # 1
T002	Exemption Status = De minimis	Leachate Tank # 2
T003	Exemption Status = De minimis	Leachate Tank # 3
T004	Exemption Status = De minimis	Leachate Tank # 4
T005	Exemption Status = De minimis	Diesel Fuel AST (1000 gal)
T006	Exemption Status = De minimis	Diesel Fuel AST (2000 gal)
T007	Exemption Status = De minimis	Leachate Tank # 5

T008	Exemption Status = De minimis	Leachate Tank # 6
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**Report Pollutant Summary: Total Emissions (Tons)**

Unit	SCC Id	PM-CON	SO2	NOX	OC	7439921	PM-FIL	PM10-FIL	PM25-FIL	VOC	NH3	CO
F001	3-03-008-34	0.	0.	0.	0.	0.	0.23	0.05	0.01	0.	0.	0.
F001	3-03-008-33	0.	0.	0.	0.	0.	1.07	0.29	0.03	0.	0.	0.
P001	5-03-006-01	0.	0.	0.	0.48	0.	0.	0.	0.	0.43	0.19	0.2
P001	5-03-008-99	0.	0.	0.	0.	0.	5.41E-04	2.71E-04	3.88E-05	0.	0.	0.
<b>Total</b>		0.	0.	0.	0.48	0.	1.30054	0.340271	0.0400388	0.43	0.19	0.2

# Emission Unit Summary: F001

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Emissions Unit ID: F001

Detailed Reporting

DAPC Description:

## - Unit Emissions

Pollutant	Code	\$	Fugitive Amount	Stack Amount	Total	Units	QA+
PE (Cond) - Primary PM Condensable Portion Only (All Less than 1 Micron)	PM-CON		0.	0.	0.	TONs	
SO2 - Sulfur Dioxide	SO2	X	0.	0.	0.	TONs	
NOx - Nitrogen Oxides	NOX	X	0.	0.	0.	TONs	
Organic Compounds	OC	X	0.	0.	0.	TONs	
Pb - Lead	7439921	X	0.	0.	0.	TONs	
PE (Filt) - Primary PM, Filterable Portion Only	PM-FIL	X	1.3	0.	1.3	TONs	
PM10 (Filt) - Primary PM10, Filterable Portion Only	PM10-FIL		0.34	0.	0.34	TONs	
PM2.5 (FILT) - Primary PM2.5, Filterable Portion Only	PM25-FIL		0.04	0.	0.04	TONs	
VOC - Volatile Organic Compounds	VOC		0.	0.	0.	TONs	
Ammonia	NH3		0.	0.	0.	TONs	
CO - Carbon Monoxide	CO		0.	0.	0.	TONs	
Total of Chargable Pollutants					1.3	TONS	

## - Processes

### - Process & Emissions Detail

Name: F001-2

Source Classification Code (SCC): 3-03-008-34

### - Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule Trade Secret:

Hours Per Day: 9

Days Per Week: 5

Weeks Per Year: 10

Hours Per Year: 429

Winter (Dec - Feb)%: 26

Spring (March-May)%: 27

Summer (June-Aug)%: 24

Fall (Sept-Nov)%: 23

Material	Material Action	Throughput	X Units
Vehicle	Travelled	602	MILES

- **Process Emissions**

Pollutant	Code	\$ Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PE (Cond) - Primary PM Condensable Portion Only (All Less than 1 Micron)	PM-CON	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
SO2 - Sulfur Dioxide	SO2	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
NOx - Nitrogen Oxides	NOX	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
Organic Compounds	OC	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
Pb - Lead	7439921	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
PE (Filt) - Primary PM, Filterable Portion Only	PM-FIL	X emissions: ENG. JUDGEMENT			0.23	0	0.23	TONs	Note : This SCC represents the emissions associated with the landfill roadways for paved areas. No control measures were necessary in 2010. Emission estimates were based on the latest AP-42 Section 13.2.1 (1/11) and HC-DOES PTI #14-04858 / Title V Permit #P0100281 calculations.
PM10 (Filt) - Primary PM10, Filterable Portion Only	PM10-FIL	emissions: ENG. JUDGEMENT			0.05	0	0.05	TONs	Note : This SCC represents the emissions associated with the landfill roadways for paved areas. No control measures were necessary in 2010. Emission estimates were based on the latest AP-42 Section 13.2.1 (1/11) and HC-DOES PTI #14-04858 / Title V #P0100281 Permit calculations.
PM2.5 (FILT) - Primary PM2.5, Filterable Portion Only	PM25-FIL	emissions: ENG. JUDGEMENT			0.01	0	0.01	TONs	Note : This SCC represents the emissions associated with the landfill roadways for paved areas. No control measures were necessary in 2010. Emission estimates were based on the latest AP-42 Section 13.2.1 (1/11) and HC-DOES PTI #14-04858 / Title V #P0100281 Permit calculations.
VOC - Volatile	VOC	emissions:			0	0	0.	TONs	

Organic Compounds		ENG. JUDGEMENT							
Ammonia	NH3	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
CO - Carbon Monoxide	CO	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
Total of Chargable Pollutants							0.23	TONS	

- **Process & Emissions Detail**

Name: F001-1

Source Classification Code (SCC): 3-03-008-33

- **Material Information, Annual Average Operating Schedule & Throughput Percent**

Schedule Trade Secret:

Hours Per Day: 9

Days Per Week: 5

Weeks Per Year: 10

Hours Per Year: 429

Winter (Dec - Feb)%: 26

Spring (March-May)%: 27

Summer (June-Aug)%: 24

Fall (Sept-Nov)%: 23

Material	Material Action	Throughput	X Units
Vehicle	Travelled	1215	MILES

- **Process Emissions**

Pollutant	Code	Method Used	Hours UnCont.	UnCont. Factor (LBS/X)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PE (Cond) - Primary PM Condensable Portion Only (All Less than 1 Micron)	PM-CON	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
SO2 - Sulfur	SO2	X emissions:			0	0	0.	TONs	

Dioxide			ENG. JUDGEMENT							
NOx - Nitrogen Oxides	NOX	X	emissions: ENG. JUDGEMENT		0	0	0.	TONs		
Organic Compounds	OC	X	emissions: ENG. JUDGEMENT		0	0	0.	TONs		
Pb - Lead	7439921	X	emissions: ENG. JUDGEMENT		0	0	0.	TONs		
PE (Filt) - Primary PM, Filterable Portion Only	PM-FIL	X	emissions: ENG. JUDGEMENT		1.07	0	1.07	TONs	Note: This SCC represents the emissions associated with the landfill roadways for unpaved areas. No control measures were necessary in 2010. Emission estimates were based on the latest AP-42 Section 13.2.2 (11/06) emission factors and HC-DOES PTI #14-04858 / Title V #P0100281 Permit calculations.	
PM10 (Filt) - Primary PM10, Filterable Portion Only	PM10-FIL		emissions: ENG. JUDGEMENT		0.29	0	0.29	TONs	Note: This SCC represents the emissions associated with the landfill roadways for unpaved areas. No control measures were necessary in 2010. Emission estimates were based on the latest AP-42 Section 13.2.2 (11/06) emission factors and HC-DOES PTI #14-04858 / Title V #P0100281 Permit calculations.	
PM2.5 (FILT) - Primary PM2.5, Filterable Portion Only	PM25-FIL		emissions: ENG. JUDGEMENT		0.03	0	0.03	TONs	Note: This SCC represents the emissions associated with the landfill roadways for unpaved areas. No control measures were necessary in 2010. Emission estimates were based on the latest AP-42 Section 13.2.2 (11/06) emission factors and HC-DOES PTI #14-04858 / Title V #P0100281 Permit calculations.	
VOC - Volatile Organic Compounds	VOC		emissions: ENG. JUDGEMENT		0	0	0.	TONs		
Ammonia	NH3		emissions: ENG. JUDGEMENT		0	0	0.	TONs		
CO - Carbon Monoxide	CO		emissions: ENG. JUDGEMENT		0	0	0.	TONs		
Total of Chargable Pollutants							1.07	TONs		

# Emission Unit Summary: P001

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Emissions Unit ID: P001

Detailed Reporting

DAPC Description:

## - Unit Emissions

Pollutant	Code	\$	Fugitive Amount	Stack Amount	Total	Units	QA+
PE (Cond) - Primary PM Condensable Portion Only (All Less than 1 Micron)	PM-CON		0.	0.	0.	TONs	
SO2 - Sulfur Dioxide	SO2	X	0.	0.	0.	TONs	
NOx - Nitrogen Oxides	NOX	X	0.	0.	0.	TONs	
Organic Compounds	OC	X	0.48	0.	0.48	TONs	
Pb - Lead	7439921	X	0.	0.	0.	TONs	
PE (Filt) - Primary PM, Filterable Portion Only	PM-FIL	X	5.41E-04	0.	5.41E-04	TONs	
PM10 (Filt) - Primary PM10, Filterable Portion Only	PM10-FIL		2.71E-04	0.	2.71E-04	TONs	
PM2.5 (FILT) - Primary PM2.5, Filterable Portion Only	PM25-FIL		3.88E-05	0.	3.88E-05	TONs	
VOC - Volatile Organic Compounds	VOC		0.43	0.	0.43	TONs	
Ammonia	NH3		0.19	0.	0.19	TONs	
CO - Carbon Monoxide	CO		0.2	0.	0.2	TONs	
Total of Chargable Pollutants					0.480541	TONS	

## - Processes

### - Process & Emissions Detail

Name: P001-1

Source Classification Code (SCC): 5-03-006-01

### - Material Information, Annual Average Operating Schedule & Throughput Percent

Schedule Trade Secret:

Hours Per Day: 24

Days Per Week: 7

Weeks Per Year: 52

Hours Per Year: 8760

Winter (Dec - Feb)%: 25

Spring (March-May)%: 25

Summer (June-Aug)%: 25

Fall (Sept-Nov)%: 25

Material	Material Action	Throughput	X Units
Waste Gas	Burned	38.97	MILLION CUBIC FEET

- **Process Emissions**

Pollutant	Code	\$ Method Used	Hours UnCont	UnCont. Factor (LBS/X)	Fugitive Amount	Stack Amount	Total	Units	Explanation
PE (Cond) - Primary PM Condensable Portion Only (All Less than 1 Micron)	PM-CON	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
SO2 - Sulfur Dioxide	SO2	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
NOx - Nitrogen Oxides	NOX	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
Organic Compounds	OC	X emissions: ENG. JUDGEMENT			0.48	0	0.48	TONs	Note: Based on AP-42 emission factors (11/98) using a site-specific NMOC value of 113.1 ppmv and USEPA Landfill Air Emissions Estimation Model (Version 3.02) for landfill gas generation rate and quantity of refuse in place. The organic compound emissions do not include methane and ethane per guidance of supplement to the policy issues document of STARShip User's Manual and the Frequently Asked Questions document (February 14, 1996).
Pb - Lead	7439921	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
PE (Filt) - Primary PM, Filterable Portion Only	PM-FIL	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
PM10 (Filt) - Primary PM10, Filterable Portion Only	PM10-FIL	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
PM2.5 (FILT) - Primary PM2.5, Filterable	PM25-FIL	emissions: ENG. JUDGEMENT			0	0	0.	TONs	

Portion Only									
VOC - Volatile Organic Compounds	VOC	emissions: ENG. JUDGEMENT			0.43	0	0.43	TONs	Note: Based on AP-42 emission factors (11/98) using site-specific NMOC value of 113.1 ppmv and USEPA Landfill Air Emissions Estimation Model (Version 3.02) for landfill gas generation rate and quantity of refuse in place. VOC emissions estimated by subtracting the non-VOC emissions (1,1,1-Trichloroethane, Acetone, Chlorodifluoromethane, Dichlorodifluoromethane, Dichloromethane, Ethane, Fluorotrichloromethane, and Perchloroethylene) from NMOC emission rate. Non-VOC pollutant emissions based on average concentrations from USEPA/EREF Research Project (Volume 5, Issue 3, Summer/Fall 2007) except for Chlorodifluoromethane, which was not included in the report. Chlorodifluoromethane emissions based on USEPA Landfill Air Emissions Estimation Model (Version 3.02) default concentration.
Ammonia	NH3	emissions: ENG. JUDGEMENT			0.19	0	0.19	TONs	Note: Based on ammonia concentration of 0.022% in LFG per RSL 11/19/10 test and USEPA Landfill Air Emissions Estimation Model (Version 3.02) for landfill gas generation rate and quantity of refuse in place.
CO - Carbon Monoxide	CO	emissions: ENG. JUDGEMENT			0.20	0	0.2	TONs	Note: Based on AP-42 emission factors (11/98) and USEPA Landfill Air Emissions Estimation Model (Version 3.02) for landfill gas generation rate and quantity of refuse in place.
Total of Chargable Pollutants							0.48	TONs	

- **Process & Emissions Detail**

Name: P001-2

Source Classification Code (SCC): 5-03-008-99

- **Material Information, Annual Average Operating Schedule & Throughput Percent**

Schedule Trade Secret:

Hours Per Day: 9

Days Per Week: 2

Weeks Per Year: 1

Hours Per Year: 18

Winter (Dec - Feb)%: 0

Spring (March-May)%: 0

Summer (June-Aug)%: 100

Fall (Sept-Nov)%: 0

Material	Material Action	Throughput	X Units

Material	Processed	27.07	TONs
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- Process Emissions

Pollutant	Code	\$ Method Used	Hours UnCont.	UnCont. Factor (LBS/X)	Fugitive Amount	Stack Amount	Total	Unit s	Explanation
PE (Cond) - Primary PM Condensable Portion Only (All Less than 1 Micron)	PM-CON	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
SO2 - Sulfur Dioxide	SO2	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
NOx - Nitrogen Oxides	NOX	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
Organic Compounds	OC	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
Pb - Lead	7439921	X emissions: ENG. JUDGEMENT			0	0	0.	TONs	
PE (Filt) - Primary PM, Filterable Portion Only	PM-FIL	X emissions: ENG. JUDGEMENT			5.41E-04	0	5.41E-04	TONs	Note: Total waste received in 2010 was 27.07 tons. The PM emissions were calculated based on emission factors used in HC-DOES PTI #14-03569 allowable emissions calculations.
PM10 (Filt) - Primary PM10, Filterable Portion Only	PM10-FIL	emissions: ENG. JUDGEMENT			2.71E-04	0	2.71E-04	TONs	Note: Total waste received in 2010 was 27.07 tons. The PM-10 emissions were calculated based on emission factors used in HC-DOES PTI #14-03569 allowable emissions calculations.
PM2.5 (FILT) - Primary PM2.5, Filterable Portion Only	PM25-FIL	emissions: ENG. JUDGEMENT			3.88E-05	0	3.88E-05	TONs	Note: Total waste received in 2010 was 27.07 tons. The PM-2.5 emissions were calculated based on emission factors for PM used in HC-DOES PTI #14-03569 allowable emission calculations and ratio of PM-2.5 to PM particle size multipliers in AP-42 Section 13.2.4 (11/06).
VOC - Volatile Organic Compounds	VOC	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
Ammonia	NH3	emissions: ENG.			0	0	0.	TONs	

		JUDGEMENT							
CO - Carbon Monoxide	CO	emissions: ENG. JUDGEMENT			0	0	0.	TONs	
Total of Chargable Pollutants							5.41E-04	TONS	