

# **Guidelines for Calculating Emissions from Crematory Operations**

April 2023

Crematory operations generate emissions of organic gases, oxides of nitrogen (NO<sub>X</sub>), oxides of sulfur (SO<sub>X</sub>), carbon monoxide (CO), particulate matter (PM), and Toxic Air Contaminants (TACs) from combustion of assist fuel as well as the cremation of human or animal remains.

# 1. GENERAL INSTRUCTIONS

Emissions can be estimated in several ways. The simplest way is to estimate emissions from emission factors. The most accurate is to estimate emissions from continual monitoring systems or source tests.

Even if emissions are estimated using a source test, depending on permit conditions, the source test may not include all pollutants. In such cases, default emission factors can be used to supplement the pollutants that were not included in the source test.

## **Emissions Estimated Using Default Emission Factors**

Emissions from fuel combustion, and emissions from remains are reported as two separate processes (e.g., Process P1, and Process P2). Natural gas combustion emissions are reported under the crematorium external combustion device, which is typically permitted by South Coast AQMD. Emissions from the combustion of human or animal remains are reported under the other process category. Each of these methods are detailed below.

#### **Process 1 - Natural Gas Combustion**

Facilities can estimate their criteria pollutant and TAC emissions from the combustion of assist fuel using the following equations:

## $E = Q \times EF$

where,

E = Annual Emissions of VOC, NOx, SOx, CO, PM, and TACs Q = Annual fuel usage (units as shown in Table 1 and 2)

EF = Emission factors from Tables 1 and 2

Table 1: External Combu	istion Equipm	ent (for all size	es)		
Fuel Type (Fuel unit)	Organic Gases (lb/unit)	Nitrogen Oxides (lb/unit)	Sulfur Oxides (lb/unit)	Carbon Monoxide (lb/unit)	Particulate Matter (lb/unit)
Natural Gas (mmscf) / Boilers Only	5.50	100.00	0.60	84.00	7.60
Natural Gas (mmscf) / Other Equipment	7.00	130.00	0.60	35.00	7.50
LPG, Propane, Butane (1000 gal.)	0.26	12.80	4.60	3.20	0.28
Diesel/Distillate Oil (1000 gal.)	1.32	20.00	0.21	5.00	2.00

# Default Natural Gas Criteria Pollutant Emission Factors

http://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/default-combustionemission-factors.pdf

Default Natural Gas Toxic Air Contaminant Emission Factors<sup>1</sup>

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Table 2: Defa	ult EF for Natural Gas Combustion - External Co	mbustion Equip	nent
<10MMBtu/H	Ir		
TAC Code	Pollutant	CAS No	lb/mmscf
2	Benzene	71432	0.0080
12	Formaldehyde	50000	0.0170
19	Total PAHs (excluding Naphthalene)	1151	0.0001
19	Naphthalene	91203	0.0003
29	Acetaldehyde	75070	0.0043
30	Acrolein	107028	0.0027
32	Ammonia*	7664417	18.000
40	Ethyl benzene	100414	0.0095
44	Hexane	110543	0.0063
68	Toluene	108883	0.0366
70	Xylene	1330207	0.0272

\* This value corresponds to equipment with selective non-catalytic reduction (SNCR), for equipment with selective catalytic reduction (SCR) substitute listed value using 9.1 lb/mmscf, and for equipment without SNCR or SCR substitute using 3.2 lb/mmscf.

<sup>&</sup>lt;sup>1</sup> AB2588 Guideline for TACs - <u>http://www.aqmd.gov/docs/default-source/planning/risk-assessment/quadrennial\_atir\_procedure.pdf</u>

# Process 2 - Emissions from the Cremation of Remains (Human or Animal)

Facilities can estimate their criteria pollutant and TAC emissions from the cremation of human or animal remains using the following equations:

# $E = Q \times EF$

where,

E = Annual Emissions of VOC and Toxic Air Contaminants (TACs)

Q = Annual throughput of human or animal remains in tons

EF = Emission factors for VOC or from Table 3

Default Criteria Pollutant Emissions Factors

Table 3: Cremation of Remains	
	Organic Gases (lb/unit)
	5.50

Default Toxic Air Contaminant Emission Factors

Table 4	Default TAC EF for Cremation of	Human and An	imal Remains	
TAC Code	Compound	CAS No	Human Cremation (lb/ton)	Animal Cremation (lb/ton)
	Arsenic and Compounds (Inorganic)	7440382	4.00E-04	4.00E-04
	Beryllium and Compounds	7440417	1.84E-05	1.84E-05
	Cadmium and Compounds	7440439	1.46E-03	1.46E-03
	Chromium, hexavalent	18540299	1.91E-04	1.91E-04
	Polychlorinated Dibenzofurans (PCDF)	1080	1.43E-07	1.43E-07
	2,3,7,8-Tetrachlorodibenzo-p- Dioxin	1086	7.74E-08	7.74E-08
	Formaldehyde	50000	2.89E-09	2.89E-09
	Hydrochloric Acid (Hydrogen Chloride)	7647010	1.97E+00	1.97E+00
	Lead and Compounds (Inorganic)	7439921	9.39E-03	9.39E-03
	Nickel and Compounds	7440020	5.09E-04	5.09E-04
	Mercury and Compounds (Inorganic)	7439976	5.32E-03	0.00E+00
	Polycyclic Aromatic Hydrocarbon (PAH)	1151	9.63E-04	9.63E-04

#### Emissions Estimated Using Continuous Emissions Monitoring Systems or Source Test Data

Emission factors based on source tests may be used for emissions reporting so long as they are submitted for review by South Coast AQMD's Source Test Engineering staff. The review may find that the emission factor from the source test is underreported, or the source test is not acceptable, which will result in an amendment to the submitted emission report(s). For these situations, Rule 301 (e)(10)(E) waves any surcharges for underreported emissions estimated using a source test that was submitted for review prior to or at the time of the official AER submittal due date. The difference or underpayment is required to be paid, but no surcharges will be applied. Facility personnel should verify with South Coast AQMD Compliance staff that their source test was submitted for review prior to using the resulting emission factors for AER.

If all emissions are estimated by continuous emission monitoring system (CEMS) data or source testing of a single stack that emits both fuel and remains combustion emissions, then all emissions can be reported from a single process.

If fuel combustion emissions and cremation of remains emissions are not combined (e.g., two separate stacks) then emissions from each operation should be reported in separate devices (if permitted separately) or processes (if permitted as one device, e.g., Device ES1 and ES2, or Process P1 and Process P2).

#### **Emissions Estimated Using Source Test and Default Emission Factors**

If a mixture of source test and default emission factors are used, then emissions from fuel combustion and emissions from cremation of remains should be reported in separate processes. An example of this is when a stack is only source tested for NOx emissions. In this case, the default NOx emission factor from Table 1 may be substituted using the NOx emission factor from the source test. All other default emission factors should be used for the other criteria and TAC emissions.

## 2. EXAMPLES SHOWING HOW TO REPORT

Criteria pollutant and TAC emissions must be reported separately for each process; combustion of assist fuel, human remains, and animal remains. This can be done through the following steps:

- 1. Determine the annual fuel usage and human and animals remains, (Throughput, Q).
- 2. Collect any approved CEMS or source test reports, if applicable.
- 3. Enter the information into the AER Reporting Tool.

## EXAMPLE 1:

Click <u>Emission Sources (ES) in the blue Navigation Menu</u>. The reporting tool displays existing emission sources in the green table as shown at bottom of the image below. If a crematory emission source is not listed, it must be added to the list by clicking on the <u>Add New Emission Source</u> link.

	Browse Facilities	Access Facility	START HERE				₩ 🖻	1 2
		Ready For Review	Facility ID: 9999	14 · SOUTH COAST	IR QUALITY I	NGT DIST(SCAQ	MD) · Reporting	period: 2022
	ID: 999914	Emission sou	ırce has been del	leted.				
2. Status U 3. Combust	pdate	Build Repo	orting Struc	ture				
4. Emission locations	s Release	Emission Sour	rces (ES) Classi	ification				
6. Report P 7. Addition Substances Usage 8. Perform 9. Review S	Production and Data Validation	Summary:	device has a s added. Add Devices ( devices by cli emission data	contains facility p specified Emission emissions source cking "Profile" un by clicking "Ope clicking on link "	n Source (E s) by clickin der the Em n" under th	S). New emis ng "Add New ission Source e Emissions o	Emission Sources of Emission Sour (ES) Column	ce". Edit . Add
	Submission							
	300111551011	Add New Em	missions Batch Fi	]	<u>e</u> for more ir	structions.		
	Juunnision	Add New Em				structions.		
	Juunnision	Add New Em	ission Source emission sources.		e for more ir ermit NO ermit Device			
		Add New Em Displaying 0 e A/N	ission Source		ermit NO			
	Juonitation	Add New Em Displaying 0 d A/N AER Device ID	ission Source		ermit NO	ə ID		Print Preview
	340011331001	Add New Em Displaying 0 d A/N AER Device ID	Ission Source		ermit NO ermit Device Search:	PID S ES Source	e Has rry Emissions Equip	Print Preview ment PERP Status

#### **Adding Emission Sources**

If you need to add an emission source for a crematory follow these directions. If you do not, then skip to Entering Emissions below. Fill out relevant information to the Emission Source by identifying ES Name (example – Human Remains Cremation) and selecting the appropriate <u>Operating ES Status</u> (typically normal operation), the <u>Categorize Emission Source</u> button will appear. By clicking this button, the tool will take the user to the next screen for categorizing this emissions source.

AER Home Browse Facilities	s Access Facility START H	ere 🖩 🖶 🕜
	Ready For Review · Facility ID:	999914 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2022
Facility ID: 999914	Edit Emission Source	
I. Facility Information     Status Update     Scombustion Fuels     Emissions Release     Locations     S. Emission Sources (ES)     Report Process/Emissions	specifica best refe Red Aster	emissions sources using information found on permits, manufacturers tions, or identifying placards. Select the Operating ES Status that ect the device's operation for this reporting period. All areas with a risk (*) must be addressed. Note: Some devices have been pre- d, verify that the information is correct
7. Additional Toxic Substances Production and Usage	Permitted	
8. Perform Data Validation	A/N	· ·
9. Review Summaries 10. Print Facility Report 11. Report Submission	PERP Equipment(CARB's Portable Equipment Registration Program)	Only CARB GHG MRR and Over 250 tons/yr (PTE) facilities must report PERP  Emissions are not included when calculating emission fees
	Permit No	
	Permit Device ID	D1
	AER Device ID	will be assigned upon saving
	ES Name	Human Remains Cremation *
	Operating ES Status	Normal Operation
	Comment	
	Emission Source Category	Categorize Emission Source
	Design Capacity	v v
	Save or Save and ro Save and proceed to Pro	eturn to List of Emission Sources or occess Reporting or <u>Cancel</u>
	Optional: Save and Mari	k as Completed Click here to delete this emission source and associated data
	AQMD web site Home   AER W	Veb Site   Submit question/comment   Report a Bug

Crematory Operations are comprised of two processes; No. 1 External Combustion Equipment and No. 7 Other Processes (for the combustion of human or animal remains). Click No. 1 and a list of external combustion equipment will appear. Select *Crematorium*. Now, click No. 7 and select *Other process equipment*. See the next two screens for examples for selecting these two processes.

mitted A/N	Permit No	Permit Device ID	Permit Equipment Description	AER Device ID	ES Name
				ESnull	Human Remains Cremation
<ol> <li>External Cor following Eq</li> </ol>		ent (e.g., boiler, dryer, o	oven, furnace, heater, afterburner, flar	e, kiln or incinerator)	click here to select one the
Boller <	10 MMBTU/HR		Heater 10-100 MI	MBTU/HR	
Boiler 1	0-100 MMBTU/H	IR	Heater >100 MMI	BTU/HR	
Boiler >	100 MMBTU/HR		Space/Water heat	ter - not related to a	a process <10 MMBTU/HR
🗆 Oven <	10 MMBTU/HR		□ Afterburner <10	MMBTU/HR	
Oven 10	0-100 MMBTU/H	R	Afterburner 10-10	00 MMBTU/HR	
🗌 Oven >	100 MMBTU/HR		□ Afterburner >100	MMBTU/HR	
🗌 Dryer <	10 MMBTU/HR		Kilns		
Dryer 1	0-100 MMBTU/H	IR	Incinerator		
Dryer >	100 MMBTU/HR		Crematorium		
Furnace	e <10 MMBTU/H	R	Flare		
Furnace	10-100 MMBTU	I/HR	Charbroiler		
Furnace	>100 MMBTU/I	HR	Deep Fat Fryers		
	<10 MMRTU/HR				Save Cance
tegorize Emi		R	Flare		Save Cance
tegorize Emi	ssion Source		☐ Flare ☐ Charbroller		Save Cance
t <b>egorize Emi</b> Furnace	ssion Source	I/HR			Save Cance
tegorize Emi Furnace Furnace Furnace Furnace Heater	ssion Source < <10 MMBTU/H 10-100 MMBTU/ > >100 MMBTU/HR <10 MMBTU/HR	I/HR HR	Charbroiler  Cheep Fat Fryers		
tegorize Emi Furnace Furnace Furnace Heater A In addi	ssion Source < <10 MMBTU/H 10-100 MMBTU/ > >100 MMBTU/HR <10 MMBTU/HR	I/HR HR g fuels, if this device	Charbroiler	e sure box "Other	
tegorize Emi Furnace Furnace Furnace Heater A Heater A naddi checke	ssion Source <pre><clo h<br="" mmbtu="">: 10-100 MMBTU/ &gt; 100 MMBTU/HR <lo hr<br="" mmbtu="">tion to burnin d under Categ nbustion Equipm</lo></clo></pre>	i/HR HR g fuels, if this device ory 7 below.	Charbroiler  Cheep Fat Fryers		Process Emissions" is
tegorize Emi Furnace Furnace Furnace Heater A In addi checke 2. Internal Cor following Eq	ssion Source < <10 MMBTU/H : 10-100 MMBTU/H > 100 MMBTU/HR tion to burnin d under Categ nbustion Equipm uipment:	I/HR HR <b>g fuels, if this device</b> ory 7 below. ent (e.g., internal comb	Charbroller Deep Fat Fryers processes other materials, mak	bine or micro turbine	Process Emissions" is
tegorize Emi Furnace Furnace Heater In addi checke 2. Internal Cor following Eq 3. Spray Coatil	ssion Source <pre>&lt;10 MMBTU/H 10-100 MMBTU &lt;10 MMBTU/HR tion to burning d under Categ nbustion Equipm nbustion Equipment: ng/Spray Booth ( f Organics (e.g.,</pre>	I/HR HR <b>ory 7 below.</b> ent (e.g., internal comb e.g., coatings, solvents,	Charbroller Deep Fat Fryers processes other materials, mak ustion engine (excluding vehicles), tur	bine or micro turbine ne of the following Ed	Process Emissions" is ) <u>click hers</u> to select one of the quipment:
tegorize Emi Furnace Furnace Hurnace Heater A In addi checke 2. Internal Cor following Eq 3. Spray Coath 4. Other Use o following Eq	ssion Source <pre>&lt;10 MMBTU/H 10-100 MMBTU &lt;10 MMBTU/HR tion to burning d under Categ nbustion Equipm nbustion Equipm ng/Spray Booth ( f Organics (e.g., ulpment:</pre>	I/HR g <b>tuels, if this device</b> ory 7 below. ent (e.g., internal comb e.g., coatings, solvents, inks,	Charbroller Deep Fat Fryers processes other materials, mak ustion engine (excluding vehicles), tur adhesives, etc.) <u>click here</u> to select o	bine or micro turbine ne of the following Ec ting/Spray Booth, <u>clic</u>	Process Emissions" is a) click here to select one of the aujoment: <u>ik here</u> to select one of the
tegorize Emi Furnace Furnace Furnace Heater A In addi checke 2. Internal Cor following Eq 3. Spray Coatil 4. Other Use o following Eq 5. Liquid Stora	ssion Source <pre>&lt;10 MMBTU/H 10-100 MMBTU &lt;10 MMBTU/HR tion to burnin d under Categ nbustion Equipm nbustion Equipm ng/Spray Booth ( f Organics (e.g., uipment: ge Tank (e.g. Un</pre>	I/HR g <b>tuels, if this device</b> ory 7 below. ent (e.g., internal comb e.g., coatings, solvents, coatings, solvents, inks, derground, Abovegroun.	Charbroiler Deep Fat Fryers processes other materials, mak ustion engine (excluding vehicles), tur adhesives, etc.) click here to select o adhesives, etc.) except in Spray Coal	bine or micro turbine ne of the following Ec ing/Spray Booth, <u>clic</u> <u>click here</u> to select on	Process Emissions" is a) click here to select one of the quipment: there to select one of the se of the following Equipment:
tegorize Emi Furnace Furnace Furnace Heater A In addi checke 2. Internal Cor following Eq 3. Spray Coatil 4. Other Use o following Eq 5. Liquid Stora 6. Fuglitive Cor	ssion Source <pre>&lt;10 MMBTU/H 10-100 MMBTU &lt;10 MMBTU/HR tion to burnin- dumder Catego nbustion Equipm nbustion Equipm nbustion Equipment: ng/Spray Booth ( f Organics (e.g., uipment: ge Tank (e.g. Un nponents (Emiss</pre>	I/HR g fuels, if this device ory 7 below. ent (e.g., internal comb e.g., coatings, solvents, coatings, solvents, inks, derground, Abovegroundon Leaks from Process i	Charbroiler Deep Fat Fryers processes other materials, mak ustion engine (excluding vehicles), tur adhesives, etc.) click here to select o adhesives, etc.) except in Spray Coal d, Small Tanks, Dispensing Systems) (	bine or micro turbine ne of the following Ec ting/Spray Booth, <u>clic</u> click here to select on .176), <u>click here</u> to se	Process Emissions" is a) click here to select one of the quipment: ik here to select one of the lee of the following Equipment: alect all applicable Equipment:

After saving, the user will be returned to the Device page. Click on the Save and proceed to List of Emission Sources button which will navigate you to the Emission Source Page.

#### **Reporting Process Emissions**

Click on the "<u>Open</u>" link in the Emissions column next to the Emission Source for the crematory operations, as shown below.

	Browse Facilities	Access Facility	START HERE							<b>-</b>		?
Facility		eady For Review	Facility ID: 999	914 · SOUTH COA	ST AIR	QUALITY /	NGT DI	ST(SCAQA	ND) · Rep	orting	period: 3	2022
1. Facility I	ID: 999914	Form data is	successfully say	/ed.								
2. Status Up 3. Combust	date	Build Repo	orting Strue	cture								
4. Emission: Locations	Release	Emission Sour	ces (ES) Class	ification								
6. Report P 7. Additiona		Summary:		contains facilit specified Emis								be
7. Additional Toxic Substances Production and Usage 8. Perform Data Validation 9. Review Summaries 10. Print Facility Report 11. Report Submission	Instruction:	devices by cl emission data	(emissions sour icking "Profile" a by clicking "C clicking on lini	' unde Open''	r the Em under th	ission e Emi	Source	(ES) Col	lumn.	Add		
	Storage Tank E	missions Batch F	ïle Import - <u>Click</u>	<u>here</u> f	or more in	nstruct	ions.					
		Add New Emi	ssion Source									
		Displaying 1 e	mission sources	i.								
		A/N			Perr	mit NO						
		AER Device ID			Porr	mit Device	DID					
					ren	inte be rice	e ib					
		Search Emissi	ion Sources		ren							
		Search Emissi	ion Sources		Fell	Search:					Print Pre	rview
		Emission Source Emissions	Permit Permit		AER	Search:		Source Category	Has Emissions	Equipm	Print Pre	ES
		Emission	A/N Permit Permit	Permit Equipment	AER Device	Search:	ES Group Name			<b>Equipm</b> Cremato	ent PERP	ES Statu Work
		Emission Source Emissions (ES)	A/N Permit Permit NO Device ID	Permit Equipment	AER Device ID	Search: ES Name Human Remains	ES Group Name	Category External Combustion, Other	Emissions		ent PERP	

The reporting tool adds a new pop-up window that shows processes P1 and P2. Click the hyperlink "<u>Open</u>" to enter process information: process, throughput, criteria emissions, and TACs.

		ID	Device Description	Device ID	ES Name	ES Group Name	Source Category	Emissions?	Equipment	PERP	ES Statu
<u>Open</u>			D1		ES15	Human Remains Cremation		External Combustion, Other Processes	Y	Crematorium	N
	Р	rocess ID	Source	Group	Pro	cess/Materi	ial/Fuel Na	me	Status	Operation	Туре
Ope	en	P1	External C	ombustion				١	Work in progress	routin	e
Ope	en	P2	Other Proce	ss Emission	s			١	Work in progress	routin	e

The hyperlinks "Open" will take the user to the Process page for that process.

After clicking the "<u>Open</u>" link, the Process page will open. The following is for the *External Combustion Equipment* process. The process information for *Other Processes* will require additional information which will be discussed later.

	Ready For	Review · Facility	ID: 999914	· SOUTH C	DAST	AIR QUALITY	MGT DIST	SCAQMD) · Report	rting pe	riod: 2	2022
Facility ID: 999914	« Bar	ck to Emission So	ource Proce	ess Referen	ce						
I. Facility Information	Exte	rnal Combu	ustion								
2. Status Update	1000								5. T. T. T.		
<ol> <li>Combustion Fuels</li> <li>Emissions Release locations</li> <li>Emission Sources (ES)</li> </ol>	Comb Comb Fuels	se provide spec bustion Emissio bustion fuels r s link in the m uctions are ava	n Sources must be s ienu on th	elected one left-sid	usag n the e) be	e, emission combustic	factor a on fuels ing data	and control eff page (see 3. C on this page.	iciency ombu	tion	ny).
6. Report Process/Emission										-	
Combustion External Combustion	Step 1	: Process						Optional: M	ark as C	omple	eted
Internal Combustion		AFR Device ID	Parmit	Device ID	A/N	Process ID	Rule #	Equipment	PERP	Fuel	sco
Use of organics	Open			D1	-014	P1	iture #	Crematorium	No	1 det	500
Spray Coating/Spray Booth								Click here to g	lelete ti	nis prod	cess.
Other Use of Organics	Step 2	: Throughput									
Storage Tanks			ual Through				Californi	ia/Toxic Throughp			
Fugitive Components	Open	Ann	iual inrough	put			Criter	Ta/ Toxic Throughp	ut		
Other Processes	Upen										
Process Upset	Step 3	: Criteria Emi	ssions (lb	5)			Use D	efault Emission F	actors i	favaila	able.
ubstances Production and	_										
sage		Pollutant	EF	Unit		EF	Data Sourc	e	Emis	sions	
	Open	VOC		lbs /							
	Open	NOx		lbs /							
. Review Summaries	Open	SOx		lbs /							
<ul> <li>Perform Data Validation</li> <li>Review Summaries</li> <li>Print Facility Report</li> </ul>				lbs /							
. Review Summaries	Open	CO		The C							
. Review Summaries 0. Print Facility Report		PM		lbs /							
. Review Summaries 0. Print Facility Report	Open Open		DDC) Emis								

Click on the "<u>Open</u>" link in the green table under Step 1, as shown in the screen above. Information can be selected and entered in every field, however only *Fuel* and *Rule* # are required entries as noted by the red asterisk next to those fields. Click <u>Save</u> button, as shown in the screen below.

1	Edit Emiss	ion Proc	ess - Ex	terna	al Combust	ion	1				×
A	ER Device ID	Permit l	Device ID	A/N	Process ID	Ru	le #	Equipment	PERP	Fuel	SCC
E	515	1	D1		P1	4	01	Crematorium	No	Natural Gas	
	AER Device	ER Device ID ES15		AER Device Name			Hur	nation			
	PERMITTED	)		Permi	t Device ID		D1				
	Process ID	P1		Proce	ss Name						
	Process Com	iment									
	SCC										
	Fuel	Natural	Gas		~	*					
	Rule #	474	•	* <u>A</u>	dd Rule						
	Equipment	Cremate	orium							$\sim$	
									Save	Cancel	

After saving, the pop-up window for Step 1 closes. Click open on the Step 2 Throughput section. Enter the Fuel Usage (Annual Throughput) and Throughput Type (Input because it is based on the amount of fuel input to the incinerator) and Fuel Usage Comment in the pop-up window, as shown below. Click <u>Save</u> button.

Edit Throughput Information - External Combustion												
AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Equipment	PERP	Fuel	SCC				
ES15	D1		P1	401	Crematorium	No	Natural Gas					
Anı	nual Throughput			C	riteria/Toxic Th	roughpu	t					
Fuel Usage (Ann Throughput Type	517	-	00.00000000 ut <b>v</b> ] *		* mmscf	~	*					
Fuel Usage Com	nent											
						Sav	e Cance	el				

Default emission factors are entered into Step 3 and Step 4.

cility ID: 999914	« Ba	ck to Emission S	ource Process Refe	rence							
Facility Information	-	ernal Comb			-						
Status Update											
Combustion Fuels			cific information								
Emissions Release			on Sources incluc								
cations			must be selecte								
Emission Sources (ES)			nenu on the left			-		page.	Detail		
Report Process/Emissions	Instr	uctions are av	ailable by clickir	ig on i	Help Icon	in the to	bol bar.				
Combustion	Sten	1: Process					Optio	nal: M	ark as Compl	eted	
External Combustion	step	1. 11000033							ant ao e empi		
Internal Combustion		AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Equipment	PERP	Fuel	SCO	
se of organics	Open	ES15	D1		P1	401	Crematorium	No	Natural Gas		
Spray Coating/Spray								re to c	elete this pro	ocess.	
Booth											
Other Use of Organics	Step 2	2: Throughput									
orage Tanks											
ugitive Components			Annual Throughput				Criteria/Toxic	Throug	hput		
ther Processes	Open	1,	000.00000000 mmscf				1,000.00000	000 mm	) mmscf		
rocess Upset											
Additional Toxic	Step 3	3: Criteria Emi									
		b. Criteria Lini	issions (lbs)				Use <u>Default Emi</u>	ssion F	actors if avail	lable.	
	_		. ,					ssion F		lable.	
stances Production and		Pollutant	EF		Unit		EF Data Source	ssion F	Emissions		
stances Production and ge	<u>Open</u>	Pollutant VOC	EF 7.00000000e-		/ mmscf	AQMI	EF Data Source D default	ssion F	Emissions 7.00000	000e+	
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If you would like to change the emission factors by substituting using results from a source test, click on the "<u>Open</u>" link next to the pollutant that has the emission factor you would like to replace. In the pop-up window, click the Use Default checkbox to uncheck the box. Enter the new emission factor. Enter the reference for the emission factor. If it is a source test, enter the South Coast AQMD Source Test ID. As noted previously, only source tests that have been either approved or submitted for review can be used for emission reporting in AER. If your source test does not have a South Coast AQMD Source Test ID, contact the South Coast AQMD inspector for your facility. Select the appropriate Emission Factor Data Source from the dropdown menu. Click the save button.

nternal Combustion		AER Device ID	Permit Device ID	A/N Proce	ess ID	Rule #	Equipment	PERP	Fuel	SCC
e of organics	Open		D1		1	401	Crematorium	No	Natural Gas	SUC
Spray Coating/Spray Booth					•				delete this pr	ocess.
Other Use of Organics itorage Tanks	Step 2	: Throughput								
Fugitive Components		Ar	nnual Throughput				Criteria/Toxic	Throug	ghput	
Other Processes	Open	1,00	00.00000000 mmscf				1,000.00000	1000 mm	nscf	
Process Upset	Stop 7	: Criteria Emis	cions (lbs)				Jse <u>Default Em</u>			labla.
Additional Toxic bstances Production and	step s	. Criteria Ellis	sions (ibs)			L	Jse <u>Default Em</u>	ISSION F	actors if avai	lable.
age		Pollutant	EF	Ur	nit	E	F Data Source		Emissions	
Perform Data Validation	<u>Open</u>	VOC	7.00000000e	+0 lbs / mms	cf	AQMD	default		7.00000	0000e+3
Review Summaries	<u>Open</u>	NOx		+2 lbs / mms			default		1.30000	
. Print Facility Report	Open	SOx		-1 lbs / mms			default		6.00000	
. Report Submission	Open	CO PM		+1 lbs / mms +0 lbs / mms			default default		3.50000	0000e+4
	<u>Open</u>	FM	7.50000000		CI .	AQMD	deraute		7.50000	0000045
	Step 4	: Toxic (TAC/O	DC) Emissions	(lbs)						
		TAC/ODC Group	CAS #	EF		Unit	EF Data S		Emissio	
	Open	Benzene	71432	8.00000000			AQMD defa		8.00000	
	Open Open	Formaldehyde PAHs [PAH, POM]	50000	1.70000000			AQMD defai		1.70000	
	Open	PAHs [PAH, POM]	91203	3.00000000			AQMD defai		3.00000	
	Open	Acetaldehyde	75070	4.3000000			AQMD defa			0000e+0
	Open	Acrolein	107028	2.7000000			AQMD defa	ult	2.70000	0000e+0
	Open	Ammonia	7664417	1.80000000			AQMD defa			0000e+4
	<u>Open</u>	Ethyl benzene	100414	9.5000000			AQMD defa		9.50000	
										00000+0
	Open	Hexane	110543	6.3000000			AQMD defa		6.30000	
	Open	Toluene	108883	3.66000000	e-2 lb	s / mmscf	AQMD defa	ult	3.66000	0000e+1
	Open Open				e-2 lb	s / mmscf		ult		0000e+1
	Open Open	Toluene Xylenes	108883	3.66000000	e-2 lb	s / mmscf	AQMD defa	ult	3.66000	0000e+1
	Open Open Add	Toluene Xylenes New	108883 1330207	3.66000000 2.72000000	e-2 lb	s / mmscf	AQMD defa	ult	3.66000	0000e+1
) Dpen Criteria Emissio	Open Open Add	Toluene Xylenes New	108883 1330207 ernal Combu	3.66000000 2.72000000	e-2 lb e-2 lb	s / mmscf s / mmscf	AQMD defa	ult	3.66000 2.72000	0000e+1
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If you are satisfied with all the information entered in the Process page, click on the <<Back to Emission Source Process Reference button on the bottom of the page, as shown in the screen below.

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eview Summaries	Open	NOx	1.30000000	+2 lb	os / mmscf	AQN	ND default		1.300000	000e+5		
Print Facility Report	Open	SOx	6.0000000	e-1 lb	os / mmscf	AQN	ND default		6.000000	000e+2		
	<u>Open</u>	со	3.5000000e	+1 lb	os / mmscf	AQN	ND default		3.500000	000e+4		
	<u>Open</u>	PM	7.5000000e	+0 lb	os / mmscf	AQN	ND default		7.500000	000e+3		
S	tep 4	4: Toxic (TAC/C	DDC) Emissions	(lbs)	EF	Unit	EF Data Se	ource	Emission	ıs		
	Open	Benzene	71432	8.0	0000000e-3	lbs / mmsc	f AQMD defau	lt	8.000000	000e+0		
	Open	Formaldehyde	50000	1.7	0000000e-2	lbs / mmsc			1.700000			
9	Open	PAHs [PAH, POM	] 1151	1.0	0000000e-4	lbs / mmsc	f AQMD defau	lt	1.00000	000e-1		
9	Open	PAHs [PAH, POM	91203	3.0	0000000e-4	lbs / mmsc	f AQMD defau	lt	3.000000	000e-1		
9	Open	Acetaldehyde	75070	4.3	0000000e-3	lbs / mmsc	f AQMD defau	lt	4.300000	000e+0		
2	Open	Acrolein	107028	2.7	0000000e-3	lbs / mmsc	f AQMD defau	lt	2.700000	000e+0		
9	<u>Open</u>	Ammonia	7664417	1.8	0000000e+1	lbs / mmsc	f AQMD defau	lt	1.800000	000e+4		
<u>(</u>	<u>Open</u>	Ethyl benzene	100414	9.5	0000000e-3	lbs / mmsc	f AQMD defau	lt	9.500000	000e+0		
1	Open	Hexane	110543	6.3	0000000e-3	lbs / mmsc	f AQMD defau	lt	6.300000	000e+0		
(	<u>Open</u>	Toluene	108883		600000e-2				3.660000			
						lbs / mmsc	f AQMD defau		2,720000			

Click the "Open" link next to Process 2 Other Process Emissions in the Process References pop-up box.

A/N	Permit No	Permit Device ID	Permit Device Description	AER Device ID	ES Name	ES Group Name	Source Category	Emissions	e Equipment	PERP	ES Status
<u>Open</u>			D1		ES15	Human Remains Cremation		External Combustion Other Processes	Y Y	Crematorium	N
	F	rocess ID	Source	Group	Pro	cess/Materi	al/Fuel Na	ne	Status	Operation	Туре
	<u>Open</u>	P1	External C	ombustion					Work in progress	routin	e
	Open	P2	Other Proces	ss Emission	S				Work in progress	routin	e
Ado	d Proces	s/Materi	al/Fuel	D							

Click on the "<u>Open</u>" link in the green table under Step 1. Identify the Process Name and fill out the Activity Code by selecting the appropriate information from the drop-down menu from each box. The example below shows entries for the correct sector, industry, operation, process, and rule for crematory operations. Click <u>Save</u> button.

	ission	Pro	cess	- Other	Proce	sses		×
AER Device ID	Pern Device		A/N	Process ID	Rule #		Activity	SCC
S15	D1			P2	401	: Comm	neous Operations and Services : Cremation nercial / Institutional : Single Chamber / Remains	
AER Dev	ice ID		ES	15 AEF	Device	Name	Human Remains Cremation	
PERMIT	TED			Per	m <mark>it</mark> Devid	ce ID	D1	
Process	ID		P2	Pro	ess Nan	ne		
Process	Comme	nt						
SCC								
Activity	Code *	Sect	or:					
,,		Mis	cellar	neous Op	eration	s and S	ervices 🗸	
			istry:					
		Cre	matio	on			~	
			ration					
				cial / Ins	titutior	nal	~	
		Proc						
		Sin	gle C	hamber /	Anima	al Rema	ins 🗸	
Rule #		401		-	* <u>Add</u>	<u>Rule</u>		
								_
							Save Cance	

After saving, the pop-up window for Step 1 closes. Click open on the Step 2 Throughput section. Enter the Throughput Type (for this example, the second process would be throughput of remains in tons), as shown below. Click <u>Save</u> button.

Edit Thre	oughput In	form	ation - O	ther P	rocesses	×
AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Activity	SCC
ES15	D1		P2	401	Miscellaneous Operations and Services : Cremation : Commercial / Institutional : Single Chamber / Animal Remains	
				A	nnual Throughput	
Annual Th	nroughput	1,	000.0000	0000	* tons ~ *	
Throughp	ut Type	In	put 🗸	*		
Throughp	ut Comment					
					Save Сапсе	I -

Default emission factors are entered into Step 3 and Step 4.

acility ID: 999914		Device ID	Device ID	A/N	ID #			Activ	· ·			SCI
	<u>pen</u>	ES15	D1		P2 40	Miscellaneou	s Opera	tions and Service Chamber /	vices : Crer	nation : C	ommercial	
Status Update						7 Institutione	a . sing				this proces	is.
Combustion Fuels												
Emissions Release Sto	ep 2	: Throug	hput									
cations												
Emission Sources (ES)						Annual Th						
. Report Process/Emissions	pen					1,000.0000	0000 to	ns				
Combustion St.	on 7	· Critori	a Emissio	as (lb	(1			Lice Defau	lt Emissis	- Easter	s if availabl	
External Combustion	ep a	. criteria	a Emission		s)			Use Derat	ILL EMISSIC	on ractor	S IT AVAILADE	e.
Internal Combustion		Pollutant	EF		Unit	Controlled	EF E	F Data Source	e Overa	II CE	Emissions	
Use of organics	pen	VOC	2,00000	000e+0	lbs / tons	No	AC	MD default			2.00000000	e+
Spray Coating/Spray Booth	Add	New										
Other Use of Organics												
Storage Tanks Sto	ep 4	: Toxic (	TAC/ODC)	Emis	sions (lb	s)						
Fugitive Components												
Other Processes		TAC	/ODC Group		CAS #	EF	Unit	Controlled EF	EF Data Source	Overall CE	Emission	s
Process Upset	pen		and Compou	nds	7440382	4.00000000e-4	lbs /	No	AQMD		4.00000000	
Additional Toxic	Ken	(i	norganic)		/ 440302	4.000000000-4	tons	NO	default		4.00000000	e.
	pen	E	Beryllium		7440417	1.84000000e-5	lbs / tons	No	AQMD default		1.84000000	e-
Perform Data Validation					-		lbs /		AOMD			
Review Summaries	pen	(	Cadmium		7440439	1.4600000e-3	tons	No	default		1.46000000	e+(
	<u>pen</u>		i, hexavalent impounds)	(and	18540299	1.91000000e-4	lbs / tons	No	AQMD default		1.9100000	e-
. Report Submission	pen	without i	ed dibenzofu ndividual iso reported		1080	1.43000000e-7	lbs / tons	No	AQMD default		1.43000000	e-4
Q	pen		d dioxins, w isomers rep		1086	7.74000000e-8	lbs / tons	No	AQMD default		7.74000000	e-
Q	pen	For	maldehyde		50000	2.8900000e-9	lbs / tons	No	AQMD default		2.89000000	e-
	pen	Hydr	ochloric acic		7647010	1.97000000e+0	lbs / tons	No	AQMD default		1.97000000	e+
Q					7439921	9.39000000e-3	lbs / tons	No	AQMD default		9.39000000	e+
	pen	Lead com	oounds (inor	ganic)	1 107721							
Q	pen pen	Lead com	Nickel	ganic)	7440020	5.09000000e-4	lbs / tons	No	AQMD default		5.09000000	e-

If you would like to change the emission factors, for example replace them with source tested values, click on the "Open" link next to the pollutant that has the emission factor you would like to replace. In the popup window, click the Use Default checkbox to uncheck the box. Enter the new emission factor. Enter the reference for the emission factor. If it is a source test, enter the South Coast AQMD Source Test ID. As noted previously, only source tests that have been either approved or submitted for review can be used for emission reporting in AER. If your source test does not have a South Coast AQMD Source Test ID contact the South Coast AQMD inspector for your facility. Select the appropriate Emission Factor Data Source from the drop-down menu. Click the save button. The following screenshots show an example of how to substitute a default emission factor for beryllium with one from a source test.

			re available by								
I. Facility Information							_				
. Status Update	Step	1: Proces	s				_	Optional	: Mark a	s Complete	d
. Combustion Fuels	_										
. Emissions Release ocations		AER Device ID	Permit A/N P	ID +	1		Activ				scc
. Emission Sources (ES)	Open	ES15	D1	P2 40			e Chamber /			ommercial	
6. Report Process/Emissions					7 Institutiona	at : Singt				this proce	
Combustion							C	tick here	uerere	citis proce.	
External Combustion	Step :	2: Throug	hput								
Use of organics					Annual Th	roughpu	ıt				
Spray Coating/Spray	Open				1,000.0000	00000 to	ns				
Booth											
Other Use of Organics	Step :	3: Criteria	a Emissions (Ib	s)			Use Defau	ilt Emissio	n Factor	s if availab	le.
Storage Tanks											
Fugitive Components		Pollutant	EF	Unit	Controlled		F Data Source	e Overa	II CE	Emissions	
Other Processes	Open	VOC	2.0000000e+0	lbs / tons	No	AQ	MD default			2.00000000	e+3
Process Upset	Ade	dNew									
	Sten	4: Toxic (	TAC/ODC) Emis	sions (lh	s)						
ubstances Production and sage . Perform Data Validation	Step -		TAC/ODC) Emis	cas #	s) EF	Unit	Controlled	EF Data	Overall CF	Emission	s
ubstances Production and sage . Perform Data Validation . Review Summaries D. Print Facility Report	Step ·	ТАС	,			lbs /	Controlled EF No	Source AQMD	Overall CE	Emission 4.00000000	
. Additional Toxic ubstances Production and sage . Perform Data Validation . Review Summaries 0. Print Facility Report 1. Report Submission		TAC Arsenic	/ODC Group	CAS #	EF		EF	Source			)e-1
ubstances Production and sage . Perform Data Validation . Review Summaries D. Print Facility Report	Open	TAC Arsenic (i	/ODC Group and Compounds	CAS #	EF 4.00000000e-4	lbs / tons lbs /	EF No	Source AQMD default AQMD		4.00000000	)e-1 )e-2
ubstances Production and sage . Perform Data Validation . Review Summaries 0. Print Facility Report	Open Open	TAC Arsenic E Chromium	/ODC Group and Compounds anguais) Beryllium	CAS # 7440382 7440417	EF 4.00000000e-4 1.84000 00e-5	lbs / tons lbs / tons lbs /	EF No No	Source AQMD default AQMD default AQMD		4.00000000	)e-1 )e-2  e+0
ubstances Production and sage . Perform Data Validation . Review Summaries D. Print Facility Report	Open Open Open	TAC Arsenic ( Chromium cc Chlorinati without i	/ODC Group and Compounds servilium Cadmium	CAS # 7440382 7440417 7440439	EF 4.00000000e-4 1.84000 00e-5 1.46000000e-3	lbs / tons lbs / tons lbs / tons lbs /	EF No No	Source AQMD default AQMD default AQMD default AQMD		4.00000000 1.84000000 1.46000000	De-1 De-2 De+0 De-1
ubstances Production and sage . Perform Data Validation . Review Summaries D. Print Facility Report	Open Open Open Open	TAC Arsenic Chromium Chlorinati without i Chlorinate	/ODC Group and Compounds asystic Beryllium Tadmium I, hexavalent (and impounds) ed diberzofurans, ndividual isomers	CAS # 7440382 7440417 7440417 18540299	EF 4.00000000e-4 1.84000000e-3 1.46000000e-3 1.91000000e-4	Lbs / tons Lbs / tons Lbs / tons Lbs / tons Lbs /	EF No No No	Source AQMD default AQMD default AQMD default AQMD default AQMD		4.00000000 1.84000000 1.46000000 1.91000000	De-1 De-2 De-2 De-1 De-1
ubstances Production and sage . Perform Data Validation . Review Summaries 0. Print Facility Report	Open Open Open Open Open	TAC Arsenic E Chromium cc Chlorinat without i Chlorinate individual	/ODC Group and Compounds oberyllium Sadmium h, hexavalent (and mpounds) ad dibenzofurans, ndividual isomers reported d dioxins, without	CAS # 7440382 7440417 7440439 18540299 1080	EF 4.00000000-4 1.84000 00e-5 1.46000000e-3 1.91000000e-7	lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons	EF No No No No	Source AQMD default AQMD default AQMD default AQMD default AQMD default AQMD		4.00000000 1.84000000 1.46000000 1.91000000 1.43000000	De-1 De-2 De-4 De-4
ubstances Production and sage . Perform Data Validation . Review Summaries D. Print Facility Report	Open Open Open Open Open Open	TAC Arsenic Chromium Chlorinat individual For	/ODC Group and Compounds exercision Servitium cadmium be dibenzofurans, ndividual isoans, reported di dioxins, without isomers reported	CAS # 7440382 7440417 7440417 7440439 18540299 1080 1086	EF 4.00000000-4 1.84000 00e-5 1.46000000e-3 1.91000000e-4 1.43000000e-7 7.74000000e-8	lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons	EF No No No No No	Source AQMD default AQMD default AQMD default AQMD default AQMD default AQMD		4.00000000 1.84000000 1.46000000 1.91000000 1.43000000 7.74000000	De-1 De-2 De-2 De-1 De-4 De-5 De-6
ubstances Production and sage . Perform Data Validation . Review Summaries 0. Print Facility Report	Open Open Open Open Open Open Open	TAC Arsenic E Chromium cc Chlorinate individual For Hydr	/ODC Group and Compounds execution Cadmium , hexavalent (and impounds) ad dibenzofurans, ndividual toomers reported dioxins, vithout isomers reported maldehyde	CAS # 7440382 7440417 7440417 18540299 1080 1086 50000	EF 4.00000000-4 1.84000 00e-5 1.46000000e-3 1.91000000e-4 1.43000000e-7 7.74000000e-8 2.89000000e-9	lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons	EF No No No No No No	Source AQMD default AQMD default AQMD default AQMD default AQMD default AQMD default AQMD default AQMD default		4.00000000 1.84000000 1.91000000 1.91000000 7.74000000 2.89000000	De-1 De-2 De-2 De-1 De-1 De-4 De-5 De-6 Le+3
ubstances Production and sage . Perform Data Validation . Review Summaries 0. Print Facility Report	Open Open Open Open Open Open Open Open	TAC Arsenic E Chromium cc Chlorinate individual For Hydr	ADDC Group and Compounds advection a	CAS # 7440382 7440437 18540299 1080 1086 50000 7647010	EF 4.00000000-4 1.84000 000-5 1.46000000-3 1.91000000-4 1.430000000-7 7.74000000-8 2.89000000-9 1.97000000-0	lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons lbs / tons	EF No No No No No No No	Source AQMD default AQMD default AQMD default AQMD default AQMD default AQMD default AQMD default AQMD default AQMD default AQMD default		4.00000000 1.84000000 1.9100000 1.9100000 1.43000000 7.74000000 1.97000000	De-1 De-2 De-2 De-1 De-1 De-4 De-5 De-6 Le+3 Le+0

Open Tox	tic (TAC/OI	DC)	Emission	Infor	mation - Other Processes	×
AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Activity	scc
ES15	D1		P2	401	Miscellaneous Operations and Services : Cremation : Commercial / Institutional : Single Chamber / Animal Remains	
					nnual Throughput	
				1	,000.0000000 tons	
TAC/ODC T	oxic Pollutants	/ Ozo	one Depleting	g Compo	unds	
TAC Group			3 - Berylliu	ım		
CAS # (Pol		-	7440417 -	Bervlli	um	
			1.5300000		* lbs/tons	
Emission Fi	actor (EF)		_		to ibs/ toris	
			Use de	fault		
			Contro (mark ch		value f EF listed represents EF determined after control)	
Overall Cor	ntrol Efficiency					
Emission F	actor Comment	t				
		r V	eferences with the in	in the format	D default emission factor please provide detailed Emission Factor Comment box above or upload file ion. t this information are subject to audit.	
Emission F	actor Data Sou	rce [	Source Te	st	✓ *	
Emissions		1	1.5300000	0e-2	55	
					Save Cance	

2. Status Update 3. Combustion Fuels	Step 4	4: Toxic (TAC/ODC) Emis	sions (lb	s)					
4. Emissions Release locations		TAC/ODC Group	CAS #	EF	Unit	Controlled EF	EF Data Source	Overall CE	Emissions
5. Emission Sources (ES) 6. Report Process/Emissions	Open	Arsenic and Compounds (inorganic)	7440382	4.00000000e-4	lbs / tons	No	AQMD default		4.00000000e-1
Combustion External Combustion	Open	Beryllium	7440417	1.84000000e-5	lbs / tons	No	AQMD default		1.84000000e-2
Internal Combustion	Open	Cadmium	7440439	1.46000000e-3	lbs / tons	No	AQMD default		1.46000000e+0
Use of organics Spray Coating/Spray	Open	Chromium, hexavalent (and compounds)	18540299	1.91000000e-4	the /	No	AQMD		1.91000000e-1
Booth Other Use of Organics	Open	Chlorinated dibenzofurans, without individual isomers reported	1080	1.43000000e-7	lbs / tons	No	AQMD default		1.43000000e-4
Storage Tanks Fugitive Components	Open	Chlorinated dioxins, without individual isomers reported	1086	7.7400000e-8	lbs / tons	No	AQMD default		7.74000000e-5
Other Processes Process Upset	Open	Formaldehyde	50000	2.8900000e-9	lbs /	No	AQMD default		2.8900000e-6
Additional Toxic	Open	Hydrochloric acid	7647010	1.97000000e+0	lbs / tons	No	AQMD default		1.97000000e+3
Isage	Open	Lead compounds (inorganic)	7439921	9.3900000e-3	lbs / tons	No	AQMD default		9.3900000e+0
<ol> <li>Perform Data Validation</li> <li>Review Summaries</li> </ol>	Open	Nickel	7440020	5.0900000e-4	lbs / tons	No	AQMD default		5.09000000e-1
0. Print Facility Report 1. Report Submission	Open	PAHs [PAH, POM]	1151	9.6300000e-4	lbs / tons	No	AQMD default		9.63000000e-1
	Emissi		be added		the <u>Emi</u> tk ht Sta ve Te nd	ck Exit Gas	<u>se Locati</u>	ons page.	
	Link	Emissions Release Locatio	ns to this						

Clicking the << Back to Emission Source Process Reference\_button on the bottom of the Process page, returns to the user to the Process References pop-up box, if changes need to be made to Process 1. Clicking on the Emission Sources (ES) link on the Navigation Menu on the left side of the page, returns the user to the Emission Sources page, where the next Emission Source, if any, can be accessed.