Guidelines for Reporting VOC Emissions from Component Leaks



FEBRUARY 2015

TABLE OF CONTENTS

PREFACE	1
COMPONENT IDENTIFICATION AND SCREENING ILLUSTRATION	2
METHOD 1AVERAGE (DEFAULT) EMISSION FACTORS	5
METHOD 2CORRELATION EQUATIONS	6
METHOD 3SCREENING VALUE RANGE	7
SPECIFIC INSTRUCTIONS	10

PREFACE

The South Coast Air Quality Management District (District) Rule 301(e) requires facilities operation under District permit to annually report their emissions from all equipment (permitted and non-permitted) to the District. This guidelines document represents a revision to the District's "Guidelines for Fugitive Emission Calculations – Petroleum Industry", dated June 1999 and "Guidelines for Fugitive Emissions Calculations", dated June 2003 to reflect the amendments to Rule 1173 and changes in the AER program. This guidelines document provides calculation methods for estimating fugitive emissions (component leaks) from the petroleum industry (i. e., oil and gas production facilities, refineries and marketing terminals), guidelines for component counting and leak quantification, and specific instructions (including examples) for how to report VOC emissions from component leaks.

This guidelines document primarily makes reference to the document entitled, "California Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities", dated February 1999, prepared by the California Air Pollution Control Officers Association (CAPCOA), and the California Air Resources Board (ARB). (The CAPCOA/ARB document represented a multi-year collaborative effort between the industry, the CAPCOA and ARB to provide a consistent approach for estimating fugitive emissions from equipment components used in the California petroleum industry. The CAPCOA/ARB document provides different calculation methodologies as well as component identification and counting guidelines, component-screening procedures and leak quantification methods, which must be followed by facilities in order to more accurately calculate the fugitive emissions. A copy of the CAPCOA/ARB document may be obtained from the District.).

The guidelines document contains a brief description of the 3 different methods of calculating fugitive hydrocarbon emissions from equipment component leaks and also provides guidance on how the components and emissions data should be reported to the District. These 3 methods are as follows:

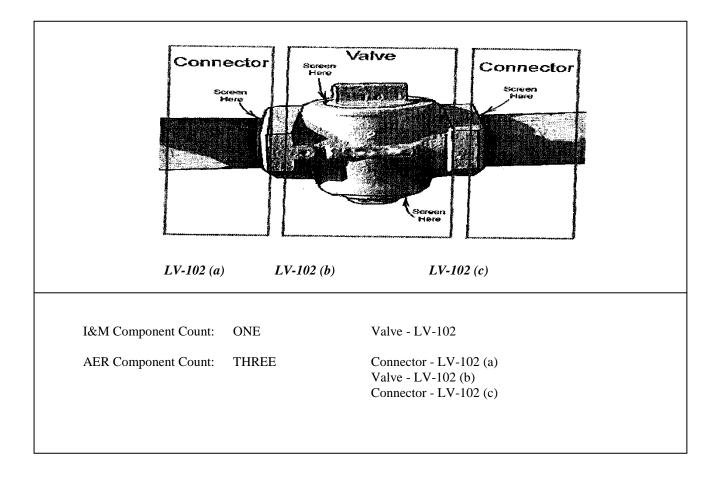
Method 1:	Average (Default) Emissions Factor
Method 2:	Correlation Equation
Method 3:	Screening Value Range

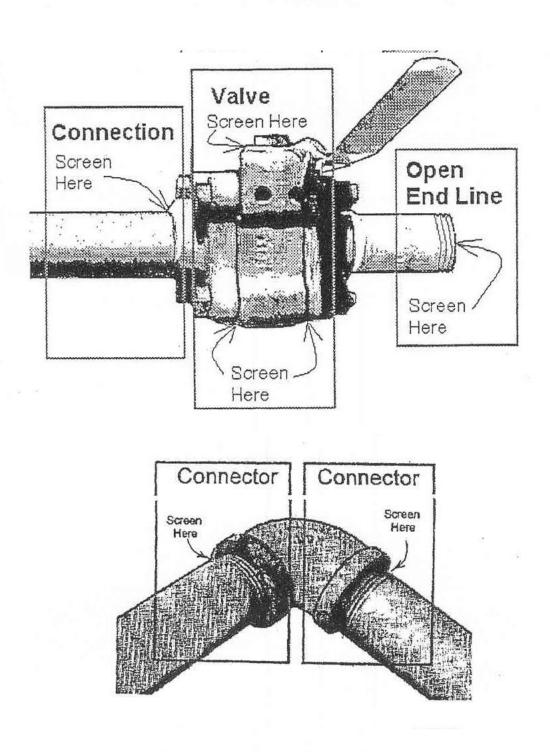
The District may require adjustment of the reported fugitive emissions based on the results of District inspections and/or audits of each refinery's data for discrepancies in reported parameters used for calculating emissions.

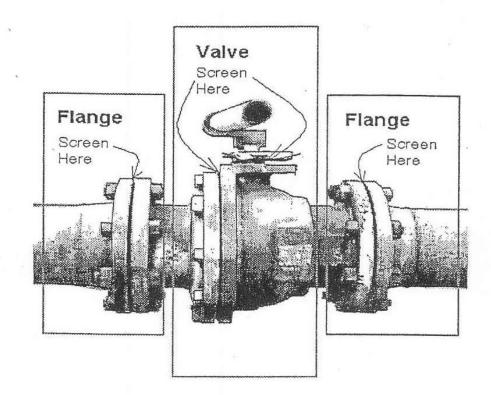
COMPONENT IDENTIFICATION AND SCREENING ILLUSTRATION

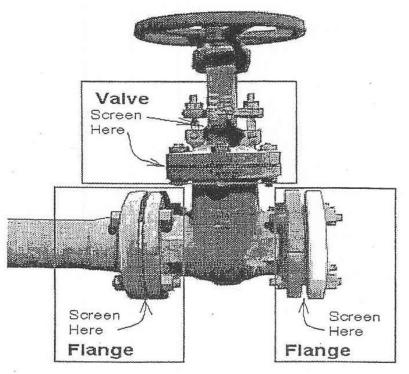
Under Rule 1173 I&M program, components are required to be identified and labeled for screening purposes. For example, as illustrated in the following diagram, a component is identified as a valve and tagged as LV-102.

However, for the Annual Emission Reporting (AER) program, all potential leak points associated with a component must be identified and screened for leaks. For AER purposes, potential leak points are counted as individual components. For example, in the following diagram, although a valve is identified and labeled as LV-102, the potential leak points are identified as 3 individual components: 1 connector (LV-102 (a)), 1 valve (LV-102 (b)), and 1 connector (LV-102 (c)). Emissions for each component are then calculated based on screening values measured. Note that for component LV-102 (b), screening value will be the higher of the two readings from the screening points.









METHOD 1 - Average Emission Factor Method

The Average Emission Factor Method may be used to calculate fugitive emissions only when an Inspection and Maintenance Program (i.e., Rule 1173 or Rule 1176) is not in place at the facility and reliable site-specific screening data are not available.

DISTRICT'S DEFAULT EMISSION FACTORS

REFINERIES

SOURCE TYPE	Emission Factor
	(lbs/source/yr)
Valves HC gas/vapor	72
Valves fuel & natural gas	12
Valves light liquid	57
Valves heavy liquid	4.4
Inaccessible valves HC gas/vapor	120
Inaccessible valves light liquid	74
Pumps light liquid	520
Pumps heavy liquid	402
Compressors	2,570
Others (fittings, hatches, sight-glasses, meters, etc.)	4.9
PRVs (no rupture disc)	1,135
Process drains	398

OIL/GAS PRODUCTION AND CHEMICAL PLANTS

SOURCES TYPE	Emission Factors (lbs/source/yr)
Production Facility – Valves in ROG vapor service	12
Others (fittings, hatches, sight-glasses, meters, etc.)	4.9
Production Facility – Valves in light liquid service.	47
Production Facility – Valves in heavy liquid service.	4.4
Production Facility – PRVs to atmosphere (no rupture disc)	567
Gas Plant – Valves in ROG service	12
Gas Plant – PRVs to atmosphere (no rupture disc)	193
Pumps in light liquid service.	432
Pumps in heavy liquid	86
Compressors in vapor recovery service	145
Compressors in gas injection service	437

TERMINALS/DEPOTS

SOURCE TYPE	Emission Factors (lbs/source/yr)
Valves in ROG vapor service	12
Valves in light liquid service	47
Valves in heavy liquid service	4.4
Pumps in light liquid service	432
Pumps in heavy liquid service	86
Compressors in vapor recovery service	145
PRVs to atmosphere (no rupture disc)	193
Others (fittings, hatches, sight-glasses, meters, etc.)	4.9

METHOD 2 - Correlation Equation Method

If an Inspection and Maintenance Program (i. e., Rule 1173 or Rule 1176) is in place at the facility and reliable site-specific screening data are available, the Correlation Equation Method can be used to calculate the fugitive emissions. Oil and Gas Production facilities may use the Correlation Equations and Factors for Refineries and Marketing Terminal.

FOR REFINERIES AND MARKETING TERMINALS							
Component Type/ Service Type	Default Zero Factor ^b lb/hr [kg/hr]	Correlation Equation ^c lb/hr [kg/hr]	Pegged Factor ^d lb/hr [kg/hr]				
			10,000 ppmv	100,000 ppmv			
Valves/All	1.7x10⁻⁵ [7.8x10 ⁻⁶]	5.00x10⁻⁶(SV) ^{0.747} [2.27x10 ⁻⁶ (SV) ^{0.747}]	0.141 [0.064]	0.304 [0.138]			
Pump seals/All	4.2x10⁻⁵ [1.9x10 ⁻⁵]	$\frac{1.12 \times 10^{-4} (SV)^{0.622}}{[5.07 \times 10^{-5} (SV)^{0.622}]}$	0.196 [0.089]	1.342 [0.610] ^e			
Others ^f /All	8.8x10⁻⁶ [4.0x10 ⁻⁶]	1.92x10⁻⁵(SV) ^{0.642} [8.69x10 ⁻⁶ (SV) ^{0.642}]	0.181 [0.082]	0.304 [0.138]			
Connectors/All	1.7x10⁻⁵ [7.5x10 ⁻⁶]	3.37x10⁻⁶(SV) ^{0.736} [1.53x10 ⁻⁶ (SV) ^{0.736}]	0.066 [0.030]	0.075 [0.034]			
Flanges/All	6.8x10⁻⁷ [3.1x10 ⁻⁷]	9.92x10⁻⁶(SV) ^{0.706} [4.53x10 ⁻⁶ (SV) ^{0.706}]	0.209 [0.095]	0.209 [0.095]			
Open-ended lines/All	4.4x10⁻⁶ [2.0x10 ⁻⁶]	4.19x10⁻⁶(SV) ^{0.724} [1.90x10 ⁻⁶ (SV) ^{0.724}]	0.073 [0.033]	0.180 [0.082]			

TABLE IV-3a:CAPCOA-REVISED 1995 EPA CORRELATION EQUATIONS AND FACTORS
FOR REFINERIES AND MARKETING TERMINALS a

^aSource: SBCAPCD Report, dated May 1, 1997, entitled *Review of the 1995 Protocol: The Correlation Equation Approach To Quantifying Fugitive Hydrocarbon Emissions At Petroleum Industry Facilities*. Technical corrections and adjustments were made to the refineries and marketing terminals bagged data, obtained by use of the blow through method, to account for the hydrocarbon leak flow rate.

^bThe default zero factors apply only when the screening value (SV), corrected for background, equals 0.0 ppmv (i.e., the screening value is indistinguishable from background reading). The default zero factors were based on the combined 1993 refinery and marketing terminal data only; default zero data were not collected from oil and gas production facilities.

^cThe correlation equations apply for actual screening values, corrected for background, between background and 9,999 ppmv and can be used for screening values up to 99,999 ppmv at the discretion of the local district.

^dThe 10,000 ppmv pegged factors apply for screening values, corrected for background, equal to or greater than 10,000 ppmv and are used when the correlation equations are used for screening values between background and 9,999 ppmv. The 100,000 ppmv pegged factors apply for screening values reported pegged at 100,000 ppmv and are used when the local district authorizes use of the correlation equations for screening values between background and 99,999 ppmv.

^eOnly 3 data points were available for the pump seals 100,000 ppmv pegged factor.

^fThe "other" component type includes instruments, loading arms, pressure relief valves, vents, compressors, dump lever arms, diaphragms, drains, hatches, meters, and polished rods stuffing boxes. This "others" component type should be applied for any component type other than connectors, flanges, open-ended lines, pumps, or valves. However, if an acceptable emission estimate exists which more accurately predicts emissions from the source, then that emission estimate applies (e.g., positive flowing junction boxes in SCAQMD). (For components such as junction box vents with positive flow, use the following correlation equation: 3.148E-04 (SV)^{1.02} lb/hr [1.428E-04(SV)^{1.02} kg/hr]).

METHOD 3 - Screening Value Range Method

If an Inspection and Maintenance Program (i.e., Rule 1173 or Rule 1176) is in place at the facility and reliable site-specific screening data are available, the facility may choose to use the Screening Value Range Method to calculate the fugitive emissions as an alternative to Method 2 – Correlation Equation Method. In the Screening Value Range Method, emissions are calculated using the average screening value range factors based on two specific leak levels. Note that facilities may not use the Screening Value Range Method in combination with the Correlation Equation Method.

TABLE IV-2a: 1995 EPA PROTOCOL - REFINERY SCREENING VALUE RANGE EMISSION FACTORS^a

Component Type	Service Type	< 10,000 ppmv Emission Factor (kg/hr/source) ^b	< 10,000 ppmv Emission Factor (lbs/hr/source) ^b	≥ 10,000 ppmv Emission Factor (kg/hr/source) ^b	\geq 10,000 ppmv Emission Factor (lbs/hr/source) ^b
Valves	Gas Light liquid	$6.0x10^{-4} \\ 1.7x10^{-3} \\ 2.3x10^{-4}$	$ \begin{array}{r} 1.3x10^{-3} \\ 3.7x10^{-3} \\ 5.1-10^{-4} \end{array} $	$2.626 \times 10^{-1} \\ 8.52 \times 10^{-2} \\ 2.2 \times 10^{-4}$	5.8x10 ⁻¹ 1.9x10 ⁻¹ 5.1-10 ⁻⁴
Pump seals ^c	Heavy liquid Light liquid Heavy liquid	$\frac{2.3 \times 10}{1.20 \times 10^{-2}}$ $\frac{1.35 \times 10^{-2}}{1.35 \times 10^{-2}}$	5.1x10 ⁻⁴ 2.6x10 ⁻² 3.0x10 ⁻²	$ \begin{array}{r} 2.3x10^{-4} \\ 4.37x10^{-1} \\ 3.885x10^{-1} \end{array} $	5.1x10 ⁻⁴ 9.6x10 ⁻¹ 8.5x10 ⁻¹
Compressor seals	Gas	8.94x10 ⁻²	2.0x10 ⁻¹	1.608	3.54
Pressure relief valves	Gas	4.47×10^{-2}	9.8x10 ⁻²	1.691	3.72
Connectors	All	6.0x10 ⁻⁵	1.3x10 ⁻⁴	3.75×10^{-2}	8.3x10 ⁻²
Open-ended lines	All	1.5×10^{-3}	3.3x10 ⁻³	1.195×10^{-2}	2.6×10^{-2}

^aSource: *1995 EPA Protocol for Equipment Leak Emission Estimates* (EPA-453/R-95-017, November 1995) which referenced the 1982 Petroleum Refining Study (EPA-450/3-82-010, 1982). These factors are based on the 1980 and 1982 refining fugitive emissions studies.

^bThese factors are for non-methane organic compound emission rates.

[°]The light liquid pump seals factor can be used to estimate the leak rate from agitator seals.

Component Type	Service Type	< 10,000 ppmv THC Emission Factor (kg/hr/source) ^b	< 10,000 ppmv THC Emission Factor (lbs/hr/source) ^b	≥ 10,000 ppmv THC Emission Factor (kg/hr/source) ^b	≥ 10,000 ppmv THC Emission Factor (lbs/hr/source) ^b		
Valves	Gas	1.3x10 ⁻⁵	2.9x10 ⁻⁵	N/A	N/A		
	Light liquid	1.5x10 ⁻⁵	3.3x10 ⁻⁵	2.3x10 ⁻²	5.1x10 ⁻²		
Pump seals	Light liquid	2.4×10^{-4}	5.3x10 ⁻⁴	7.7x10 ⁻²	1.7x10 ⁻¹		
Others	Gas	1.2x10 ⁻⁴	2.6x10 ⁻⁴	N/A	N/A		
(compressors and others) ^c	Light liquid	2.4x10 ⁻⁵	5.3x10 ⁻⁵	3.4x10 ⁻²	7.5x10 ⁻²		
Fittings	Gas	5.9x10 ⁻⁶	1.3x10 ⁻⁵	3.4x10 ⁻²	7.5x10 ⁻²		
(connectors and flanges) ^d	Light liquid	7.2x10 ⁻⁶	1.6x10 ⁻⁵	6.5x10 ⁻³	1.4x10 ⁻²		

TABLE IV-2b:1995 EPA PROTOCOL - MARKETING TERMINAL SCREENING VALUE
RANGE EMISSION FACTORS^a

^aSource: *1995 EPA Protocol for Equipment Leak Emission Estimates* (EPA-453/R-95-017, November 1995). NOTE: These factors have not been corrected to reflect the technical corrections and adjustments discussed in Section III of the implementation guidelines.

^bThese factors are for total organic compound emission rates (including non-VOC's such as methane and ethane). "NA" indicates that not enough data were available to develop the indicated emission factor.

^cThe "Others" component type should be applied for any component type other than fittings, pump seals, or valves.

^d"Fittings" were not identified as flanges or non-flanged connectors; therefore, the fitting emissions were estimated by averaging the estimates from the connector and the flange correlation equations.

Component Type	Service Type	< 10,000 ppmv THC Emission Factor (kg/hr/source) ^b	< 10,000 ppmv THC Emission Factor (lbs/hr/source) ^b	≥ 10,000 ppmv THC Emission Factor (kg/hr/source) ^b	≥ 10,000 ppmv THC Emission Factor (lbs/hr/source) ^b
Valves	Gas/Light Liquid Light Crude Oil Heavy Crude Oil	3.5x10 ⁻⁵ 1.90x10 ⁻⁵ 1.40x10 ⁻⁵	7.7x10 ⁻⁵ 4.2x10 ⁻⁵ 3.1x10 ⁻⁵	1.386x10 ⁻¹ 7.07x10 ⁻² N/A	3.0x10 ⁻¹ 1.6x10 ⁻¹ N/A
Pump seals	Gas/Light Liquid Light Crude Oil Heavy Crude Oil	9.96x10 ⁻⁴ 2.65x10 ⁻⁴ N/A	2.2x10 ⁻³ 5.8x10 ⁻⁴ N/A	8.9x10 ⁻² 8.9x10 ⁻² N/A	2.0x10 ⁻¹ 2.0x10 ⁻¹ N/A
Others ^c	Gas/Light Liquid Light Crude Oil Heavy Crude Oil	$\frac{1.47 \text{x} 10^{-4}}{1.31 \text{x} 10^{-4}}\\5.7 \text{x} 10^{-5}$	3.2x10 ⁻⁴ 2.9x10 ⁻⁴ 1.3x10 ⁻⁴	1.376x10 ⁻¹ 7.1x10 ⁻³ N/A	3.0x10 ⁻¹ 1.6x10 ⁻² N/A
Connectors	Gas/Light Liquid Light Crude Oil Heavy Crude Oil	$\frac{1.20 \text{x} 10^{-5}}{1.0 \text{x} 10^{-5}} \\ 8.0 \text{x} 10^{-6}$	2.6x10 ⁻⁵ 2.2x10 ⁻⁵ 1.8x10 ⁻⁵	2.59x10 ⁻² 2.34x10 ⁻² N/A	5.7x10 ⁻² 5.1x10 ⁻² N/A
Flanges	Gas/Light Liquid Light Crude Oil Heavy Crude Oil	$2.80 \times 10^{-5} \\ 2.4 \times 10^{-5} \\ 2.3 \times 10^{-5}$	6.2x10 ⁻⁵ 5.3x10 ⁻⁵ 5.1x10 ⁻⁵	6.1x10 ⁻² 2.6x10 ⁻¹ N/A	1.3x10 ⁻¹ 5.7x10 ⁻¹ N/A
Open-ended lines	Gas/Light Liquid Light Crude Oil Heavy Crude Oil	$2.4 x 10^{-5} \\ 1.8 x 10^{-5} \\ 1.5 x 10^{-5}$	5.3x10 ⁻⁵ 4.0x10 ⁻⁵ 3.3x10 ⁻⁴	5.49x10 ⁻² 2.22x10 ⁻² 7.11x10 ⁻²	1.2x10 ⁻¹ 4.9x10 ⁻² 1.6x10 ⁻¹

TABLE IV-2c: CAPCOA OIL AND GAS PRODUCTION SCREENING VALUE RANGE EMISSION FACTORS^a

^aSource: Fax Transmittal from STAR Environmental, dated December 17, 1997, entitled *Comparison of Screening Value Range Factors for Oil and Gas Production Operations*. These factors were developed using the separated oil and gas production default zero factors and pegged factors. Correlation equations for the petroleum industry (revised to reflect the technical corrections and adjustments discussed in Section III of the implementation guidelines) were used for components with screening values between background and 9,999 ppmv.

^bThese factors are for total organic compound emission rates (including non-VOC's such as methane and ethane) and apply to light crude, heavy crude, gas plant, gas production, and off shore facilities.

^cThe "Others" component type was derived from compressors, diaphragms, drains, dump arms, hatches, instruments, meters, pressure relief valves, polished rods stuffing boxes, relief valves, and vents. This "Others" component type should be applied for any component type other than connectors, flanges, open-ended lines, pumps, or valves.

SPECIFIC INSTRUCTIONS

Facilities holding individual permits must report fugitive emissions from components associated with permitted equipment that appears as an emission source in the reporting tool. Facilities subject to RECLAIM and/or Title V that were issued a facility permit must report fugitive emissions at the system level for each device designated as fugitive components in that system. Fugitive emissions from unpermitted components must also be reported; unpermitted component fugitive emissions may be aggregated and reported as one emission source that needs to be added by user to the list of emission sources.

Following are instructions on how to report fugitive emissions using the new AER format; for example purposes let's assume facility ABC with the ID# 999117 is subject to RECLAIM and was issued a facility permit. The methodology used for reporting emissions is the same for a non-RECLAIM facility that was issued individual permits. Facility ABC has permitted equipment with fugitive emissions, device D1, AER emission source ES1, covered by application A/N# 123456, Permit to Operate F12345, as shown below:

AQMD Air Quality	- Management District					
AER Home Access Facility F	acility Home		III	-	£	?
		Facility ID: 99	9117 · ABC · I	Reporting	period:	2012
Facility ID: 999117	Form data is successfully saved.					
Facility Information Build Reporting Structure	Build Reporting Structure					
Combustion Fuels	Emission Sources (ES) Classification					
Emission Sources (ES) Report Process/Emissions Summaries	This section contains facility permit profile. Please make s Source (ES). New emission sources can also be added.	sure that every	y device has a	a specified	Emissio	n
Data Validation	EPA TANKS Software DATA IMPORT - <u>Click here</u> for more in	structions.				
Report Submission	Displaying 1 emission sources.					
	A/N Permit					
	AER Device ID Permit Search Emission Sources	Device ID				
	Add New Emission Source					
		Search:			Print P	review
	Actise A/N Permit NO Permit Device ID Description ID		urce Has Sup Emissions	quipment		Process eference
(Open 123456 F12345 D1 ES	\$1		P	Nork in rogress	
	Shewing 1 to 1 of 1 entries			I Pre	evious N	lext 🕨
AQMD we	b site Home AER Web Site Submit question/comment Ec	otek Web Site	Report a B	ug		

Click the "Open" link under the "Action" column and the following screen appears. Fill out the mandatory fields marked by an asterisk and optionally, fill out the other fields. For facility ABC, A/N 123456 describes Unit 1, in normal operation and is comprised of vessel V1 and pump P1:

AQMD Air Quality	/ Management Dist	rict
AER Home Access Facility	Facility Home	
		Facility ID: 999117 · ABC · Reporting period: 2012
Facility ID: 999117	Edit Emission Source	Facility 10. 77717 • ABC • Reporting period. 2012
Facility Information		
Build Reporting Structure	Providing correct informati	ion and proper selection categories would help to classify emission source.
Combustion Fuels	Permitted	
Emission Sources (ES)	A/N	123456 123456 💌
Report Process/Emissions	Permit No	F12345
Summaries	Permit Device ID	D1
Data Validation	Permit Equipment Description	
Report Submission	AER Device ID	ES1
	ES Name	Unit 1
	Operating ES Status	Normal Operation 💌 *
	Comment	Vessel V1, pump P1
	Emission Source Group	Determine Emission Source Group Type
	Design Capacity	
		?
	Save and return to List o	or Save and proceed to Process Reporting or Cancel
	Optional: Save and Mar	k as Completed Click here to <u>delete</u> this emission source and associated data.
AQMD	web site Home AER Web Site	Submit question/comment Ecotek Web Site Report a Bug

When clicking on the "Determine Emission Source Group Type" button, the following selection window appears:

	South Coast AQMD	Air Qual	lity Managemen	t District					
	AER Home	e Access Facili	ty Facility Home			III	-		?
					Facilit	tv ID: 999117 · ABC · F	Reporting	period:	2012
Determine Em	ission Sour	ce Group Type						×	
Permitted Yes	A/N 123456	Permit No F12345	Permit Device ID D1	Permit Equipment Descri		AER Device ID ES1	ES N Unit 1	lame	
 Internal C Spray Co Other Use Storage T Fugitive C 	combustion Eq ating/Spray Bo e of Organics (ank (e.g. Und Components (E	uipment (e.g., inter poth (e.g., coatings (e.g., coatings, solv erground, Abovegr Emission Leaks fror	nal combustion engine (exclud , solvents, adhesives, etc.) <u>clic</u> ents, inks, adhesives, etc.) exc ound, Small Tanks, Dispensing m Process Components per Ru	r, afterburner, flare, kiln or incinerato ing vehicles), turbine or micro turbir <u>k here</u> to select one of the following sept in Spray Coating/Spray Booth, g Systems) <u>click here</u> to select one of ule 1173 and 11 (c), <u>click here</u> to select k <u>click here</u> to mark "Other Process	le) <u>click here</u> to se Equipment: <u>click here</u> to select of the following Ec ect all applicable Equipment":	elect one of the following at one of the following Ed quipment:	I Equipmer		
					or Save and			g or (Cancel
			Optional: Save	and Mark as Completed	Click here to <u>de</u>	l <u>ete</u> this emission sou	rce and a	ssociate	d data.
		AQ	MD web site Home AER W	eb Site Submit question/com	ment Ecotek V	<u>Veb Site</u> Report a Bi	ıg		

Go to option #6: Fugitive Components and click on the link provided. Let's assume that the fugitive components for this emission source are: 5 valves in gas/vapor service, 4 valves in light liquid service, 2 PRV's, 1 pump in light liquid service, 20 connectors, 1 sight-glass, 6 flanges, and 1 drain.

On the next screen, check all the applicable boxes for the above component types:

	Acir Quality Management District				
	AER Home Access Facility Facility Home		-		?
	Facilit	tv ID: 999117 · ABC · Re	porting r	period:	2012
Determine Emi	ission Source Group Type			×	
1. External C	Combustion Equipment (e.g., boiler, dryer, oven, furnace, heater, afterburner, flare, kiln or incinerator) click here to su	elect one the following Equ	ipment:	^	<u> </u>
2. Internal Co	ombustion Equipment (e.g., internal combustion engine (excluding vehicles), turbine or micro turbine) click here to s	elect one of the following E	quipment		
3. Spray Coa	ating/Spray Booth (e.g., coatings, solvents, adhesives, etc.) click here to select one of the following Equipment:				
4. Other Use	e of Organics (e.g., coatings, solvents, inks, adhesives, etc.) except in Spray Coating/Spray Booth, click here to sele	ct one of the following Equi	pment:		
5. Storage Ta	ank (e.g. Underground, Aboveground, Small Tanks, Dispensing Systems) <u>click here</u> to select one of the following Ec	quipment:			
6. Fugitive C	components (Emission Leaks from Process Components per Rule 1173 and 1176), click here to select all applicable	Equipment:			
✓ Valves	es Gas/Vapor			=	
✓ Valves	s in Light Liquid Service				
Valves	in Heavy Liquid Service 🗹 Connectors				
Inacce	essible Valves Gas/Vapor				
Inacce	essible Valves Light Liquid				
	os in Light Liquid Service (Double Mechanical / Tandem Seals) 🛛 🕅 Other (including fittings, hatches, sight-gla	asses, meters, etc)			
🔲 Pump	os in Heavy Liquid Service (Single Mechanical Seal)				
7 Other Pror	cesses (does not fit in any of the groups mentioned above) click click here to mark "Other Process Equipment"			-	
		Save	Cance	el	
					,
	Save and return to List of Emission Sources or Save and			or (Cancel
	Optional: Save and Mark as Completed Click here to de	elete this emission sourc	e and ac	rociato	d data
	Optional. Save and wark as completed Click here to de	teres emission source	o and as	sociate	u uata.
	AQMD web site Home AER Web Site Submit guestion/comment Ecotek V	<u>Neb Site</u> Report a Bug			

Click the "Save" button and proceed to Process Reporting. (If you are not ready to input the data at this time, click the "Save and return to List of Emission Sources" button to work on another emission source.) The following window displays 8 processes corresponded to the component types:

-	D: 99911	7	Form data i	s successf	ully save	d.					
lity Infor Process	References									×	
A/N	Permit NO	Permit Device ID	Permit Dev Descriptio		AER vice ID	ES Name	Source Gro	up Emissions?	Equipment	ES Status	
123456	F12345	D1			ES1 L	Jnit 1	Fugitive Components	Y	Fugitive	Work in progress	
Pro	ocess ID	Source	Group		Proce	ss Name	P	rocess Status	Operation Type		
	P1	Fugitive Co	mponents				W	ork in progress	routine		
	<u>P2</u>	Fugitive Co	mponents				w	ork in progress	routine		
	<u>P3</u>	Fugitive Co	mponents				w	ork in progress	routine		
	<u>P4</u>	Fugitive Co	-					ork in progress	routine		
	<u>P5</u>	Fugitive Co	-					ork in progress	routine		
	<u>P6</u>	Fugitive Co	-					ork in progress	routine		
	<u>P7</u>	Fugitive Co						ork in progress	routine		
	<u>P8</u>	Fugitive Co	mponents				w	ork in progress	routine		
										ок	
							S	earch:		Print P	reviev
		Ac	tion A/N	Permit NO	Permit Device ID	Permit Equipment Description	AER Device ID	ES Source Name Group	Has Emissions		Proces
			en 123458	F12345	D1		ES1	Jnit Fugitive	Y Fugitive	Work in	eferen

To report emissions, click on the "P1" link. Note that the following window shows the component type as Valves Gas/Vapor:

Air Quality	/ Manage	ement D	istri	ct									
Access Facility	Facility Hom	e							Ħ	-		?	
							Fac	ility ID: 9991	17 · ABC · F	eporting	g period:	2012	
0: 999117	« Back	to Emission §	Source	Process R	eferer	ice							
nation	Fugitiv	ve Compo	onen	ts									
n <mark>g Structure</mark> Fuels	and Rule	This section contains emission data relative to leakage from process components as specified in Rule 1172 and Rule 1176. Please visit the supplemental instructions for more information on component identification, count, and emission calculation. Detailed instructions are available by clicking on Help icon in the tool bar.											
urces (ES) ess/Emissions	Process								Option	al: Mark	as Comp	pleted	
		AER Device ID		Permit Dev	ice ID	A	/N	Process ID	Rule #	Com	ponent T	уре	
Combustion		ES1		D1		123	456	P1					
ombustion	\smile								Click here	e to <u>dele</u>	e this pr	ocess.	
nics	Through	put											
iting/Spray						Annua	al Throu	ighput					
of Organics	Open												
ks	Criteria	Emissions (lbs)										
mponents		Pollutant	FF	Unit		FF Dat	a Sourc	-	Overall CE		Emissie	0.05	
sses	Open	VOC		lbs /		Li but	u sourc	~	over un et		Children	5115	
et	T (T			(1)									
	TOXIC (1	AC/ODC) En	1155101	ns (ibs)									
on		TAC/ODC Gro	up	CAS #	EF	Unit	EF	Data Source	Over	all CE	Emis	sions	
ssion	Add No	ew											
	" Back	to Emission S	Source	Process R	eferer	ice							
	A Duck			11000331	oron cr								
	Access Facility D: 999117 mation ng Structure Fuels urces (ES) esss/Emissions Combustion icos iting/Spray e of Organics ks mponents ssees et	Access Facility Facility Hom D: 9991117 mation ng Structure Fuels urces (ES) combustion combustion times Through timg/Spray of Organics ks Criteria mponents sess et Toxic (T Add N	Access Facility Facility Home	Access Facility Facility Home C: 999117 mation ng Structure Fuels curces (ES) combustion combustio	0: 999117 Back to Emission Source Process R Fugitive Components Fuels and Rule 1176. Please visit the supplemention ontains emission calculation. Detaile Combustion Process Combustion AER Device ID Combustion E51 Combustion Open Combustion E51 Components Pollutant Pollutant EF Upen Voc Deen Voc Toxic (TAC/ODC) Emissions (lbs) TaC/ODC Group CAS # Add New	Access Facility Facility Home D: 999117 « Back to Emission Source Process References Fugitive Components This section contains emission data relative to and Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission calculation. Detailed instand Rule 1176. Please visit the supplemental i count, and emission (Ibs) Combustion Detailed Instand Rule 1176. Please visit the supplemental i count, and emissions (Ibs) Mathematical Rule 1176. Please visit the supplemental i count, and Rule 1176. Please visit the supplemental i count, and Rule 1176. Please visit the supplemental i count, and Rule 1176. Please visit the supplemental i count supplemental i count supplemental i count supplemental i count	Access Facility Facility Home	Access Facility Facility Home Facility Facility Home C: 999117 Back to Emission Source Process Reference Fugitive Components This section contains emission data relative to leakage from p and Rule 1176. Please visit the supplemental instructions for count, and emission calculation. Detailed instructions are avainated with the supplemental instructions of count, and emission calculation. Detailed instructions are avainated with the supplemental instructions of count, and emission calculation. Detailed instructions are avainated with the supplemental instructions of the supplemental instructins of the supplemental instructins of the sup	Access Facility Facility Home D: 999117 Back to Emission Source Process Reference Fugitive Components This section contains emission data relative to leakage from process comp and Rule 1176, Please visit the supplemental instructions for more informa count, and emission calculation. Detailed instructions are available by clic sess/Emissions Process Process Combustion Combustion Components Throughput AER Device ID Permit Device ID A/N Process ID Throughput Open Es1 D1 123456 P1 Annual Throughput Open Voc User Voc Toxic (TAC/ODC) Emissions (lbs) 	Access Facility Facility Home C: 999117 Facility ID: 999117 - ABC - F mation * Back to Emission Source Process Reference Fugitive Components This section contains emission data relative to leakage from process components as sp and Rule 1176. Please visit the supplemental instructions for more information on con count, and emission calculation. Detailed instructions are available by clicking on Help arces (ES) person Process Combustion AER Device ID Combustion AER Device ID Combustion ES1 Did 123456 Process Option Criteria Emissions (lbs) Maponents Sees et Toxic (TAC/ODC) Emissions (lbs) Open CAS # EF Unit Tac/ODC Group CAS # EF Unit	Access Facility Facility Home C: 999117 Facility ID: 999117 - ABC - Reporting mation • Back to Emission Source Process Reference Fugitive Components Init section contains emission data relative to leakage from process components as specified in and Rule 1176. Please visit the supplemental instructions for more information on component i count, and emission calculation. Detailed instructions are available by clicking on Help icon in urces (ES) person Process Combustion Optional: Mark Combustion ES1 Deen ES1 Criteria Emissions (lbs) Imponents sees et Open Sees et Toxic (TAC/ODC) Emissions (lbs) On TAC/ODC Group CAS # EF Add New	Access Facility Facility Home Image: Comparison of the state	

Under "Process", click the "Open" link and select Rule 1173 in the mandatory field marked with an asterisk and optionally fill out other fields:

AQMD	All Quality	manayeme								
AER Home	Access Facility	Facility Home								?
							Facility ID: 9	99117 · ABC	· Reporting p	eriod: 2012
Facility	ID: 999117	« Back to Em				ice				
Facility Inf	formation	Fugitive C	ompone	ents						
Build Repo	orting Structure	This section co	ontains emis	sion dat	ta relative to	leakage fro				
Combu	Edit Emission Pro	cess - Fugitive Con	nponents	100 11	DDIOMODIU J	DEFRICTIONE.			component ide lelp icon in th	
Emissio	AER Device ID	Permit Device ID	A/N	Proce	ess ID Ru	le# Co	omponent Type			
Report	ES1	D1	123456				Gas/Vapor	Optic		
	AER Device ID	ES1	AER Device	Name	Unit 1					
Combu	PERMITTED	AN: 123456	Permit Devic	e ID	D1			Rule #	Compo Valves Gas/	nent Type
Exte	Process ID	P1	Process Nan	ne	valves g	as/vapor			ere to delete	
Inter	Process Comment									
Use of	Rule #	1173 💌	* Add Rule							
Spra Boot										
Othe						Save	Cancel			
	Tanks	Criteria Emis	sions (lbs)							
Fugitive	Components	Dellete	nt EF		Uni		EF Data S		0	Facilitation
		Open VOC			bs / compone		AQMD default		Overall CE	Emissions 360.00
	Jpset									
Summaries	5	Toxic (TAC/O	DC) Emissi	ions (l	bs)					
Data Valid	ation	TAC/OD	C Group C	AS #	EF	Unit	t El	F Data Source	Overall C	E Emissions
Report Sul	omission	Open Benz	zene 7	1432	7.20000e-1	lbs / compor	nents Mate	erial Balance		3.600e+0
		Add New								
	AQMD	web site Home AE	R Web Site	Submit	t question/co	omment Ec	cotek Web Sit	e Report a	Bug	

Data must be saved before moving on to next step. Clicking on the "Save" button will bring user back to data enter screen for process P1 as shown:

AQMD Air	Quality	/ Management Dis	strict										
AER Home Acce	ess Facility	Facility Home				III	🖶 🔒	2					
					Facility ID: 9991	17 · ABC · Rep	porting period: 2	2012					
Facility ID: 9	999117	« Back to Emission Sou	urce Process R	eference									
Facility Information	on	Fugitive Compon	ents										
Build Reporting St Combustion Fue	ls	and Rule 1176. Please vi	This section contains emission data relative to leakage from process components as specified in Rule 1172 and Rule 1176. Please visit the supplemental instructions for more information on component identification, count, and emission calculation. Detailed instructions are available by clicking on Help icon in the tool bar.										
Emission Source Report Process/I		Process	Process Optional: Ma										
Combustion		AER Device ID	Permit Devi	ice ID A	/N Process ID	Rule #	Component Typ	be					
External Com	bustion	Open ES1	D1	123	456 P1		alves Gas/Vapor						
Internal Comb	oustion					Click here to	o <u>delete</u> this pro	cess.					
Use of organics		Throughput											
Spray Coating Booth	/Spray	\frown		Annua	al Throughput								
Other Use of (Organics	Open											
Storage Tanks		Criteria Emissions (Ibs	5)										
Fugitive Compo		Pollutant Open VOC	EF Unit	EF Dat	a Source	Overall CE	Emission	15					
Process Upset		Open VOC	tus 7										
Summaries		Toxic (TAC/ODC) Emis	sions (lbs)										
Data Validation		TAC/ODC Group	CAS #	EF Unit	EF Data Source	Overall	CE Emissi	ons					
Report Submissio	n	Add New											
		« Back to Emission Sou	urco Drocoso D	oforonco									
		« Back to Emission Sol	aree process R	elerence									
	AQMD	web site Home AER Web Site	<u>Submit quest</u>	ion/comment	Ecotek Web Site	Report a Bug							

Next, go to "Throughput", click the "Open" link and fill out the "Number of components" field, and click "Save". As mentioned before, facility ABC Unit 1 has 5 valves in gas/vapor service.

		ement D							
AER Home Access Facility F								-	• ?
						Facility ID:	999117 · ABC · Rep	porting p	period: 2012
Facility ID: 999117									
Facility Information	Fugitiv	ve Compo	nen	ts					
Build Reporting Structure							omponents as spec		
Combustion Fuels							ormation on compo clicking on Help io		
Emission Sources (ES)									
Report Proce Edit Throughpu		0	Compo					×	Completed
AER Device ID Combustion ES1	P	ermit Device ID D1		A/N 123456	Process ID P1	Rule # 1173	Component Typ Valves Gas/Vapor	pe	nent Type
External 0				Annual Thro	ughput				Vapor
Internal C Number of Compo	nents (Annual '	Throughput)		5		* components	*		this process.
Use of organ Throughput Type				Existing	*		_		
Spray Coa Number of Compo	nents Commer	nt							
Booth							Savo Cano	201	
Booth Other Use	<u></u>						Save Cano	cel	
Booth Other Use Storage Tanks	Criteria	Emissions (II	bs)				Save Cano	cel	
Booth Other Use Storage Tanks Fugitive Components	Criteria l	Emissions (II	bs) EF	Unit	EF Data	a Source	Save Cano Overall CE	cel	Emissions
Booth Other Use Storage Tanks Fugitive Components Other Processes	Criteria I			Unit lbs /	EF Data	a Source		cel	Emissions
Booth Other Use Storage Tanks Fugitive Components Other Processes Process Upset	<u>Open</u>	Pollutant VOC	EF	lbs /	EF Data	a Source		el	Emissions
Booth Other Use Storage Tanks Fugitive Components Other Processes Process Upset	<u>Open</u>	Pollutant	EF	lbs /	EF Data	a Source		cel	Emissions
Booth Other Use Storage Tanks Fugitive Components Other Processes Process Upset Summaries Data Validation	<u>Open</u>	Pollutant VOC	EF	lbs /	EF Unit	a Source EF Data Sour	Overall CE		Emissions Emissions
Booth Other Use Storage Tanks Fugitive Components Other Processes	<u>Open</u>	Pollutant VOC AC/ODC) Em	EF	lbs / ns (lbs)			Overall CE		
Booth Other Use Storage Tanks Fugitive Components Other Processes Process Upset Summaries Data Validation	Open Toxic (T/	Pollutant VOC AC/ODC) Em	EF	lbs / ns (lbs)			Overall CE		
Booth Other Use Storage Tanks Fugitive Components Other Processes Process Upset Summaries Data Validation	Open Toxic (TA Add Ne	Pollutant VOC AC/ODC) Em TAC/ODC Grou	EF	lbs / ns (lbs) CAS #	EF Unit		Overall CE		
Booth Other Use Storage Tanks Fugitive Components Other Processes Process Upset Summaries Data Validation	Open Toxic (TA Add Ne	Pollutant VOC AC/ODC) Em	EF	lbs / ns (lbs) CAS #	EF Unit		Overall CE		

Save the entry, then go to "Criteria emissions" and click "Open".

AQMD A	ir Quality	/ Manag	Jement Dis	uncu						
AER Home Ac	cess Facility	Facility Hor	me					II	-	a 7
						Facilit	y ID: 99911	7 · ABC ·	Reporting	gperiod: 2012
Facility ID:	999117	« Bacl	k to Emission Sou	rce Process Refere	nce					
Facility Informa	tion	Fugiti	ive Compone	ents						
Build Reporting Combustion Fi	uels	and Ru	le 1176. Please visi	ssion data relative it the supplemental llation. Detailed ins	instructio	ns for moi	re informat	ion on co	mponent i	dentification,
Emission Source Report Process		Process	1					Optior	al: Mark a	as Completed
Combustion			AER Device ID	Permit Device II	A	/N P	rocess ID	Rule #	Com	ponent Type
External Co	mbustion	Open	ES1	D1	123	456	P1	1173	Valves Ga	
Internal Cor	mbustion							Click her	e to <u>delet</u>	e this process.
Use of organic	s	Throug	hput							
Spray Coati Booth	ng/Spray				Annua	l Throughp	out			
Other Use o	of Organics	<u>Open</u>			5.0	component	s			
Storage Tanks		Criteria	Emissions (lbs))						
Fugitive Com	ponents		Pollutant EF	Unit		FF D.	a Source	0	rall CF	Emissions
Other Process	es	Open	VOC	lbs / components		EF Dat	a source	Uve	rall CE	Emissions
Process Upset		\smile		•						
Summaries		Toxic (TAC/ODC) Emiss	sions (lbs)						
Summaries Data Validation		Toxic (TAC/ODC) Emiss	CAS # EF	Unit	EF Dat	a Source	Ove	rall CE	Emissions
		Toxic (TAC/ODC Group		Unit	EF Dat	a Source	Ove	rall CE	Emissions
Data Validation			TAC/ODC Group		Unit	EF Dat.	a Source	Ove	rall CE	Emissions
Data Validation		Add	TAC/ODC Group			EF Dat	a Source	Ove	rall CE	Emissions

For the purpose of this exercise, assuming that no screening data are available, the AQMD default emission factors (EF) will be used; for valves in gas/vapor service, EF is 72 lb/component/year. Note that emissions are calculated automatically. In the mandatory field "Emission Factor Data Source", select AQMD default; user may also comment on the emission factor in case other than default EF is used, then click "Save".

	ir Quality N		ement D	istric								
									Ħ			3
								Facility ID:	999117 · ABC · I	Reporting	period:	2012
acility ID:	999117											
acility Informa	ation	Fugitiv	ve Compo	nent	s							
uild Reporting		This sect	tion contains e	mission	data rela	tive to	leakage	from process	components as s	pecified in	Rule 11	72
Combustion	Open Criteria Er	nission Inf	formation - Fu	aitive (Compone	nts	actruction	ar for moro in	formation on cor	x teoroot	entifica	
Emission Sou	AER Device ID		ermit Device ID		A/N		rocess ID	Rule #	Component	Type		
Report Proce	ES1		D1		123456		P1	1173	Valves Gas/Vapor		Comp	
				F	Annual Thro 5.0 compor							
Combustion			VOC - Volatile	Organ							nent Ty	ре
External C		Pollutant VOC - Volatile Organic Compounds Emission Factor (EF) 72.0000 * lbs/components									Vapor this pro	
Internal C	Emission Factor (E	-	72.0000		103/	comp	Sherits		*		this pro	ocess.
Use of orgar	Emission Factor Co	omment										
Spray Coa												
Booth	Emission Factor Da	ata Source	AQMD defau	IT								
Other Use	Emissions		360.00 lbs									
Storage Tanl									Save C	ancel		
Fugitive Co											. Carrier	
Other Process			VOC		Un componen			EF Data Sou	urce Over	rall CE	Emiss	ions
		open	100	100 /	componen							
ummaries		Toxic (T	AC/ODC) Em	ission	s (lbs)							
ata Validation			TAC/ODC Gro	up	CAS #	EF	Unit	EF Data Sou	urce Over	rall CE	Emiss	ions
eport Submiss	ion											
	AOMD web	site Home	I AFR Web Si	te L Sub	omit quest		omment I	Ecotek Web S	Site Report a B	19		

If the VOC stream contains any toxic air compounds (TAC) or ozone depleting compounds (ODC), click on the "Add New" button under Toxic (TAC/ODC) Emissions. In the next window, select the TAC/ODC compound from the drop-down list.

In this example, the gas/vapor stream is assumed to contain 1% benzene by weight based on material balance. Therefore, the EF for benzene is 0.72 lbs/component (72 lbs x 0.01). In the "Emission Factor Data Source" field, select the appropriate source from the drop-down list, then click the "Save" button.

	ir Quality Mana	igement Dist	rict				
AER Home Ac							
					Facility ID: 9	999117 · ABC · Reporti	ng period: 2012
Facility ID:	999117 «Ва	ck to Emission Sourc	ce Process R	eference			
Facility Inform	Open Toxic (TAC/ODC)	Emission Informatio	n - Fugitive	Components			×
Build Reportir	AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Component Type	Rule 1172
Combustion	ES1	D1	123456	P1	1173	Valves Gas/Vapor	e tool bar.
			Annual Thro				c coor bar.
Emission Sou			5.0 compo	hents			Completed
Report Proce	TAC/ODC Toxic Pollutants /	Ozone Depleting Compound	ds				Completed
Combustion	Pollutant	2 - Benzene				*	nent Type
5 1 1 1						-	Vapor
External C	TAC Group	2 - Benzene					this process.
Internal C	CAS # (Pollutant)	71432 - Benzene					tins processi
Use of orgar	Emission Factor (EF)	7.2000e-1	* lbs/	components			
Spray Coa		7.2000001	103/	components			
Booth Other Use	Emission Factor Comment					÷	
Storage Tan	Emission Factor Data Source	Material Balance				*	
	Emissions	3.600e+0 lbs					
Fugitive Co							Emissions
Other Proce						Save Cancel	360.00
Process Upse							
Summaries	Toxic	(TAC/ODC) Emissi	ons (lbs)				
Data Validation		TAC/ODC Group	CAS #	EF Unit	EF Data Sour	ce Overall CE	Emissions
Report Submiss	ion Ado						
	« Ba	ck to Emission Sourc	ce Process R	eference			
	AQMD web site Ho	ome AER Web Site	Submit quest	ion/comment	Ecotek Web Sit	te Report a Bug	

Click on the "Save" button and the following screen appears:

Air Quality	Mana	gement Di	strict	:							
AER Home Access Facility	Facility H	ome						Ħ	-	a 7	
						Facility	/ ID: 999117	· ABC ·	Reporting p	period: 2012	
Facility ID: 999117	« Ba	ck to Emission So	ource Pr	ocess Refere	nce						
Facility Information	Fugi	tive Compo	nents								
Build Reporting Structure		ection contains er									
Combustion Fuels	and Rule 1176. Please visit the supplemental instructions for more information on component identification, count, and emission calculation. Detailed instructions are available by clicking on Help icon in the tool bar.										
Emission Sources (ES)											
Report Process/Emissions	Proce	55					_	Option	ial: Mark as	Completed	
Combustion		AER Device ID	Pe	ermit Device ID	A/N	l Pr	rocess ID	Rule #	Compo	nent Type	
External Combustion	Open	ES1		D1	1234	56	P1	1173	Valves Gas/		
Internal Combustion							(lick her	e to <u>delete</u>	this process.	
Use of organics	Throu	ghput									
Spray Coating/Spray Booth					Annual	Throughp	ut				
Other Use of Organics	Open				5.0 cc	omponents	;				
Storage Tanks	Criter	ia Emissions (Ib	os)								
Fugitive Components		Pollutant	EF	Ur			Data Source		verall CE	Emissions	
Other Processes	Open	VOC		lbs / compone		AQMD d		0	verall CE	360.00	
Process Upset		(746(000) 5		/II							
Summaries	I OXIC	(TAC/ODC) Emi	ssions	(IDS)							
Data Validation		TAC/ODC Group	CAS #	EF	Ur		EF Data	Source	Overall C	E Emissions	
Report Submission	Open	Benzene	71432	7.20000e-1	lbs / comp	onents	Material Ba	alance		3.600e+0	
	Add	New									
	« Ba	ck to Emission So	ource Pr	ocess Refere	nce						
AQMD we	eb site Ho	me <u>AER Web Sit</u>	e <u>Subn</u>	nit question/c	omment	Ecotek W	<u>eb Site</u> Re	eport a B	ug		

If the data entered for process P1 is final, the user may want to click the grey button "Optional: Mark as Completed". Click "Back to Emission Source Reference" and proceed to the next process.

							_			
							Facility ID:	999117 · Al	BC · Reporting pe	riod: 2012
acilit	ty ID: 9	99117	Build	Reporting S	Structur	e				
acility I	Informatio	n	Emissio	n Sources (ES)	Classifies	tion				
uild Re	porting St	ructure	LIIIISSIO	in sources (ES)	Classifica	tion				
	, Stion Fuel		This se	ction contains fac	ility permit	profile. Please m	nake sure that e	verv device	has a specified En	nission
	on Sources			(ES). New emissio						
		· · ·								
· .	Process/Em			NKS Software DAT	FA IMPORT -	Click here for m	ore instructions.			
umma	Process	References								>
ata Va	A/N	Permit NO	Permit Device ID	Permit Device Description	AER Device ID	ES Name	Source Group	Emissions?	Equipment	ES Status
eport	123456	F12345	D1		ES1	Unit 1	Fugitive Components	Y	Fugitive	Work in progress
	Pro	cess ID	Source	Group	Pro	cess Name	Berry	ess Status	Operation Type	
		P1	Fugitive Cor		110		Co	routine		
		<u>P2</u>	Fugitive Cor	mponents			Work	in progress	routine	
		<u>P3</u>	Fugitive Cor	mponents			Work	in progress	routine	
		<u>P4</u>	Fugitive Cor	mponents			Work	in progress	routine	
		<u>P5</u>	Fugitive Cor	mponents			Work	in progress	routine	
		<u>P6</u>	Fugitive Cor	mponents			Work	in progress	routine	
		<u>P7</u>	Fugitive Cor	mponents			Work	in progress	routine	
		<u>P8</u>	Fugitive Cor	mponents			Work	in progress	routine	

Using the same steps as for P1, fill out the information for P2 through P8 by clicking on the respective buttons, such that all components are accounted for. Once all processes are completed, click "OK" and proceed to reporting another emission source by clicking on the "Back to Emission Source Process Reference" button.

If the facility is a non-RECLAIM facility that has individual permits where piping components are not explicitly listed in the permits, reporting associated fugitive emissions require adding new emission sources. For example, for a bulk loading terminal with a permitted loading rack, emissions associated with the organic liquid loading would be reported under the permitted emission source (loading rack). The fugitive emissions must be reported by creating a new emission source, with the suggested comment "loading rack – fugitive components".

To start adding the unpermitted emission sources and report emissions, user must click on the "Add New Emission Source" link:

Air Quality	1anagement District	
AER Home Access Facility	acility Home 🛱 🖶 🚹 🤅	
	Facility ID: 999117 · ABC · Reporting period: 201	2
Facility ID: 999117	Build Reporting Structure	
Facility Information Build Reporting Structure	Emission Sources (ES) Classification	
Combustion Fuels Emission Sources (ES)	This section contains facility permit profile. Please make sure that every device has a specified Emission Source (ES). New emission sources can also be added.	
Report Process/Emissions Summaries	EPA TANKS Software DATA IMPORT - <u>Click here</u> for more instructions.	
Data Validation Report Submission	Displaying 1 emission sources.	
	A/N Permit NO AER Device ID Permit Device ID Search Emission Sources	
	Add New Emission Source Search: Print Preview	
	Action A/N Permit Permit Equipment AER ES Source Has Equipment ES Proce	55
	Open 123458 F12345 D1 Description Device ID Name Group Emissions Equipment Status Reference	_
	Showing 1 to 1 of 1 entries Previous Next	•
AQMD	site Home <u>AER Web Site</u> Submit guestion/comment <u>Ecotek Web Site</u> Report a Bug	

The following screen will appear:

AER Home Access Facility	Facility Home	
		Facility ID: 999117 · ABC · Reporting period: 2012
Facility ID: 999117 Facility Information Build Reporting Structure Combustion Fuels Emission Sources (ES) Report Process/Emissions Summaries Data Validation Print Facility Report Excel Reports Report Submission	Edit Emission Source Providing correct information and proper selection categories would help to classify emission source.	
	ES Name Operating ES Status Normal Oper Comment Environment Comment	ed upon saving ation • • d components Emission Source Group Type •
4040	Save and return to List of Emission Sources or Save and proceed to Process Reporting or Cancel Optional: Save and Mark as Completed	

Continue by repeating the steps described before for permitted sources and complete reporting emissions for all non-permitted components.