

Guidelines for Calculating Emissions from Dairy and Poultry Operations

(Revised December 2022)

The dairy and poultry farms are required to report to the SCAQMD their emissions of Volatile Organic Compounds (VOC), Particulate Matter (PM) and Ammonia (NH₃) that result from the handling of livestock waste. For poultry operations, there are additional PM emissions from bird feed.

1. PROCEDURES

Facilities can estimate their VOC, PM, and NH₃ emissions using the equation:

$$\mathbf{E} = \mathbf{Q} * \mathbf{EF} * (\mathbf{1} - \mathbf{CE})$$

Where,

- E = VOC, PM or NH₃ emissions, expressed in pounds per year (lbs/yr)
- Q = Throughput is the number of animals per reporting year by animal category. For poultry farms, the throughput is also expressed in tons of bird feed when estimating PM emissions from bird feed.
- EF = Uncontrolled emission factors from Table 1 based on the animal categories and materials.
- CE = Control effectiveness listed in Table 2 based on the types of manure disposal practices.

	VOC	PI	М	NH ₃
Animals/Operations	lbs/head	lbs/head	lbs/ton	lbs/head
Dairy Farms:				
Milking Cows	12.8	3.56		74.0
Dry Cows	8.7	3.56		45.4
Heifers (4-24 months)	6.1	3.56		27.8
Heifers (4-24 months) ^b	4.4	3.56		27.8
Calf (under 3 months)	4.5	3.56		23.6
Mature Cows ^b	6.3	3.56		74.0
Poultry Farms:				
Birds Manure	0.02565	0.0308		0.192
Birds Feed			0.108	
Swine Farms:				
Swine	4.64			20.3

Table 1: Uncontrolled Emission Factors^a

a. The emission factors from Table 1 are from the Governing Board Meeting Agenda, October 7, 2011, Appendix I

- b. Emission factors for dairy operations with flush lanes that are flushed with water to a holding pond.
- c. Milking cow is a cow raised to produce milk

- d. Dry cow is a cow of approximately 2 weeks from calving and in between lactation, hence, is not giving milk and is usually kept separately for different feeding
- e. Heifer is a young female calf under 3 years old and has not borne a calf
- f. Calf is a young cow or bull in its first year
- g. Mature cow is a cow that has had one or two calves and which may be more than 3 years old

Table 2- Control Efficiency^a

Type of Disposal	(VOC & NH3) Control Efficiency	(PM) Control Efficiency
No Disposal		
Best Management Practices ^c		0.20
Manure Sent out of Basin	0.50	
Composting (open window)	0.385	
Composting (enclosed)	0.475	
Digester (plug & complete mix)	1.0	
Land Application ^d	0.115	

a. The emission factors in Table 2 are from SCAQMD Final Staff Report for Proposed Rule 1127 dated August 6, 2004 unless otherwise noted.

- b. This emission factor is from SCAQMD Governing Board Meeting Agenda, October 7, 2011.
- c. Best Management Practices are Class One Mitigation Measures defined in Rule 223, Appendix A, Table 1, subsections E & F, and Table 2, subsections C & D.
- d. Land Application is the use of methods such as tilling, injecting, or plowing that covers animal waste in accordance with NRCS Agricultural Waste Management Field Handbook Chapter 10, Section 651.1102.

2. HOW TO REPORT

VOC, PM, NH₃ emissions must be reported separately for each animal category (i.e., milking cows, dry cows, heifers, birds, etc.). This can be done through the following steps:

- 1. Determine the annual average number of animals, (Throughput, Q):
 - For a dairy farm, take the annual average number of animals for each annual category from the annual report submitted to the Santa Ana Regional Water Quality Control Board (SARWQCB).
 - For a poultry farm, take the annual average number of birds using your annual recordkeeping report. In addition, the total amount of bird feed used during the same time period is also needed.
- 2. Select proper emission factors listed in Table 1, (EF):
 - Note that the VOC emission factors are different based on the animal category (e.g., milking cows versus dry cows) and whether the dairy farm has lanes that are flushed with water to a holding pond.
 - $\circ~$ Note that the PM emission factors are different based on the source of emissions (bird's manure or feed). There are no VOC or NH_3 emissions associated with bird feed.
- 3. Select appropriate control efficiency (CE) from Table 2 based on the type of emissions (i.e., VOC, PM, or NH₃) and manure handling method.
- 4. Enter the information into the AER Reporting Tool.

In the following examples, the blue Navigation Menu on the left-hand side may look different depending on the type of AER you are submitting. The emissions estimation instructions will always be the same regardless of the type of Navigation Menu the reporter sees.

EXAMPLE 1:

Last year, a dairy farm facility has reported to the Santa Ana Regional Water Quality Control Board 900 milking cows, 300 heifers (17-14 months) and no calves. The manure is sent out of the basin. This dairy does not have any lanes that are flushed with water to a pond.

STEPS TO REPORT THE EMISSIONS

Image 1: Click "Emission Sources (ES)" on the Left Navigation Menu. The reporting tool displays existing permitted units (emission sources) as shown at bottom of the image below. If livestock waste handling is not listed, it must be added to the list by clicking "Add New Emission Source." In this example, this farm operations are permitted. Click on the hyperlink "Profile" for Device ID ES58 which will take user to image 2 below.

Facility ID: 999001	Build	Repo	ortin	g Str	uctu	ire								
1. Facility Information 2. Status Update	Emissi	on Sour	ces (ES) CI	assific	ation								
Combustion Fouls Emission Sources (ES) Report Process/Emissions Additional Toxic Substances Production and Usage Perform Data Validation Review Summaries Print Facility Report	Sum	mary: ruction:	This devia adde Add devia emis tank	sectic ce has ed. Device ces by sion d data	en con a spe es (en clicki ata by by clic	tains facility cified Emission nissions source ing "Profile" u y clicking "Op- cking on link"	permit on Sources) by nder then" under 'Click H	t profil rce (ES clickin he Emi der the here" b	e. Pla i). Ne g "Ad ssion e Emi pelow	ease ma w emis: d New I Source ssions c	ike sure sion sou Emissior (ES) Co column.	that en rces ca Source lumn. A Upload	very n also ". Ed dd stora) be it ige
	Stora Add Displ	ge Tank E New Em aying 29	mission emiss	ion sou	h File I	mport - <u>Click he</u> You can search	by:	nore in	structi	ions.				
	A/N AER I	Device ID					Permit Permit	NO Device	ID					
	Emission	ch Emissions	A/N	Permit	Permit Device	Permit Equipment	Se AER Device	earch:	ES Group	Source	Has	Equipmer	Print P	ES Status
	(ES)		445819	F86880	ID		ES58	AGOPS Dairy	Name	Other Processes	Y.	Other process equipment	N	Work in progress

Image 2: Fill out relevant information for the Emission Source by identifying "ES Name" (example, Animal Waste Handling) and selecting the "Operating ES Status" (i.e., Normal Operation) from the drop-down menu. After selecting the appropriate Operating ES Status, the "Categorize Emission Source" button will appear. By clicking this button, the tool will take the user to the next screen (Image 3 below) for categorizing this emission source.

Facility ID: 999001 1. Facility Information	Edit Emission Source		
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions 6. Additional Toxic Substances Production and Usage	Instruction: Add new specificat best refle Red Aster populated	emissions sources using information found on permits, manufact itions, or identifying placards. Select the Operating ES Status the ect the device's operation for this reporting period. All areas wit risk (°) must be addressed. Note: Some devices have been pre- id, verify that the information is correct	turers at th a
7. Perform Data Validation			
8. Review Summaries	Permitted		
9. Print Facility Report	A/N	445819	
10. Report Submission	PERP Equipment(CARB's Portable Equipment Registration Program)	Only CARB GHG MRR and Over 250 tons/yr (PTE) facilities must repo	ort PERP
	Permit No	F86880	
	Permit Device ID		
	Permit Equipment Description		
	AER Device ID	ES58	
	ES Name	AGOPS Dairy	
	Operating ES Status	Normal Operation	
	Comment	4	
	Emission Source Category	Categorize Emission Source	
	Equipment		
	Design Capacity	0.000000	
	Save or Save and re	etum to List of Emission Sources or	

Image 3: In this example, user selects No. 7 Other Processes by clicking on the click here link. Select the check box designated as "Other process equipment," and click the "Save" button.

1 Granteeu	A/N	Permit No	Permit Device ID	Permit Equipment Description	AER Device ID	ES Name
s	445819	F86880			ES58	AGOPS Dairy
 Extern followi Intern followi Spray Other followi Liquid Fugitiv Other 	al Combusti ng Equipme al Combustion ng Equipme Coating/Spr Use of Orgai ng Equipme Storage Tan e Componer Processes (c	on Equipment (e.g nt: on Equipment (e.g nt: ay Booth (e.g., coi nics (e.g., coatings nt: k (e.g. Undergrou nts (Emission Leak does not fit in any	., boiler, dryer, oven, furna ., internal combustion eng atings, solvents, adhesives ., solvents, inks, adhesives nd, Aboveground, Small Ta s from Process Componen of the groups mentioned a	ace, heater, afterburner, flare, kiln or incir ine (excluding vehicles), turbine or micro , etc.) <u>click here</u> to select one of the follo c, etc.) except in Spray Coating/Spray Boo inks, Dispensing Systems) <u>click here</u> to se ts per Rule 462, 1173 and 1176), <u>click her</u> bove), click click here to mark "Other Pro	erator) <u>click here</u> to select turbine) <u>click here</u> to se wing Equipment: oth, <u>click here</u> to select of elect one of the following are to select all applicable cess Equipment":	ect one the lect one of the one of the g Equipment: e Equipment:

After saving, the program return user to Image 2. Click "Save and proceed to Process Reporting," which will take the user to the screen shown in Image 4 for reporting emissions for this emission source.

Image 4: The reporting tool adds Process ID (P1) for every Device ID. Click the link "Open" for entering process information such as throughputs, emissions, emission factors, and TACs as shown in Image 5.

A/N	Permit No	Permit Device ID	Permit Device Description	AER Device ID	ES Name	ES Group Name	Source Category	Emissions?	Equipment	PERP	ES Status
<u>Open</u>	445819	F86880			ES58	AGOPS Dairy		Other Processes	Y	Other process equipment	Ν
	Pr	ocess ID	Source Gr	oup	Process	/Materia	I/Fuel Nam	e	Status	Operation	Туре
-	nen	P1	Other Process E	missions		Milking C	ows	Wo	rk in progress	routin	e

Image 5: The below image is the Process page for Device ID 58, Process ID 1. Each step on this page has a designated data entry link or orange button. Click the "Open" link under "Step 1: Process" to enter process information.

Facility ID: 999001	« Back to Emission So	ource Proce	ess Referenc	e				
1. Facility Information	Other Processe	s						
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics	This reporting scree which were not cou- for every associate data in the followi under external or in reported here; how instructions are avai	en is for re rered in pr d emission ng steps t nternal co rever, it m ailable by	eporting ac revious rep n source. P to reset. C ombustion p nust be sub clicking or	ctivity data for porting screen lease start w ombustion en process categ stantiated to a Help icon in	or other ns. Plea vith Ste nissions ories. (avoid o the too	r processes u se provide s p 1, edits to s need to be Combined en double repor ol bar.	sed in your pecific info Step 1 ma reported so nissions car ting. Detail	facility rmation ay cause eparately also be led
Spray Coating/Spray Booth	Step 1: Process					Optio	nal: Mark as	Completed
Other Use of Organics	AER Device I	D	Permit Devic	e ID /	A/N	Process ID	Rule #	Activity
Storage lanks	Open ES58			44	5819	P1		
Process Upset 6. Additional Toxic Substances Production and	Step 2: Throughput			Appual Throu	iebout			
Usage 7. Perform Data Validation	Open			Annual Through	Subar			
8. Review Summaries 9. Print Facility Report	Step 3: Criteria Emi	ssions (lb:	s)		U	se <u>Default Emi</u>	ssion Factors	<mark>if available.</mark>
10. Report Submission	Pollutant E	F Unit	Controlle	d EF EF	Data Sou	urce Ov	verall CE	Emissions
	Step 4: Toxic (TAC/C	DC) Emis	sions (lbs)	1				
	TAC/ODC Group	CAS #	EF Unit	Controlled EF	EF	Data Source	Overall CE	Emissions
	Add New							

Image 6: The "Edit Emission Process - Other Processes" pop-up appears. Identify the Process Name for the first Process ID P1 and fill out the Activity Code by selecting the appropriate information from the drop-down menu from each box. This example shows correct sector, industry, operation, process, and rule for the milking cows. Click "Save" button.

AER Device ID) Permit Devi	ice ID	A/N	Process ID	Rule #	Activity
18			445819	P1		
AER Device ID	ES58	AER	Device Name	AGOPS Dairy		
PERMITTED	AN: 445819	Perm	it Device ID			
Process ID	P1	Proce	ess Name	Milking Cows		
Process Comme	ent					
Activity Code *	Sector:					
	Inductor					
	Food and Agricul	tural				~
	Operation:	contan				
	Dairy Farms / Wa	aste Har	ndling			~
	Process:					
	Milking Cows					~ 🚺
Rule #	1127	• * Add	Rule			

Image 7: After saving, the program alerts the user to the fact that the AER Reporting Tool automatically populates default emission factors. Click the "OK" button.

Facility ID: 999001	- Ba	ck to Emission S	iource Proc	ess Referenc	e				
1. Facility Information	Othe	er Processe	25						
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of oreanics	This whice for e data unde repo instr	reporting scre th were not co every associate in the follow er external or orted here; how ructions are av	een is for r vered in p ed emissio ing steps internal co wever, it n vailable by	eporting a revious rep n source. F to reset. C ombustion nust be sub clicking or	ortivity da orting so lease sta ombustio process o stantiate Help ico	ata for other creens. Pleas art with Stea on emissions categories. C ed to avoid c on in the too	processes use provide s p 1, edits to need to be combined er louble report of bar.	used in your pecific info o Step 1 ma reported se missions can rting. Detail	facility rmation y cause parately also be ed
Spray Coating/Spray	Step	Created Def	ault Emis	sions		×	Optio	onal: Mark as	Completed
Other Use of Organics Storage Tanks Fugitive Components Other Processes Process Upset . Additional Toxic justances Production and Jsage 7. Perform Data Validation 3. Review Summaries	Open Step	Default T been assi factors, u enter you	AC and Cri igned. To e uncheck "U ur specific	iteria emiss enter non-d 'se Default" emission fa	ion factor efault em check-bo ctors.	rs have hission bx and OK Throughput	Activ pod and Agricu Cows Click he	ity Itural : Dairy Fr ere to <u>delete</u>	rms / Waste
9. Print Facility Report									
10. Report Submission	Step 3	3: Criteria Em	issions (lb	s)		Us	e <u>Default Em</u>	ission Factors	if available.
		Pollutant	EF	Unit	Controll	ed EF EF I	Data Source	Overall CE	Emissions
		VOC	1.2800000)e+1 lbs /	No	AQMD	default		
	Step 4	New 1 New 4: Toxic (TAC/	ODC) Emis	sions (lbs)	No	AQMD	dei autr		
		TAC/ODC Group	CAS #	EF	Unit	Controlled EF	EF Data Sou	rce Overall (E Emissions
	Open	Ammonia	7664417	7.4000000	e+1 lbs /	No	AQMD defaul	t	
	Add	1 New							

Image 8: After saving, the program returns to Image 5. This time, click on the open link underneath "Step 2: Throughput" (see Image 5) to enter the Annual Throughput, Type and Comment for the Process, as shown below. Click the "Save" button.

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Activity	
ES58		445819	P1	1127	Manufacturing : Food and Agricultural : Dairy Farms / Was Handling : Milking Cows	te
			1	Annual 1	hroughput	
Annual Thr	oughput	900.000	00000		* head ~ *	
Throughpu	t Type	Existing	▼ *			
Throughou	t Comment	As repor	rted to SA	RWOC	Board	

Image 9: After saving, the program returns to Image 5. If you do not need to change the default emission factor or add any new pollutants, you have completed the reporting of Device ID ES58, Process ID P1: Milking Cows. If the user would like to replace the default emission factor with a site-specific emission factor continue to Image 10. If you are eligible for abbreviated reporting under CTR, not using default emission factors will prevent you from submitting an abbreviated report. In other words, only default emission factors are allowed for abbreviated reporting.

Facility ID: 999001	« Ba	ick to Emissio	n Source P	rocess	Referen	ice					
1. Facility Information	Oth	er Proces	sses								
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics	This whice for e data unde repo instr	reporting s ch were not every associ a in the foll er external orted here; ructions are	creen is fo covered i ated emis owing ste or interna however, i available	or rep n prev sion s ps to l com it mus by cli	orting a rious re ource. reset. oustion t be su cking o	activity of porting Please s Combust process bstantia in Help i	data for o screens. start with tion emis s categori ted to av icon in th	other p Please h Step ssions r ies. Co void do ne tool	processes (provide s 1, edits to need to be ombined er puble repor bar.	used in you pecific inf o Step 1 n reported nissions ca ting. Deta	ur facility ormation hay cause separately un also be illed
Spray Coating/Spray Booth	Step	1: Process							Optic	nal: Mark a	s Completed
Other Use of Organics Storage Tanks		AER Device	Permit Device ID	A/N	Proces	s Rule #			Activ	ity	
Other Processes	Open	ES58		44581	9 P1	1127	Manufactur Handling :	ring : Foo Milking (od and Agricu Cows	tural : Dairy	Farms / Waste
6. Additional Toxic Substances Production and Usage	Step 2	2: Through	put						Click he	ere to <u>delet</u> e	this process.
7. Perform Data Validation						Annu	al Through	put			
8. Review Summaries	Open					900.0	0000000 he	ead			
10. Report Submission	Step	3: Criteria	Emissions	(lbs)				Use	Default Em	ssion Factor	💈 if available.
		Pollutant	EF		Unit	Contro	olled EF	EF Data	Source O	verall CE	Emissions
	<u>Open</u>	VOC	1.2800000	e+1 lb:	/ head	1	No A	AQMD de	fault		1.15200000e+4
	Open	PM	3.56000000	e+0 lb	/ head		No A	AQMD de	fault		3.20400000e+3
	Ad	dNew									
	Step 4	4: Toxic (TA	C/ODC) E	missic	ns (lbs)					
		TAC/ODC Grou	ID CAS #	i.	F	Unit	Controlle	ed EF E	F Data Source	Overall CE	Emissions
	Open	Ammonia	7664417	7.4000	0000e+1	lbs / hea	d No	A	QMD default		6.66000000e+4
	Ad	d New									

Image 10: Click on the "Open" link next to the pollutant the user would like to change. For the below example let's use VOC.

				eferen						
Oth	er Proces	ses								
This whice for e data unde repo	reporting sc th were not of every associa in the follo er external o inted here; h uctions are a	reen is for covered in ited emiss wing step r internal owever, it available b	r report previous ion sol s to re combine must by clic	rting a ous rej urce. F eset. (ustion be sub king o	ctivity of porting s Please s Combust process ostantiat n Help in	data for screens. tart with tion emis categor ted to av con in th	other Plea h Ste sion: ies. (void one to	r processes u se provide s op 1, edits to s need to be Combined er double repor ol bar.	used in you pecific inf o Step 1 m reported nissions ca ting. Deta	ur facility formation nay cause separately an also be ailed
Step	1: Process							Optic	inal: Mark a	s Completed
	AER Device	Permit Device ID	A/N	Proces	Rule			Activ	ity	
Open	ES58		445819	P1	1127	Manufactu Handling :	ring : I Milkin	Food and Agricul g Cows	tural : Dairy	Farms / Waste
Open					Annua 900.0	al Through 10000000 he	put rad			
Step	3: Criteria E	missions (lbs)				U	se <u>Default Em</u>	ssion Factor	🖪 íf available.
-	Pollutant	EF		Unit	Contro	olled EF	EF Da	ata Source O	verall CE	Emissions
Open	VOC	1.28000000e	+1 lbs	head	N	lo J	AQMD	default		1.15200000e+4
Open Add	PM	3.56000000e	+0 lbs	head	N	io /	AQMD (default		3.20400000e+3
Step 4	4: Toxic (TAC	C/ODC) Em	nission	s (lbs)						
	TAC/ODC Group	CAS //	EF	3	Unit	Controll	ed EF	EF Data Source	overall CE	Emissions
	This which for e data under reporting the second se	This reporting sc which were not of for every associa data in the follo under external of reported here; h instructions are Step 1: Process AER Device ID Quen ES58 Step 2: Throughp Step 3: Criteria E Open Pollutant Open PA	This reporting screen is for which were not covered in for every associated emiss data in the following step under external or internal reported here; however, it instructions are available it Step 1: Process AER Device Permit ID Device ID Device ID Open ESS8 Step 2: Throughput Open Step 3: Criteria Emissions (Open VCC 1.2800000e Add New Device ID	This reporting screen is for reporting screen is for reporting for every associated emission soid data in the following steps to ridude rexternal or internal combineported here; however, it must instructions are available by clic Step 1: Process AER Device Permit DD Device ID AVN Device ID Step 2: Throughput Step 3: Criteria Emissions (lbs) Device VOC 1.2800000e+0 Ibs / Device Ibs / De	This reporting screen is for reporting a which were not covered in previous rep for every associated emission source. F data in the following steps to reset. C under external or internal combustion reported here; however, it must be sub instructions are available by clicking or Step 1: Process AER Device Permit Device ID A/N Process Step 2: Throughput Open Step 3: Criteria Emissions (lbs) Pollutant EF Unit Unit Open 3.55000000e+0 Us / head Add New	This reporting screen is for reporting activity of which were not covered in previous reporting for every associated emission source. Please s data in the following steps to reset. Combustion process reported here; however, it must be substantia instructions are available by clicking on Help i Step 1: Process AER Device Permit A/N Process AER Device Permit A/N Process Step 1: Process Step 2: Throughput Onen 900.0 Step 3: Criteria Emissions (lbs) Onen Yoc Pollutant EF Unit Control Open Yoc 1.28000000e+1 Ibs / head N Open Yoc 1.28000000e+1 Ibs / head N Open Yoc 1.28000000e+0 Ibs / head N Add Newe	This reporting screen is for reporting activity data for which were not covered in previous reporting screens. for every associated emission source. Please start with data in the following steps to reset. Combustion process categor reported here: however, it must be substantiated to an instructions are available by clicking on Help icon in the Step 1: Process AER Device Permit A/N Process Rule AER Device Permit A/N Process Rule Step 1: Process Bevice ID A/N Process Rule Step 2: Throughput Annual Through 900.0000000 he Step 3: Criteria Emissions (lbs) Step 3: Criteria Emissions (lbs) Pollutant Ef Unit Controlled EF No Open VOC 1.2800000e+1 lbs / head No A Add New Add New Add New Add New Add New	This reporting screen is for reporting activity data for othe which were not covered in previous reporting screens. Pleas for every associated emission source. Please start with Ste data in the following steps to reset. Combustion emission: under external or internal combustion process categories. 4 reported here; however, it must be substantiated to avoid instructions are available by clicking on Help icon in the to Step 1: Process AER Device Permit Device ID A/N Process Rule ID Open ES58 445819 P1 1127 Manufacturing : Handling : Millin Step 2: Throughput Open 900.0000000 head Step 3: Criteria Emissions (lbs) U Open YoC 1.28000000e+1 Ib/s / head No AQMD Add New Actional Throughput Step 3: Criteria Emissions (lbs) U EF Device IF Find	This reporting screen is for reporting activity data for other processes U which were not covered in previous reporting screens. Please provide s for every associated emission source. Please start with Step 1, edits to data in the following steps to reset. Combustion emissions need to be under external or internal combustion process categories. Combined er reported here; however, it must be substantiated to avoid double report instructions are available by clicking on Help icon in the tool bar. Step 1: Process Option AER Device Permit A/N Process Rule Activity Device ID Device ID A/N Process Rule Activity Option ES58 445819 Pt 1127 Manufacturing : Food and Agricul Handling : Miking Cows Click he Step 2: Throughput Option 900.0000000 head Step 3: Criteria Emissions (lbs) Use Default Emi Option VOC 1.28000000e+0 lbs / head No AQMD default Add New	This reporting screen is for reporting activity data for other processes used in you which were not covered in previous reporting screens. Please provide specific inf for every associated emission source. Please start with Step 1, edits to Step 1 n data in the following steps to reset. Combustion emissions need to be reported under external or internal combustion process categories. Combined emissions care reported here; however, it must be substantiated to avoid double reporting. Deta instructions are available by clicking on Help icon in the tool bar. Step 1: Process Optional: Mark 3 AER Device Permit A/N Process Rule Activity Device ID A/N Process Rule Activity Device ID A/N Process Rule Activity Click here to delete Step 2: Throughput Open 900.0000000 head Step 3: Criteria Emissions (lbs) Use Default Emission Factor VOC 1.28000000e+1 lbs / head No AQMD default Add New

Image 11: Uncheck the check box next to "Use Default". Enter the site-specific emission factor and/or control efficiency. Add detailed information about the development or source of the emission factor and/or control efficiency in the emission factor comment, and select the most appropriate the emission factor data Source for the Process. Click the "Save" button.

ID	ID	A/N	ID	Rule #	Activity
558		445819	P1	1127	Manufacturing : Food and Agricultural : Dairy Farms / Waste Handling : Milking Cows
			1	Annual	Throughput
				900.000	00000 head
Pollutant		VOC -	null		
Emission Fa	actor (FF)	1.2800	00000e+1		* lbs/head
		1150	a default	>	
		Use	e derault	_	
		U Cor	ntrolled EF	value	
		(ma	rk checkbox	if EF list	ed represents EF determined after control)
Overall Con	trol Efficiency				0
Emission Ea	actor Comment				
Chrission re	con comment				
					h
		If not a referen with th Proces	using AQM nces in the ne informa ses withou	1D def Emiss tion. It this i	ault emission factor please provide detailed ion Factor Comment box above or upload file nformation are subject to audit.
Emission Fa	actor Data Source	AQMD	default		*
Fasterland		1.1520	00000e+4	lbs	

You have now completed the reporting for Device ID ES 1, Process ID P1: Milking cows. To add the next process (Heifers), click on the orange "Back to Emission Source Process Reference" button circled in red in Image 10 and continue to the following steps.

STEPS TO REPORT THE NEXT PROCESS

Image 12:

To add the next Process (Heifers), click "Add Process/Material/Fuel" button as shown below. Name the Process (i.e. Heifers) in the box and click the "OK" button next to it.

	113	Description	ID	co name	Group	Category	Emissions?	Equipment	PERP	Status
45819	F86880			ES58	AGOPS Dairy		Other Processes	Y	Other process equipment	N
Pr	ocess ID	Source Gr	oup	Process	/Materia	l/Fuel Nam	e	Status	Operation	Туре
1	P1	Other Process E	missions		Milking C	ows	Wo	rk in progress	routine	
	15819 Pr	Process ID P1	Process ID Source Gr P1 Other Process E	Process ID Source Group P1 Other Process Emissions	Process ID Source Group Process P1 Other Process Emissions	F86880 ES58 AGOPS Dairy Process ID Source Group Process/Materia P1 Other Process Emissions Milking C	ISB19 F86880 ES58 AGOPS Dairy Process ID Source Group Process/Material/Fuel Nam P1 Other Process Emissions Milking Cows	Process ID Source Group Process/Material/Fuel Name P1 Other Process Emissions Milking Cows Wo	ISB19 F86880 ES58 AGOPS Dairy Other Processes Y Process ID P1 Source Group Other Process Emissions Process/Material/Fuel Name Milking Cows Status Work in progress	ISB19 F86880 ES58 AGOPS Dairy Other Processes Y process equipment Process ID P1 Source Group Other Process Emissions Process/Material/Fuel Name Milking Cows Status Work in progress Operation routin

REMINDER:

To report the VOC, PM, and NH₃ emissions from the <u>300 Heifers</u>, repeat the procedures as illustrated in Image 5 and follow the steps leading to Image 11.

Process	References									×
A/N	Permit No	Permit Device ID	Permit Device Description	AER Device ID	ES Name	ES Group Name	Source Category	Emissions?	Equipment	ES Status
445819	F86880		AGOPS DAIRY	ES1	Animal waste handling		Other Processes	Y	Other process equipment	Work in progress
	Proce	ess ID	Source Group		Process/Material/F	uel Name		Status	Operatio	n Type
Ope	n P	1	Other Process Emission	กร	Milking cow	/S		Work in progr	ress routi	ne
Ope	en P	2	Other Process Emission	ns	Heifers			Work in prog	ress routi	no

EXAMPLE 2:

Last year, a poultry farm facility raised 5,000 chicken on 100 tons of feed. The manure is sent out of the basin. This poultry does not have any lanes that are flushed with water to a pond.

Image 14: Since this poultry farm does not possess an operating permit, the user must add this emission source by clicking on the link "Add New Emission Source" on the Emission Source page. Once you have followed the procedure illustrated in Images 1-5 you will see the below Emission Source (ES) page. Click on the blue "Open" link in the "Step 1: Process" header.

Facility ID: 999001		ocess Reference				
1. Facility Information	Other Processes					
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics	This reporting screen is for which were not covered in for every associated emiss data in the following step under external or internal reported here; however, it instructions are available	r reporting activity da previous reporting sc ion source. Please st to reset. Combustic combustion process of must be substantiate by clicking on Help ice	ata for other creens. Plea art with Ste on emissions categories. (ed to avoid o on in the too	processes use provide s p 1, edits to need to be Combined en double report ol bar.	used in you pecific info o Step 1 m reported s missions can rting. Detai	r facility ormation ay cause eparately n also be iled
Spray Coating/Spray Booth	Step 1: Process			Optio	onal: Mark as	Completed
Other Use of Organics	AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Activity
Storage Tanks	Open ES59			P1		
Other Processes Process Upset 6. Additional Toxic Substances Production and Usage	Step 2: Throughput	Annual	Throughput			
7. Perform Data Validation	Qpen					
8. Review Summaries 9. Print Facility Report	Step 3: Criteria Emissions ((lbs)	U	se <u>Default Em</u>	ission Factors	if available.
10. Report Submission	Pollutant EF Unit	Controlled EF	EF Data Sou	urce O	verall CE	Emissions
	Add New					
	Step 4: Toxic (TAC/ODC) En	nissions (lbs)				
	TAC/ODC Group CAS	# EF Unit Controlle	ed EF EF I	Data Source	Overall CE	Emissions
	Add New					

Image 15: Fill in the information for Chicken Manure as shown in the following image. Click the "Save" button.

	SAICG ID		ID	#	Activity
59			P1	1127	Manufacturing : Food and Agricultural : Poultry Farms : Manure Handling
AER Device ID		ES59	AER Devic	e Name	Chicken Manure
NON-PERMITTE	D		Permit Dev	vice ID	
Process ID		P1	Process Na	ame	Chicken Manure
Process Comme	nt	Waste	Handling		
Activity Code *	Sector	:			
	Manut	facturin	g		~
	Indust	ry:			
	Food	and Agr	icultural		~
	Operat	ion:			
	Poultr	y Farms	5		~
	Proces	s:			
	Manu	re Hand	lling		~
Rule #	1127		• * <u>Ac</u>	ld Rule	

Image 16: After saving, you will see the below pop-up that states Default TAC and Criteria emission factors have been assigned and will be automatically populated. Click "Ok" to continue. If you would like to change the default emission factors after they have been automatically populated you can follow the steps under **Image 18**.

Facility ID: 999001											
1. Facility Information	Othe	er Processe	es.								
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics	This whice for e data unde repo instr	reporting scre ch were not co every associate a in the follow er external or ported here; how ructions are av	een is for rep vered in pre ed emission s ing steps to internal com wever, it mu vailable by cl	orting acti vious repor cource. Ple reset. Con bustion pro st be subst icking on H	vity da rting so ase sta nbustio ocess o antiate lelp ico	ata for other creens. Pleas art with Step on emissions categories. C ed to avoid c on in the too	processes use se provide spe p 1, edits to S need to be re combined emis louble reportir of bar.	d in your f cific inforn tep 1 may ported sep sions can a ng. Detaile	acility nation cause varately Ilso be d		
Booth	Step Created Default Emissions X Optional: Mark a										
Booth Other Use of Organics Storage Tanks Fugitive Components Other Processos Process Upset , Additional Toxic ubstances Production and Isage , Perform Data Validation J. Review Summaries , Print Facility Report	Open Step Open	Default TAC and Criteria emission factors have been assigned. To enter non-default emission factors, uncheck "Use Default" check-box and enter your specific emission factors. OK							scc ns : is process.		
10. Report Submission	Step 3	3: Criteria Em	issions (lbs)			Us	e <u>Default Emissi</u>	on Factors if	available.		
		Pollutant VOC PM	EF 2,56000000e- 3,08000000e-	Unit (2 lbs / 2 lbs /	Controlle No No	AQMD	Data Source (default default	Overall CE	Emissions		
	Add Step 4	4 New 4: Toxic (TAC/ TAC/ODC Group	ODC) Emissi CAS #	EF	Unit	Controlled EF	EF Data Source	Overall CE	Emissions		
		AITHURID	1004411	·		INO .	AUMU GEIALA				

Image 17: Click the "Open" link under "Step 2: Throughput" to add the throughput values for this process.

Facility ID: 999001	« Ba	ck to Emissio	n Source Proc	ess	Reference						
1. Facility Information	Othe	er Proces	ses								
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics	This whic for e data unde repo instr	reporting so h were not very associa in the follo r external o rted here; h uctions are	creen is for r covered in p ated emissio owing steps or internal co nowever, it n available by	to oml nus	orting act rious repo purce. Pla reset. Co bustion p t be subs cking on	tivity ease mbu roce tanti Help	dat g scr star stior ss ca iateo icor	a for other eens. Pleas rt with Step n emissions ategories. C d to avoid d n in the too	processes u e provide s o 1, edits to need to be ombined en ouble repor l bar.	ised in your pecific infor Step 1 ma reported se nissions can ting. Detail	facility mation y cause parately also be ed
Spray Coating/Spray Booth	Step 1	: Process							Optio	nal: Mark as	Completed
Other Use of Organics Storage Tanks		AER Device	Permit Device ID	A/N	Process ID	Rule #			Activi	ty	
Other Processes	Open	ES59			P1	1127	Man Man	ufacturing : Fo ure Handling	od and Agricult	ural : Poultry F	arms :
6. Additional Toxic Substances Production and Usage 7. Perform Data Validation	Step 2	: Throughp	out			Anr	nual T	hroughput			
8. Review Summaries 9. Print Facility Report	<u>Open</u>										
10. Report Submission	Step 3	: Criteria E	missions (lb	os)				Us	e <u>Default Emi</u>	ssion Factors	if available.
		Pollutant	EF		Unit	Cont	rolled	EF EF D	ata Source	Overall CE	Emissions
	<u>Open</u>	VOC PM	2.5600000	0e-2 0e-2	lbs / lbs /		No No	AQMD a AQMD a	lefault lefault		
	Add Step 4	New	C/ODC) Emis	ssic	ens (lbs) EF	Ur	nit	Controlled EF	EF Data Sour	rce Overall (E Emissions
	Open Add	Ammonia New	7664417	1		1 lbs	1	No	AQMD default		

Image 17: Add the throughput section as shown below. Click the "Save" button.

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	A	Activity					
ES59			P1	1127	Manufacturing : Food and Agricultural : Poultry Farms : Manu Handling						
			4	Annual T	hroughput						
Annual Thro	Annual Throughput 5,000.0000000				* head	~	*				
Throughput	Туре Е	xisting	× *								
Throughput	Comment Fi	ng report									

Image 18: After saving, the program returns to Image 5 (the Emission Source ID ES59, Process P1 page). As you see below, since the default Criteria Pollutant and TAC emission factors (EF) were automatically added; the tool automatically calculates the Emissions for VOC, PM and Ammonia.

Facility ID: 999001	« Ba	ck to Emissior	n Source Pro	cess	Referen	ce					
1. Facility Information	Othe	er Proces	ses								
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics	This whic for e data unde repo instr	reporting so h were not very associa in the follo r external o rted here; h uctions are	reen is for covered in ited emission wing steps in internal of owever, it available b	rep pre to to com mu: y cl	orting a vious re ource. reset. bustion st be su icking c	Please Please Combus proces bstanti on Help	data for screen start v stion en ss categ ated to icon in	or othe ns. Plea vith Ste mission gories. avoid the to	r processes ase provide s ep 1, edits t s need to be Combined e double repo ol bar.	used in you pecific inf o Step 1 n reported missions ca rting. Deta	ur facility formation nay cause separately an also be ailed
Spray Coating/Spray Booth	Step 1	: Process							Opti	onal: Mark a	s Completed
Other Use of Organics Storage Tanks		AER Device I	Permit Device ID	A/N	Process ID	Rule #			Activ	ity	
Other Processes	<u>Open</u>	ES59			P1	1127	Manufac Manure	turing : F Handling	ood and Agricu	tural : Poultry	/ Farms :
6. Additional Toxic Substances Production and Usage	Step 2	2: Throughp	ut							ere to <u>deleti</u>	e this process.
7. Perform Data Validation						Ann	ual Thro	ughput			
8. Review Summaries 9. Print Facility Report	<u>Open</u>					5,00	0.000000	00 head			
10. Report Submission	Step 3	8: Criteria E	missions (l	bs)				ι	lse <u>Default En</u>	ission Facto	rs if available.
		Pollutant	EF		Unit	Contr	rolled EF	EF Da	ata Source C	verall CE	Emissions
	Open	VOC	2.56000000e-	2 lb	s / head		No	AQMD	default		1.28000000e+2
	<u>Open</u>	PM	3.0800000e-	2 lb	s / head		No	AQMD	default		1.5400000e+2
	Add	New									
	Step 4	I: Toxic (TAC	C/ODC) Em	issi	ons (lbs)					
		TAC/ODC Group	CAS #		EF	Unit	Cont	rolled EF	EF Data Source	e Overall CE	Emissions
	Open	Ammonia	7664417 1	.920	00000e-1	lbs / hea	ad	No	AQMD default		9.6000000e+2
	Add	New									

Image 19: If you are eligible for abbreviated reporting under CTR, not using default emission factors will prevent you from submitting an abbreviated report. In other words, only default emission factors are allowed for abbreviated reporting. If you would like to use a facility specific emission factor in place of the the default emission factor that was automatically added by the tool click on the "Open" link next to the pollutant you want to edit. Through the pollutant (in this example is VOC) pop-up, uncheck the Use default checkbox. You can then replace the Emission Factor (EF) and add a control efficiency value by clicking the "Controlled EF value" check box

and entering the correct value in the field provided. Choose from the Emission Factor Data Source drop-down menu the option that best describes the origins of your emission factor. Click on the orange "Save" button. These steps can also be used to add or edit toxic emissions in "Step 4: Toxic (TAC/ODC) Emissions (lbs)".

ER Device	Permit Device	A/N	Process	Rule	Activity	SC
10	15		10	1127	Manufacturing : Food and Agricultural : Poultry Farms :	
559			71	Annual	Manure Handling	
				Annuai	inoughput	
Pollutant		VOC -	null			
Emission Fa	actor (EF)	2,560	000000e-2	2	* lbs/	
	(Us	se default)		
			ontrolled E	F value		
		(m	ark checkbo	x if EF lis	ted represents EF determined after control)	
Overall Con	trol Efficiency				0	
Emission Es	actor Comment					
Emission re	conment					
		TEast	using AO	MD da	//	
		refere with t Proce	he inform sses witho	e Emis ation. out this	information are subject to audit.	
Emission Fa	actor Data Source	AQM	D default		~ *	
Emissions		lbs				

Image 20: To add additional criteria pollutants or Toxics, click the orange "Add New" button found at the bottom of section "Step 3: Criteria Emissions" or "Step 4: Toxics" depending on which type of pollutant you would like to add. You may add the pollutant type from the drop-down menu, add the "Emission Factor (EF)", "Overall Control Efficiency" and "Emission Factor Comment" in the empty fields. Choose the correct "Emission Factor Data Source" from the drop-down menu and click the orange "Save" button.

Open Crite	eria Emission	Infor	mation - (Other F	Processes X
AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Activity
ES59			P1	1127	Manufacturing : Food and Agricultural : Poultry Farms : Manure Handling
			A	Innual T	hroughput
			5	,000.000	00000 head
Pollutant	(∽ *		
Emission Fac	ctor (EF)				* Ibs/head
		Cor (ma	ntrolled EF rk checkbox	value if EF liste	d represents EF determined after control)
Overall Cont	rol Efficiency				0
Emission Fac	ctor Comment				6
	1	If not preferer with the Proces	using AQM nces in the ne informat ses withou	ID defa Emissi tion. t this in	ult emission factor please provide detailed on Factor Comment box above or upload file nformation are subject to audit.
Emission Fac	ctor Data Source				✓ *
Emissions	1	lbs			
					Save Cancel

Image 21: You have completed the Process page for Chicken Manure Handling. To add emissions for chicken feed click on the orange "Back to Emission Source Process Reference" to continue to the next image.

* B	ack to Emission	n Source Pro	cess	Referen	ce				
Oth	er Proces	ses							
This whi for dat und rep inst	s reporting so ch were not every associa a in the follo er external o orted here; h ructions are	covered in ated emission owing steps or internal of owever, it available b	repo prev on so to comi mus y cli	orting a vious rep ource. F reset. (oustion t be sub cking of	ctivity o porting Please s Combust process ostantia n Help i	data for othe screens. Plea tart with Ste ion emission categories. ted to avoid con in the to	r processes use provide p 1, edits s need to b Combined e double repo ol bar.	used in you specific inf to Step 1 n e reported missions ca prting. Deta	ur facility ormation nay cause separately un also be uiled
Step	1: Process						Opt	ional: Mark a	s Completed
	AER Device I ID	Permit Device ID	A/N	Process ID	Rule #		Acti	vity	
Open	ES59			P1	1127	Aanufacturing : F Aanure Handling	ood and Agricu	ltural : Poultry	/ Farms :
Step Open Step	Step 2: Throughput Annual Throughput Open 5,000.0000000 head Step 3: Criteria Emissions (lbs) Use Duiteria								if available.
	Pollutant	EF		Unit	Contro	lled EF EF Da	ata Source	Overall CE	Emissions
Open	VOC	2.56000000e-	2 lbs	/ head	N	o AOMD	default		1.2800000e+2
Open	100						Gereicite		TILOUGUUUUU L
Open Open	PM d New	3.08000000e-	2 lbs	/ head	N	o AQMD	default		1.54000000e+2
Open Ad Step	PM d New 4: Toxic (TAC	3.08000000e-: C/ODC) Emi	2 lbs	/ head	N	o AQMD	default		1.54000000e+2
Open Open Ad	PM d New 4: Toxic (TAC	3.08000000e-3 C/ODC) Emi o CAS #	2 lbs issio	/ head	Unit	o AQMD	EF Data Sour	e Overall CE	1.5400000e+2 Emissions
	Copen Step	Back to Emission Other Proces This reporting sc which were not for every associa data in the folic under external c reported here; h instructions are Step 1: Process AER Device ID Qpen E559 Step 2: Throughp Qpen Step 3: Criteria E Pollutant Qoen YOC	Back to Emission Source Pro Other Processes This reporting screen is for which were not covered in for every associated emissi data in the following steps under external or internal or reported here; however, it instructions are available b Step 1: Process AER Device Permit Device ID Open E559 Step 2: Throughput Open Step 3: Criteria Emissions (I Pollutant EF Open VOC 2.5600000e-	Back to Emission Source Process Other Processes This reporting screen is for republic were not covered in prewfor every associated emission sudata in the following steps to under external or internal combiner external combiner external or internal combiner external combiner extern		Back to Emission Source Process Reference Other Processes This reporting screen is for reporting activity of which were not covered in previous reporting : for every associated emission source. Please is data in the following steps to reset. Combust under external or internal combustion process reported here; however, it must be substantiat instructions are available by clicking on Help is Step 1: Process AER Device Permit Device A/N Process Rule ID ID # Open E559 P1 1127 M Step 2: Throughput Annua Open 5,000. Step 3: Criteria Emissions (Ibs) Pollutant EF Unit Control Open VOC 2,5600000e-2 Ubs / head N	Back to Emission Source Process Reference Other Processes This reporting screen is for reporting activity data for other which were not covered in previous reporting screens. Pleas for every associated emission source. Please start with Ste data in the following steps to reset. Combustion emission under external or internal combustion process categories. reported here; however, it must be substantiated to avoid instructions are available by clicking on Help icon in the to Step 1: Process AER Device Permit Device A/N Process Rule Device Permit Device A/N Process Step 2: Throughput Copen E559 Annual Throughput Step 3: Criteria Emissions (lbs) Device Pollutant EF Unit Controlled EF EF Data	Back to Emission Source Process Reference Other Processes This reporting screen is for reporting activity data for other processes which were not covered in previous reporting screens. Please provide for every associated emission source. Please start with Step 1, edits data in the following steps to reset. Combustion emissions need to be under external or internal combustion process categories. Combined e reported here; however, it must be substantiated to avoid double repor instructions are available by clicking on Help icon in the tool bar. Step 1: Process Opti <u>AER Device Permit Device A/N Process Rule Activity (Deen E559 Pl 1 P1 1127 Manufacturing : Food and Agricu Click F Step 2: Throughput <u>Annual Throughput 5,000.00000000 head Step 3: Criteria Emissions (lbs) Use Default EF Unit Controlled EF EF Data Source (</u></u>	Back to Emission Source Process Reference Other Processes This reporting screen is for reporting activity data for other processes used in you which were not covered in previous reporting screens. Please provide specific inf for every associated emission source. Please start with Step 1, edits to Step 1 n data in the following steps to reset. Combustion emissions need to be reported under external or internal combustion process categories. Combined emissions ca reported here; however, it must be substantiated to avoid double reporting. Deta instructions are available by clicking on Help icon in the tool bar. Step 1: Process Optional: Mark a AER Device Permit Device A/N Process Rule Activity Copen E559 Pi 1127 Manufacturing : Food and Agricultural : Poultry Manure Handling Click here to delete Step 2: Throughput Annual Throughput Open 5,000.0000000 head Step 3: Criteria Emissions (lbs) Use Default Emission Factor Optional: EF Unit Controlled EF EF Data Source Overall CE Optional: Mark a ADD down default

STEPS TO REPORT THE NEXT PROCESS FOR PM EMISSIONS FROM FEEDS.

Image 22: The below image is the Process Reference for the Chicken Manure Emission Source you added in Example 2 above. Click the orange "Add Process/Material/Fuel" button, name the process Chicken Feed, and click OK button next to it.

A/N	Permit No	Permit Device	Permit Device Description	AER Device	ES Name	ES Group	Source Category	Emissions?	Equipment	PERP	ES Status
<u>Open</u>		10		10	ES59	Chicken Manure		Other Processes	Y	Other process equipment	N
	Pr	ocess ID	Source G	roup	Process	;/Materia	l/Fuel Nam	e	Status	Operation	Туре
	Open	P1	Other Process I	Chicken Manure				rk in progress	routin	e	
Ad	open d Process	P1 /Materia	Other Process I	Emissions	kan Fead	Chicken M		Wo	rk in progress	routin	

Image 24: After clicking OK, Process ID P2 is added for chicken feed operation as shown below. Click on "Open" next to Process ID P2 to start entering the information for that process.

A/N	Permit No	Permit Device ID	Permit Device Description	AER Device ID	ES Name	ES Group Name	Source Category	Emissions?	Equipment	PERP	ES Status
Open					ES59	Chicken Manure		Other Processes	Y	Other process equipment	N
	Pi	rocess ID	Source G	roup	Process	/Material	l/Fuel Nam	e	Status	Operation	Туре
	Open	P1	Other Process B	Emissions		Chicken Ma	anure	Wo	Work in progress		e
	Open	P2	Other Process F	Emissions	Chicken Feed				rk in progress	routine	

Image 25: After clicking Process ID P2, the tool will open the emission source page for Device ID ES59, Process ID P2 Chicken Feed process. Again, Click on the "Open" link next to "Step 1: Process."

1. Facility Information	Other Processes										
3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics Spray Coating/Spray Booth	This reporting scre which were not co for every associate data in the follow under external or reported here; how instructions are av	een is for r vered in p ed emissio ing steps internal co wever, it n vailable by	eporting activity da previous reporting so n source. Please sta to reset. Combustio ombustion process o nust be substantiate clicking on Help ice	ata for oth creens. Pla art with S on emissic categories ed to avoir on in the f	ner processe ease provide tep 1, edits ons need to . Combined d double rep tool bar.	s used in you e specific info to Step 1 m be reported s emissions ca porting. Deta	r facility ormation ay cause eparately n also be iled				
	Step 1: Process	Step 1: Process									
Other Use of Organics	AER Device	ID	Permit Device ID	A/N	Process ID	Rule #	Activity				
Storage Tanks	Open ES59				P2						
rugicive components											
Other Processes					Click	here to <u>delete</u>	this proces				
Other Processes Process Upset	Step 2: Throughput				Click	here to <u>delete</u>	this proces				
Other Processes Process Upset 5. Additional Toxic Substances Production and	Step 2: Throughput	:	Annual	Throughput	Click	here to <u>delete</u>	this proces				
Other Processes Process Upset 6. Additional Toxic Substances Production and Usage 7. Perform Data Validation	Step 2: Throughput	:	Annual	Throughput	Click	here to <u>delete</u>	this proces				
Other Processes Process Upset 6. Additional Toxic Substances Production and Usage 7. Perform Data Validation 8. Review Summaries 9. Print Facility Report	Step 2: Throughput	issions (lb	Annual	Throughput	Click Use <u>Default 1</u>	here to <u>delete</u>	this proces s if available				
Other Processes Process Upset 5. Additional Toxic Substances Production and Usage 7. Perform Data Validation 8. Review Summaries 9. Print Facility Report 10. Report Submission	Step 2: Throughput	issions (lb EF Unit	Annual IS) Controlled EF	Throughput EF Data	Click Use <u>Default I</u> Source	here to <u>delete</u> <u>Emission Factor</u> Overall CE	this proces s if available Emissions				
Other Processes Process Upset 5. Additional Toxic Substances Production and Jsage 7. Perform Data Validation 8. Review Summaries 9. Print Facility Report 10. Report Submission	Step 2: Throughput	issions (lb EF Unit	Annual IS) Controlled EF	Throughput EF Data	Click Use <u>Default 1</u> Source	mission Factor	this proces s if available Emissions				
Other Processes Process Upset 5. Additional Toxic Substances Production and Usage 7. Perform Data Validation 8. Review Summaries 9. Print Facility Report 10. Report Submission	Step 2: Throughput	issions (Ib EF Unit ODC) Emit	Annual (S) Controlled EF (Ibs)	Throughput EF Data	Click Use <u>Default 1</u> Source	mission Factor	this proces tif availabl Emissions				

Image 26: The tool presents the user with the process data entry screen. Add the Chicken Feed to the empty "Process Name" field and a "Process Comment" if needed. Use the drop-down arrows at the right of each box to report information for this process as shown below. Click the "Save" button.

Edit Emission	Process -	Other Proces	ses			×				
AER Device ID	Per	nit Device ID	A/N	Process ID	Rule #	Activity				
ES59										
AER Device ID	ES59	AER Device N	ame	Chicken Manure	ti.					
NON-PERMITTED) 6	Permit Device	ID							
Process ID	P2	Process Name	1	Chicken Feed						
Process Commer	nt Cons	Consumed Feed								
Activity Code *	Sector:									
	Manufactu		~							
	Industry:									
	Food and	~								
	Operation:	2								
	Poultry Fai		~							
	Process:									
	Feed Oper		~							
Rule #	1127	× * Add	<u>Rule</u>							
					Save	Cancel				

Image 27: After saving, the program returns to Image 25. Open the "Step 2: Throughput" section to enter the amount, as shown below. Click "Save" button.

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Activity
S59			P2	1127	Manufacturing : Food and Agricultural : Poultry Farms : Feed Operation
			A	nnual T	hroughput
Annual Throu	ughput 1	00.000	00000		* tons 🗸 *
Throughput 1	Type I	nput	✓ *		
Throughput (Comment b	ased o	n usage re	cords	

Image 28: After saving, the program returns to the Device ID ES59 Process P1 page for Chicken Feed. As seen below, the Particulate Matter (PM) default emission factor has automatically populated. If you would like to change the default emission factor, click on the "Open" link under the Step 3: Criteria Emissions (lbs)" section and next to "PM". If you are eligible for abbreviated reporting under CTR, not using default emission factors will prevent you from submitting an abbreviated report. In other words, only default emission factors are allowed for abbreviated reporting.

Facility ID: 999001	« Ba	ick to Emissi	on Source Proc	ess	Referenc	e						
1. Facility Information	Oth	er Proce	sses									
2. Status Optate 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics Spray Coating/Spray Booth Other Use of Organics Storage Tanks	This whice for e data under repo	reporting s ch were not every assoc a in the foll er external orted here; ructions are	screen is for t covered in p iated emissic lowing steps or internal c however, it e available b	repo prev to i comb mus / cli	orting ac ious rep ource. P reset. C oustion p t be sub cking on	tivity orting lease ombus proces stanti Help	data fo g screen start w stion en ss categ ated to icon in	or other process is. Please provice tith Step 1, edit nissions need to ories. Combined avoid double re the tool bar.	es used in y le specific in is to Step 1 be reported emissions porting. De	our facility nformation may cause d separately can also be tailed		
	Step	Step 1: Process Optional: Mark as Completed										
		AER Device Permit Device A/N Process Rule Activit										
Other Processes	<u>Open</u>	Open ES59 P2 1127 Manufacturing : Food and Agricultural : Poultry Farms : Feed Operation										
Process Upset 6. Additional Toxic Substances Production and Usage	Click here to <u>delete</u> this process. Step 2: Throughput											
7. Perform Data Validation 8. Review Summaries	Open					Ann 100	ual Throu	i <mark>ghput</mark>) tops				
9. Print Facility Report 10. Report Submission	Step 3: Criteria Emissions (lbs) Use Default Emission								Emission Fact	actors if available.		
	Open	Pollutant	EF 1.08000000e-	l lbs	Unit / tons	Contr	olled EF	EF Data Source	Overall CE	Emissions 1.08000000e+1		
	Ad	d New										
	Step	4: Toxic (TA	AC/ODC) Emi	ssio	ns (lbs)							
		TAC/ODC C	Group CAS #	EF	Unit	Contr	olled EF	EF Data Source	Overall (E Emissions		
	Ad	d New										

Image 29: Click on the selected check box next to "Use Default". You can now edit the "Emission Factor (EF)" and add a "Overall Control Efficiency" if needed. Add the source you referenced for the emission factor in the "Emission Factor Comment" box. Make sure to select the correct source

for your emission factor on the drop-down menu next to "Emission Factor Data Source". Click "Save."

ID	Permit Device ID	A/N	Process ID	Rule #	Activity			
59			P2	1127	Manufacturing : Food and Agricultural : Poultry Farms : Fee Operation			
			A	nnual T	hroughput			
				100.0000	10000 tons			
Pollutant		PM - nu	III					
Emission Factor (EF)		1.0800	* lbs/tons					
		☑ Use default						
			has lad CC					
		(mai	rk checkbox i	f EE listo	d represents EE determined after control)			
Overall Cont	ral Efficiency	(•			
Overall cont	TOI Efficiency							
Emission Fac	tor Comment							
					1.			
		If not u referen with th Process	using AQM loces in the e informat ses withou	D defa Emissio ion. t this ir	ult emission factor please provide detailed on Factor Comment box above or upload file iformation are subject to audit.			
Emission Fac	tor Data Source	AQMD default						
Fastastere		1.08000000e+1 lbs						

Image 30: To add a new criteria pollutant click on the orange "Add New" button under the "Step 3: Criteria Emissions (lbs)" section.

Facility ID: 999001	« Ba	ck to Emissi	on Source Proc	ess	Referenc	e							
1. Facility Information	Othe	Other Processes											
2. Status Update 3. Combustion Fuels 4. Emission Sources (ES) 5. Report Process/Emissions Combustion External Combustion Internal Combustion Use of organics	This whic for e data unde repo instr	reporting s th were not every assoc in the follow er external orted here; ouctions are	screen is for t covered in p iated emissic lowing steps or internal c however, it n e available by	repo orev to i oml nus / cli	orting ac ious rep ource. P reset. C oustion p t be sub cking on	ortivity lease ombus proces stanti Help	data fo screen start w stion en s categ ated to icon in	or other process is. Please provid- rith Step 1, edit nissions need to ories. Combined avoid double re the tool bar.	es used in ye de specific in ts to Step 1 be reported d emissions eporting. De	our facility nformation may cause d separately can also be tailed			
Spray Coating/Spray Booth	Step '	Step 1: Process Optional: Mark as Complete											
Other Use of Organics Storage Tanks		AER Device	Permit Device ID	A/N	Process ID	Rule #		A	ctivity				
Pugitive Components Other Processes	Open	ES59			P2	1127	Manufac	turing : Food and Ag	ricultural : Poul	try Farms : Feed			
Process Upset							operatio	Clic	k here to dele	ete this process.			
6. Additional Toxic Substances Production and Usage	Step 2: Throughput												
7. Perform Data Validation		Annual Throughput											
8. Review Summaries	<u>Open</u>	Open 100.0000000 tons											
10. Report Submission	Step 3	3: Criteria	Emissions (II	Use Default	Emission Fact	ors if available.							
		Pollutant	EF		Unit	Contr	olled EF	EF Data Source	Overall CE	Emissions			
	Open Add	PM I New	1.08000000e-	lbs	/ tons		No	AQMD default		1.08000000e+1			
	Step 4	4: Toxic (T/	AC/ODC) Emi	ssio	ns (lbs)					i			
		TAC/ODC C	Group CAS #	EF	Unit	Contro	olled EF	EF Data Source	e Overall (E Emissions			
	Add	i New											

Image 31: Add the new "Pollutant" from the options in the drop-down menu. You can add your emission factor into the empty "Emission Factor (EF)" field. Check the controlled EF value

checkbox if needed, and you may add an "Overall Control Efficiency" in the empty field. Add the source you referenced for the emission factor and/or control efficiency in "Emission Factor Comment" box, and choose the correct option from the drop-down menu for the "Emission Factor Data Source". Click "Save".

Open Crite	ria Emission I	Inforr	mation - O	ther P	rocesses ×
AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Activity
ES59			P2	1127	Manufacturing : Food and Agricultural : Poultry Farms : Feed Operation
			A	nnual Tl	hroughput
				100.0000	0000 tons
Pollutant	(∽ *		
Emission Fac	tor (EF)				* lbs/tons
		Cor (ma	ntrolled EF rk checkbox i	value f EF liste	d represents EF determined after control)
Overall Cont	rol Efficiency				0
Emission Fac	tor Comment				1.
	I r v F	f not u eferer with th Proces	using AQM nces in the e informat ses withou	D defa Emissio ion. t this in	ult emission factor please provide detailed on Factor Comment box above or upload file formation are subject to audit.
Emission Fac	tor Data Source				*
Emissions	1	bs			
					Save Cancel

You have now successfully completed adding Process IDs P1 Chicken Manure and P2 Chicken Feed under Device ID ES59.