



Guidelines for Reporting Emissions from Automotive Body Shop Operations

December 2024

Introduction

Automotive repair facilities or any facility that uses automotive paints and coatings may be required to report their emissions under South Coast Air Quality Management District's (South Coast AQMD's) Rule 301(e) or the California Air Resource Board's (CARB's) Regulation for the reporting of Criteria Air Pollutants and Toxic Air Contaminants Regulation (CTR). This reporting is done through the Annual Emissions Reporting (AER) WebTool.

The activity threshold for reporting applicability is 50 gallons of total coating use. Auto body facilities which meet or exceed this activity threshold must submit an AER for data year 2024. Annual reporting will be required for data year 2026 and subsequent years the facility exceeds the threshold. The threshold includes 50 gallons of total cumulative coatings e.g., 25 gallons of color coat and 25 gallons of clear coat, or 50 gallons of primer alone.

Coatings are composed of solvents and solids. The solvent is the liquid component that the solids are dissolved in and contain volatile organic compounds (VOC) pollutants. Some coatings are water-based and contain little to no VOC. The solids consist of binders and pigments which are particulate matter (PM) pollutants. The solvent (VOCs) evaporates after application and a portion of the solids (PM) remain on the surface of the substrate coated. When coatings are sprayed, some solids become airborne and become PM emissions. A typical automotive spray booth can control some but not all PM emissions. Both the solvent and solid portions of a coating can contain toxic air contaminants which also be reported. Therefore, to comprehensively report all emissions from coating operations, the report must contain VOC, PM, and listed toxic air contaminants. Additionally, facilities that operate a natural gas-fired, heated spray booth will need to report combustion emissions associated with that heater.

Default Emission Factors

Emissions in the AER WebTool are calculated using coating throughputs, emission factors, transfer efficiencies, and control efficiencies. The amount of a category of paint used in a paint spray booth, typically in gallons, is the throughput of that paint category for that spray booth (termed a 'device' or 'emission source' in the WebTool). The amount of natural gas used to heat a paint spray booth, if so equipped, would be the throughput for that heater. Emission Factors (EFs) are ratios of how much emissions are produced for a particular throughput of that activity. In the case of coatings, the emission factor is typically described in pounds of pollutant per gallon of paint (e.g., lb/gal).

South Coast AQMD has provided default EFs for various automotive coatings categories for reporting.¹

Reporters may elect to use product-specific emission factors used at the facility instead of the provided defaults. This document describes how to select non-default EFs. If the reporter elects to use non-default EFs, methodology is available in the technical appendix of this document.

VOC Emissions

The emission factor for VOC coatings is the VOC content. Default VOC emission factors provided in the AER WebTool are based on Rule 1151 limits and will auto-populate during reporting.

PM Emissions

PM Control Efficiency

Particulate matter is captured by the filters in the spray booth. The default control efficiency of standard spray booth filters is 90 percent, which will populate in the AER WebTool as 0.90.

PM Transfer Efficiency

While the goal of applying a coating is to cover the substrate with a protective or decorative coating, not all application methods result in all the coating applied to the substrate. Brush application or dipping parts into paint results in all the coating applied to the substrate. However, when sprayed, some of the coating does not adhere to the substrate. The transfer efficiency represents the fraction of the coating that adheres to the substrate. High volume, low pressure (HVLP) spray guns have a default transfer efficiency of 65 percent, which is entered as a fraction into the AER WebTool. This means that 65 percent of the PM portion of the coating adheres to the substrate, and 35 percent of the PM portion of the coating is emitted to the air.

PM Solid Content

PM emissions are estimated from the solid content of the coatings. Default solid contents are provided by the AER WebTool. The default solid content 3.0 lb/gal.

Toxic Air Contaminant Emissions

Toxic Air Contaminants (TACs) in coatings are categorized as either PM or VOC. PM TACs are the TACs that make up the solid portion of the coating while VOC TACs are the TACs that make up the solvent portion of the coating. The AER WebTool will provide the correct transfer efficiency based on the type of application and coating category the user enters. Default TAC emissions will also be automatically loaded.

Solvent Use

Cleaning solvents are used for various cleaning operations at an auto body facility. Solvents containing VOC must also be reported. Other cleaning products not containing VOC, such as

¹ See Excel file listing default emission factors for auto body coatings:

<https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/final-automotive-ef-for-im-11-01-2024-with-tac-id-and-voc-pm.xlsx>

acetone, do not have to be reported. If the VOC content of the cleaning products used on site is unknown, the user can use a VOC content of 0.21 lbs/gal (25 g/L) (Rule 1171 limit).

Heater Emissions

Some spray booths are equipped with natural gas heaters to accelerate drying or curing of the applied coatings. Combustion of natural gas generates emissions and must be reported. Default combustion emission factors are provided in the WebTool. The reporter may estimate gas usage from direct measurement, such as a gas meter, or from utility bills. Electric heaters do not generate emissions and therefore do not need to be reported.

If the natural gas heater is equipped with a gas meter, use the meter to obtain the annual throughput. Otherwise, gas usage can be estimated using gas bills. Gas bills often provide a monthly average usage in units of therms. This monthly average can be multiplied by 12 to estimate the annual usage. If more than one booth is equipped with a natural gas heater, divide the annual throughput by the number of booths to estimate the usage of each booth.

Reporting Spray Booth Emissions in the AER WebTool

Spray booths do not qualify for Abbreviated Reporting. Do not select Abbreviated Reporting if the facility includes a spray booth.

- For most facilities all permitted equipment, including spray booths, will be preloaded in the AER WebTool. Under the Emission Sources (ES) tab, these permitted devices are found in the green table. To view details and edit these pieces of equipment, select the blue profile link on the left-hand side of the table. If the user does not see their device, they can click on the orange button above 'Add New Emission Source' and add the device.

Facility ID: 999007

Build Reporting Structure

Facility Comments

Abbreviated Reporting

1. Facility Information

2. Status Update

3. Combustion Fuels

4. Emission Sources (ES)

5. Report Process/Emissions

6. Additional Toxic Substances Production and Usage

7. Perform Data Validation

8. Review Summaries

9. Print Facility Report

10. Report Submission

Emission Sources (ES) Classification

Summary: 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.

Instruction: Add Devices (emissions sources) by clicking "Add New Emission Source". Edit devices by clicking "Profile" under the Emission Source (ES) Column. Add emission data by clicking "Open" under the Emissions column. Upload storage tank data by clicking on link "Click here" below.

Abbreviated Reporting

Starting in Reporting Year 2022 some facilities can qualify for Abbreviated Reporting. Your eligibility to file Abbreviated Report depends in part on the types of Emission Sources used at your Facility. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Storage Tank Emissions Batch File Import - [Click here](#) for more instructions.

Add New Emission Source

Displaying 3 emission sources.

A/N Permit NO

AER Device ID Permit Device ID

Search Emission Sources

Search:

Emission Source (ES)	Emissions	A/N	Permit NO	Permit Device ID	Permit Equipment Description	AER Device ID	ES Name	ES Group Name	Source Category	Has Emissions	Equipment	PERP	Release Location Linked	ES Status
Profile	Open	054321				ES6	South Booth		Spray Coating/Spray Booth	Y	Automotive Spray Booth	N	NR	Work in progress
Profile	Open	456123				ES5	North Spray Booth		Spray Coating/Spray Booth	Y	Automotive Spray Booth	N	NR	Work in progress
Profile	Open	123456				ES4	Spray Booth		Spray Coating/Spray	Y	Automotive Spray Booth	N	NR	Work in progress

- Fill out all required information as denoted by the red asterisk next to the field. Required fields including ES Name (the user should enter the name used at the facility for the device for easy reference, e.g., Booth No 1), and then select the Operating ES Status from the drop-down menu.

Facility ID: 99900/

Edit Emission Source

Instruction: Add new emissions sources using information found on permits, manufacturers specifications, or identifying placards. Select the Operating ES Status that best reflect the device's operation for this reporting period. All areas with a Red Asterisk (*) must be addressed. Note: Some devices have been pre-populated, verify that the information is correct

Facility Comments

Abbreviated Reporting

1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Additional Toxic Substances Production and Usage
7. Perform Data Validation
8. Review Summaries
9. Print Facility Report
10. Report Submission

Abbreviated Reporting

Starting in Reporting Year 2022 some facilities can qualify for Abbreviated Reporting
Your eligibility to file Abbreviated Report depends in part on the types of Emission Sources used at your Facility.
Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Permitted	<input checked="" type="checkbox"/>
A/N	456123 ⓘ
PERP Equipment (CARB's Portable Equipment Registration Program)	<input type="checkbox"/> ⓘ
Permit No	ⓘ
Permit Device ID	<input type="text"/>
Permit Equipment Description	<input type="text"/>
AER Device ID	E55 Assign new ID
ES Name	North Spray Booth *
Operating ES Status	Normal Operation * ⌵
Comment	<input type="text"/>
Emission Source Category	Categorize Emission Source *
Equipment	<input type="text"/>
Design Capacity	0.000000 <input type="text"/>

Save or Save and return to List of Emission Sources or
Save and proceed to Process Reporting or [Cancel](#)

Optional: Save and Mark as Completed
Click here to [delete](#) this emission source and associated data.

- Next, click on the orange Categorize Emission Source button. The pop-up window shown in the image below will appear. Select “Click Here” in Item 3. Spray Coating/Spray Booth, then check the box for “Automotive Spray Booth”.

If your spray booth is equipped with a gas fired heater you will also need to categorize it in this step. Select “Click Here” 1.External Combustion Equipment. then check the box for heater based on the rating of the heater. Most spray booth heaters are in the 10-100 MMBTU Range, but you can check your equipment or permit to verify. (Instructions for heated booths continue in step 10 of this guidance document). Finally, click the orange save button at the bottom of the dialog box.

Facility ID: 99900/ Edit Emission Source

Facility Comments

Abbreviated Reporting

1. Facility Information

2. Status Update

3. Combustion Fuels

4. Emission Sources (ES)

5. Report Process/Emissions

6. Additional To

7. Substances Pro

8. Usage

9. Perform Data

10. Review Sum


11. Print Facility

12. Report Sub

Instruction: Add new emissions sources using information found on permits, manufacturers specifications, or identifying placards. Select the Operating ES Status that best reflect the device's operation for this reporting period. All areas with a Red Asterisk (*) must be addressed. Note: Some devices have been pre-populated, verify that the information is correct.

Abbreviated Reporting

Permitted	A/N	Permit No	Permit Device ID	Permit Equipment Description	AER Device ID	ES Name
Yes	456123				ES5	North Spray Booth

All Emission Source with this icon  qualify for AER Abbreviated Reporting
Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

- External Combustion Equipment (e.g., boiler, dryer, oven, furnace, heater, afterburner, flare, kiln or incinerator) [click here](#) to select one the following Equipment:
- Internal Combustion Equipment (e.g., internal combustion engine (excluding vehicles), turbine or micro turbine) [click here](#) to select one of the following Equipment:
- Spray Coating/Spray Booth (e.g., coatings, solvents, adhesives, etc.) [click here](#) to select one of the following Equipment:
 - Spray Booth
 - Automotive Spray Booth
 - Open Spray
- Other Use of Solvents (e.g., coatings, solvents, inks, adhesives, etc.) except in Spray Coating/Spray Booth, [click here](#) to select one of the following Equipment:
- Liquid Storage Tank (e.g. Underground, Aboveground, Small Tanks, Dispensing Systems) [click here](#) to select one of the following Equipment:

Equipment

Design Capacity 0.000000

Save or Save and return to List of Emission Sources or

Save and proceed to Process Reporting or Cancel

Optional: Save and Mark as Completed

Click here to [delete](#) this emission source and associated data.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Edit Emission Source

Facility Comments

Abbreviated Reporting

1. Facility Information

2. Status Update

3. Combustion Fuels

4. Emission Sources (ES)

5. Report Process/Emissions

6. Additional Toxic Substances Production and Usage

7. Perform Data Validation

8. Review Summaries


9. Print Facility Report

10. Report Submission

Instruction: Add new emissions sources using information found on permits, manufacturers specifications, or identifying placards. Select the Operating ES Status that best reflect the device's operation for this reporting period. All areas with a Red Asterisk (*) must be addressed. Note: Some devices have been pre-populated, verify that the information is correct.














Categorize Emission Source

Permitted	A/N	Permit No	Permit Device ID	Permit Equipment Description	AER Device ID	ES Name
Yes		112233			ESnull	Booth Heater

All Emission Source with this icon  qualify for AER Abbreviated Reporting

Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

1. External Combustion Equipment (e.g., boiler, dryer, oven, furnace, heater, afterburner, flare, kiln or incinerator) [click here](#) to select one of the following Equipment:

- Boiler <10 MMBTU/HR 
- Boiler 10-100 MMBTU/HR 
- Boiler >100 MMBTU/HR 
- Oven <10 MMBTU/HR 
- Oven 10-100 MMBTU/HR 
- Oven >100 MMBTU/HR 
- Dryer <10 MMBTU/HR 
- Dryer 10-100 MMBTU/HR 
- Heater >100 MMBTU/HR 
- Heater 10-100 MMBTU/HR 
- Space/Water heater - not related to a process <10 MMBTU/HR 
- Afterburner <10 MMBTU/HR 
- Afterburner 10-100 MMBTU/HR
- Afterburner >100 MMBTU/HR
- Kilns
- Incinerator
- Crematorium 

Emission Source Category: [Categorize Emission Source](#)

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Edit Emission Source

Facility Comments

Abbreviated Reporting

1. Facility Information

2. Status Update

3. Combustion Fuels

4. Emission Sources (ES)

5. Report Process/Emissions

6. Additional Toxic Substances Production and Usage

7. Perform Data Validation

8. Review Summaries

9. Print Facility Report


10. Report Submission


Instruction: Add new emissions sources using information found on permits, manufacturers specifications, or identifying placards. Select the Operating ES Status that best reflect the device's operation for this reporting period. All areas with a Red Asterisk (*) must be addressed. Note: Some devices have been pre-populated, verify that the information is correct.


Abbreviated Reporting

Starting in Reporting Year 2022 some facilities can qualify for Abbreviated Reporting
Your eligibility to file Abbreviated Report depends in part on the types of Emission Sources used at your Facility.
Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Permitted

A/N 123456 

PERP Equipment(CARB's Portable Equipment Registration Program) 

Permit No 

Permit Device ID

Permit Equipment Description

AER Device ID ES4 [Assign new ID](#)

ES Name Spray Booth 13 *

Operating ES Status Normal Operation *

Comment

Emission Source Category External Combustion, Spray Coating/Spray Booth
[Categorize Emission Source](#)

Equipment Heater 10-100 MMBTU/HR

Application Type HVLP Spray *

Coating Categories

- Adhesion Promoter
- Clear Coating
- Color Coating
- Pretreatment Coating
- Primer
- Single-Stage Coating
- Truck Bed Liner Coating
- Underbody Coating

4. Several options will appear under the Categorize Emission Source button. Select the application type of the spray booth from the drop-down menu. Next, check the boxes for the all the types of coatings that were applied in the spray booth during the year. Be sure to add all coatings here before proceeding, as returning to this page to make edits may cause data loss.

The screenshot displays a web application interface for managing emission sources. The interface is divided into a left sidebar with navigation links and a main content area. The main content area contains a form with various fields and a list of coating categories. A red box highlights the 'Automotive Spray Booth' application type and the list of coating categories.

Facility Comments

Abbreviated Reporting
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
5. Additional Toxic Substances Production and Usage
7. Perform Data Validation
3. Review Summaries
9. Print Facility Report
10. Report Submission

Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Permitted	<input checked="" type="checkbox"/>
A/N	456123 i
PERP Equipment(CARB's Portable Equipment Registration Program)	<input type="checkbox"/> i
Permit No	<input type="text"/> i
Permit Device ID	<input type="text"/>
Permit Equipment Description	<input type="text"/>
AER Device ID	ES5 Assign new ID
ES Name	North Spray Booth *
Operating ES Status	Normal Operation *
Comment	<input type="text"/>
Emission Source Category	Spray Coating/Spray Booth Categorize Emission Source *
Equipment	Automotive Spray Booth
Application Type	<input type="text"/> *
Coating Categories	<input type="checkbox"/> Adhesion Promoter <input type="checkbox"/> Clear Coating <input type="checkbox"/> Color Coating <input type="checkbox"/> Pretreatment Coating <input type="checkbox"/> Primer <input type="checkbox"/> Single-Stage Coating <input type="checkbox"/> Truck Bed Liner Coating <input type="checkbox"/> Underbody Coating <input type="checkbox"/> Uniform Finishing Coating <input type="checkbox"/> Any Other Coating Type
Design Capacity	0.000000 <input type="text"/>

Save or Save and return to List of Emission Sources or

Save and proceed to Process Reporting or Cancel

Optional: Save and Mark as Completed

Click here to [delete](#) this emission source and associated data.

- Once the types of coatings are selected you can click the orange 'Save and Return to List of Emission Sources' button to return to the previous Emission Source page or click the 'Save and Proceed to Process Reporting' button to continue to emissions reporting for this device. For this example, user should click on 'Save and Proceed to Process Reporting' button.

Facility ID: 777007

Facility Comments

Abbreviated Reporting

1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
5. Additional Toxic Substances Production and Usage
7. Perform Data Validation
3. Review Summaries
9. Print Facility Report
10. Report Submission

Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Permitted	<input checked="" type="checkbox"/>
A/N	456123 ⓘ
PERP Equipment(CARB's Portable Equipment Registration Program)	<input type="checkbox"/> ⓘ
Permit No	ⓘ
Permit Device ID	<input type="text"/>
Permit Equipment Description	<input type="text"/>
AER Device ID	ES5 Assign new ID
ES Name	North Spray Booth *
Operating ES Status	Normal Operation *
Comment	<input type="text"/>
Emission Source Category	Spray Coating/Spray Booth Categorize Emission Source *
Equipment	Automotive Spray Booth
Application Type	<input type="text"/>
Coating Categories	<input type="checkbox"/> Adhesion Promoter <input type="checkbox"/> Clear Coating <input type="checkbox"/> Color Coating <input type="checkbox"/> Pretreatment Coating <input type="checkbox"/> Primer <input type="checkbox"/> Single-Stage Coating <input type="checkbox"/> Truck Bed Liner Coating <input type="checkbox"/> Underbody Coating <input type="checkbox"/> Uniform Finishing Coating <input type="checkbox"/> Any Other Coating Type
Design Capacity	0.000000 <input type="text"/>

[Save](#) or [Save and return to List of Emission Sources](#) or [Save and proceed to Process Reporting](#) or [Cancel](#)

Optional: [Save and Mark as Completed](#)

Click here to [delete](#) this emission source and associated data.

- The following window will then pop-up showing processes for each of the types of coatings selected previously. Click the blue Open link next to the first Spray Coating/Spray Booth option in the table. The user can also open the processes from the '5. Report Processes/Emissions' page on the left-hand menu of the page and navigating to the 'Spray Coating/Spray Booth' category.

Facility ID: 999007

Work In Progress - Facility ID: 999007 - SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) - Reporting period: 2024

Form data is successfully saved.

Build Reporting Structure

Emission Sources (ES) Classification

Process References

Emissions	A/N	Permit No	Permit Device ID	Permit Device Description	AER Device ID	ES Name	ES Group Name	Source Category	Emissions?	Equipment	PERP	Release Location Linked
Open	123456				ES4	Spray Booth 13		External Combustion, Spray Coating/Spray Booth	Y	Heater 10-100 MMBTU/HR	N	NR

	Process ID	Source Group	Process/Material/Fuel Name	Status	Operation Type
Open	P1	Spray Coating/Spray Booth	Clear Coating	Work in progress	routine
Open	P2	Spray Coating/Spray Booth	Color Coating	Work in progress	routine
Open	P3	Spray Coating/Spray Booth	Truck Bed Liner Coating	Work in progress	routine
Open	P4	External Combustion		Work in progress	routine

[Add Process/Material/Fuel](#) ⓘ

OK

Facility ID: 999007

Back to Emission Source Process Reference

Spray Coating/Spray Booth

Please provide specific information for every process associated with the organics used in spray coating/spray booth including usage, emission factor, and control efficiency (if any). **Please start with Step 1, edits to Step 1 may cause data in the following steps to reset.** Detailed instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you **Must** only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Step 1: Process Optional: Mark as Completed

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
Open	ES5	456123	P1	1151	Coating:Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations:HVLPA Application:Clear Coating	Clear Coating	40201606

[Click here to delete](#) this process.

Step 2: Throughput

Annual Throughput
Open

Step 3: Criteria Emissions (lbs)

Pollutant	EF	Unit	EF Data Source	Overall CE	Emissions
Open	VOC	2.10000000e+0	lbs /	AQMD default	
Open	PM	1.05000000e+0	lbs /	AQMD default	0.90000000

[Add New](#)

Step 4: Toxic (TAC/ODC) Emissions (lbs)

- Click the blue Open link under Step 2: Throughput and fill out all required information as denoted by the red asterisks next to the fields. This will include the throughput and how the throughput measurement was acquired or recorded. Click on the orange Save button once all relevant information has been entered.

Facility ID: 999007

Back to Emission Source Process Reference

Spray Coating/Spray Booth

Please provide specific information for every process associated with the organics used in spray coating/spray booth including usage, emission factor, and control efficiency (if any). Please start with Step 1, edits to Step 1 may cause data in the following steps to reset. Detailed instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you Must only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click here to find out more details about Abbreviated Reporting and its possible benefits.

Optional: Mark as Completed

Step 1: Process

	AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
Open	ES5		456123	P1	1151	Coating:Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations:HVLP Application:Clear Coating	Clear Coating	40201606

Click here to [delete](#) this process.

Step 2: Throughput

Annual Throughput

[Open](#)

Step 3: Criteria Emissions (lbs)

	Pollutant	EF	Unit	EF Data Source	Overall CE	Emissions
Open	VOC	2.10000000e+0	lbs /	AQMD default		
Open	PM	1.05000000e+0	lbs /	AQMD default	0.90000000	

[Add New](#)

Step 4: Toxic (TAC/ODC) Emissions (lbs)

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Spray Coating/Spray Booth

Please provide specific information for every process associated with the organics used in spray coating/spray booth including usage, emission factor, and control efficiency (if any). Please start with Step 1, edits to Step 1 may cause data in the following steps to reset. Detailed instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you Must only use AQMD Default Emission Factors.

Optional: Mark as Completed

Edit Throughput Information - Spray Coating/Spray Booth

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
ES4		111111	P2	1151	Coating:Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations:HVLP Application:Clear Coating	Clear Coating	40201606

Annual Throughput
100.00000000 gal

Usage (Annual Throughput) gal

Throughput Type *

Throughput Origin

Usage Comment

[Save](#) [Cancel](#)

Click here to [delete](#) this process.

Step 3: Criteria Emissions (lbs)

	Pollutant	EF	Unit	EF Data Source	Overall CE	Emissions
Open	VOC	2.10000000e+0	lbs / gal	AQMD default		2.10000000e+2
Open	PM	1.05000000e+0	lbs / gal	AQMD default	0.90000000	1.05000000e+1

[Add New](#)

8. The AER WebTool will automatically calculate both criteria and toxic pollutant emissions based on the user entered throughput using default emission factors. Click on the orange 'Back to Emission Source Process Reference' button at the bottom of the page to return to the list of coatings.

Step 3: Criteria Emissions (lbs)

	Pollutant	EF	Unit	EF Data Source	Overall CE	Emissions
Open	VOC	2.1000000e+0	lbs / gal	AQMD default		2.1000000e+2
Open	PM	1.0500000e+0	lbs / gal	AQMD default	0.90000000	1.0500000e+1

[Add New](#)

Facility ID: 999007

Facility Comments

Abbreviated Reporting

- Facility Information
- Status Update
- Combustion Fuels
- Emission Sources (ES)
- Report Process/Emissions

Combustion

- External Combustion
- Internal Combustion

Use of organics

- Spray Coating/Spray Booth**
- Other Use of Organics

Storage Tanks

Fugitive Components

Other Processes

Process Upset

- Additional Toxic Substances Production and Usage
- Perform Data Validation
- Review Summaries
- Print Facility Report
- Report Submission

Open	Diethylene glycol monoethyl ether	111900	2.73110390e-5	lbs / gal	AQMD default		2.73110390e-3
Open	Ethylene glycol monobutyl ether acetate	112072	3.21300674e-2	lbs / gal	AQMD default		3.21300674e+0
Open	Diethylene glycol monobutyl ether	112345	5.46219343e-6	lbs / gal	AQMD default		5.46219343e-4
Open	Ethylene glycol monophenyl ether	122996	1.60272500e-3	lbs / gal	AQMD default		1.60272500e-1
Open	Diethylene glycol monobutyl ether acetate	124174	4.42969017e-3	lbs / gal	AQMD default		4.42969017e-1
Open	Dipropylene glycol	25265718	1.89480086e-6	lbs / gal	AQMD default		1.89480086e-4
Open	Dipropylene glycol monomethyl ether	34590948	1.38933456e-4	lbs / gal	AQMD default		1.38933456e-2
Open	n-Butyl alcohol	71363	5.19540835e-4	lbs / gal	AQMD default		5.19540835e-2
Open	Hexane	110543	3.02371114e-6	lbs / gal	AQMD default		3.02371114e-4
Open	Hydrochloric acid	7647010	2.17100000e-9	lbs / gal	AQMD default	0.90000000	2.17100000e-8
Open	Hexamethylene-1,6-diisocyanate	822060	1.61801278e-3	lbs / gal	AQMD default		1.61801278e-1
Open	Isophorone diisocyanate [IPDI]	4098719	6.58665430e-4	lbs / gal	AQMD default		6.58665430e-2
Open	Methanol	67561	2.55978038e-4	lbs / gal	AQMD default		2.55978038e-2
Open	Methyl ethyl ketone [2-Butanone]	78933	6.44985210e-2	lbs / gal	AQMD default		6.44985210e+0
Open	Methyl isobutyl ketone [Hexone]	108101	5.71672143e-2	lbs / gal	AQMD default		5.71672143e+0
Open	Triphenyl phosphite [POM]	101020	5.97078326e-4	lbs / gal	AQMD default	0.90000000	5.97078326e-3
Open	Propylene oxide	75569	4.84936855e-8	lbs / gal	AQMD default		4.84936855e-6
Open	Styrene	100425	4.22745780e-4	lbs / gal	AQMD default		4.22745780e-2
Open	Toluene	108883	1.60692694e-2	lbs / gal	AQMD default		1.60692694e+0
Open	Cumene	98828	7.01941580e-4	lbs / gal	AQMD default		7.01941580e-2
Open	Xylenes	1330207	1.95616037e-1	lbs / gal	AQMD default		1.95616037e+1
Open	Cyclohexane	110827	2.61585474e-5	lbs / gal	AQMD default		2.61585474e-3
Open	1-Chloro-4-(trifluoromethyl)benzene [PCBTF]	98566	3.18616372e+0	lbs / gal	AQMD default		3.18616372e+2
Open	N-methyl-2-pyrrolidone [N-Methylpyrrolidone] [NMP]	872504	3.39789337e-4	lbs / gal	AQMD default		3.39789337e-2

[Add New](#)

[« Back to Emission Source Process Reference](#)

- Once back at the list of coatings repeat Steps 6 through 8 for all the different types of coatings used in that spray booth. If reporting emissions from a heated booth proceed to step 10 of these instructions.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007 Form data is successfully saved.

Facility Comments

Build Reporting Structure

Emission Sources (ES) Classification

Process References

Emissions	A/N	Permit No	Permit Device ID	Permit Device Description	AER Device ID	ES Name	ES Group Name	Source Category	Emissions?	Equipment	PERP	Release Location Linked
Open	123456				ES4	Spray Booth 13		External Combustion, Spray Coating/Spray Booth	Y	Heater 10-100 MMBTU/HR	N	NR

Process ID	Source Group	Process/Material/Fuel Name	Status	Operation Type
Open	P1	Spray Coating/Spray Booth	Clear Coating	Work in progress routine
Open	P2	Spray Coating/Spray Booth	Color Coating	Work in progress routine
Open	P3	Spray Coating/Spray Booth	Truck Bed Liner Coating	Work in progress routine
Open	P4	External Combustion		Work in progress routine

[Add Process/Material/Fuel](#) ⓘ

OK

Note: The following set of instructions pertains only to booths equipped with a gas-powered heater. If the facility has no spray booths that are heated with a natural gas heater, repeat steps 2-9 for other booths without following steps 10-14

10. To report emissions from a natural gas heater, the Fuel must be added first. From the main menu on the left click '3. Combustion Fuels' and click the orange 'Add New Fuel' button. The following menu will appear where you can select various fuel types used in the spray booth heater. Be sure to verify the correct fuel for your equipment. If there is more than one spray booth heater and they use different fuels, the other fuels should also be added during this step.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting

1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Additional Toxic Substances Production and Usage
7. Perform Data Validation
8. Review Summaries
9. Print Facility Report
10. Report Submission

Combustion Fuels Specification

Summary: This section informs the South Coast AQMD of the combustion fuels (fuels being burned) that were used in the facility.

Instruction: Click on "Add New Fuel" to specify all the combustion fuels (fuels being burned) that were used in the facility during this reporting period. Do not include fuels used exclusively in vehicles.

Add New Fuel ⓘ

Action	Fuel Name	Qualifies for Abbreviated Reporting	Comment
--------	-----------	-------------------------------------	---------

AQMD web site Home | AER Web Site | Submit question/comment | Report a Bug

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting

1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Additional Toxic Substances Production and Usage
7. Perform Data Validation
8. Review Summaries
9. Print Facility Report
10. Report Submission

Edit Combustion Fuel Data

Fuel

Comment

Save or Cancel

- Kerosene
- BioDiesel
- Wood
- Tires
- Coke
- Jet Naphtha (Jet B)
- Jet A
- Refinery Gas/Refinery Mixed Gas
- Residual Fuel Oil No. 6
- Digester Gas (Biogas)
- Landfill Gas (Biogas)
- Aviation Gasoline
- Gasoline
- Distillate Fuel Oil No. 4
- Distillate Fuel Oil No. 2 (Diesel)
- Distillate Fuel Oil No. 1
- Propane
- Butane
- LPG
- Natural Gas

AQMD web site Home | AER Web Site | Submit question/comment | Report a Bug

11. The user can then open the processes from the ‘5. Report Processes/Emissions’ option on the left-hand menu of the page and navigate to the ‘External Combustion’ category. If the facility has multiple heated booths there will be a process listing for each of them. Click the blue ‘Open’ text next to the AER Device ID that is being reported.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting

- 1. Facility Information
- 2. Status Update
- 3. Combustion Fuels
- 4. Emission Sources (ES)**
- 5. Report Processes/Emissions
- 6. Combustion
- External Combustion**

Internal Combustion

- Use of organics
 - Spray Coating/Spray Booth
 - Other Use of Organics
- Storage Tanks
- Fugitive Components
- Other Processes
- Process Upset

5. Additional Toxic Substances Production and Usage

- 7. Perform Data Validation
- 3. Review Summaries
- 2. Print Facility Report
- 10. Report Submission

External Combustion

Please provide specific information for every process associated with your external combustion Emission Sources including usage, emission factor and control efficiency (if any). **Combustion fuels must be selected on the combustion fuels page (see 3. Combustion Fuels link in the menu on the left-side) before entering data on this page.** Detail instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting.
As part of Abbreviated Reporting, you **Must** only use AQMD Default Emission Factors.
If you select anything other than **AQMD Default Emission Factors** you will be disqualified from Abbreviated Reporting.
Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

External Combustion Process List Overview

[Add New Process to ES](#) [Print Preview](#)

	AER Device ID	Permit Device ID	A/N	Process ID	Status	Equipment	Fuel	Fuel Usage	Units
Open	ESZ		112233	P1	Work in Progress	Heater 10-100 MMBTU/HR		0	
Open	ES4		123456	P4	Work in Progress	Heater 10-100 MMBTU/HR		0	

Search:

12. The following page will open. Click the 'Open' link under Step 1: Process and fill out all required information as denoted by the red asterisks next to the fields. This will include the fuel and the applicable rule Number. The applicable rule is Rule 1147. Click on the orange Save button once all relevant information has been entered. A dialog box will pop up informing you that Default EFs have been assigned, click the orange OK button to dismiss this dialog box.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Back to Emission Source Process Reference

External Combustion

Please provide specific information for every process associated with your external combustion Emission Sources including usage, emission factor and control efficiency (if any). **Combustion fuels must be selected on the combustion fuels page (see 3. Combustion Fuels link in the menu on the left-side) before entering data on this page.** Detail instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting
 Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you **Must** only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Optional: Mark as Completed

Step 1: Process

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Equipment	PERP	Fuel	SCC
Open ES7		112233	P1		Heater 10-100 MMBTU/HR	No		

Click here to [delete](#) this process.

Step 2: Throughput

Annual Throughput	Criteria/Toxic Throughput
Open	

Step 3: Criteria Emissions (lbs) Use [Default Emission Factors](#) if available.

Pollutant	EF	Unit	EF Data Source	Emissions
Open VOC		lbs /		
Open NOx		lbs /		
Open SOx		lbs /		
Open CO		lbs /		
Open PM		lbs /		

Step 4: Toxic (TAC/ODC) Emissions (lbs) Use [Default Emission Factors](#) if available.

TAC/ODC Group	CAS #	EF	Unit	EF Data Source	Emissions
Add New					

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Back to Emission Source Process Reference

External Combustion

Please provide specific information for every process associated with your external combustion Emission Sources including usage, emission factor and control efficiency (if any). **Combustion fuels must be selected on the combustion fuels page (see 3. Combustion Fuels link in the menu on the left-side) before entering data on this page.** Detail instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting
 Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you **Must** only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Optional: Mark as Completed

Step 1: Process

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Equipment	PERP	Fuel	SCC
Open ES4		111111	P5		Heater 10-100 MMBTU/HR	No		

Click here to [delete](#) this process.

Step 2: Throughput

Annual Throughput	Criteria/Toxic Throughput
Open	

Step 3: Criteria Emissions (lbs) Use [Default Emission Factors](#) if available.

Pollutant	EF	Unit	EF Data Source	Emissions
Open VOC		lbs /		
Open NOx		lbs /		
Open SOx		lbs /		
Open CO		lbs /		
Open PM		lbs /		

Edit Emission Process - External Combustion

AER Device ID: ES4 Permit Device ID: AN: 111111 AER Device Name: HEAT Rounds Authorized

PERMITTED Process ID: P5 Process Name: _____

Process Comment: _____

SCC: _____

Fuel: **Natural Gas** *

Rule #: **1147** * [Add Rule](#)

Equipment: Heater 10-100 MMBTU/HR

[Save](#) [Cancel](#)

- Click the Open link under 'Step 2: Throughput' and fill out all required information as denoted by the red asterisks next to the fields. This will include the throughput, unit, and how the throughput measurement was acquired or recorded. Enter this as your throughput and select 'Product or raw material records e.g. receipts/invoices/bills' as your throughput origin. Click on the orange Save button once all relevant information has been entered.

Work In Progress - Facility ID: 999007 - SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) - Reporting period: 2024

Facility ID: 999007

Back to Emission Source Process Reference

Facility Comments

Abbreviated Reporting

1. Facility Information

2. Status Update

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

Fugitive Components

Other Processes

Process Upset

6. Additional Toxic substances Production and Usage

7. Perform Data Validation

8. Review Summaries

9. Print Facility Report

10. Report Submission

External Combustion

Please provide specific information for every process associated with your external combustion Emission Sources including usage, emission factor and control efficiency (if any). Combustion fuels must be selected on the combustion fuels page (see 3. Combustion Fuels link in the menu on the left-side) before entering data on this page. Detail instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you Must only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Step 1: Process Optional: Mark as Completed

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Equipment	PERP	Fuel	SCC
Open	ES7		112233	P1	Heater 10-100 MMBTU/HR	No		

Click here to [delete](#) this process.

Step 2: Throughput

Annual Throughput	Criteria/Toxic Throughput
Open	

Step 3: Criteria Emissions (lbs) Use [Default Emission Factors](#) if available.

Pollutant	EF	Unit	EF Data Source	Emissions
Open				

Work In Progress - Facility ID: 999007 - SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) - Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting

1. Facility Information

2. Status Update

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

Fugitive Components

Other Processes

Process Upset

6. Additional Toxic substances Production and Usage

7. Perform Data Validation

8. Review Summaries

9. Print Facility Report

10. Report Submission

External Combustion

Please provide specific information for every process associated with your external combustion Emission Sources including usage, emission factor and control efficiency (if any). Combustion fuels must be selected on the combustion fuels page (see 3. Combustion Fuels link in the menu on the left-side) before entering data on this page. Detail instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you Must only use AQMD Default Emission Factors.

Edit Throughput Information - External Combustion

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Equipment	PERP	Fuel	SCC
ES4		111111	P5	1147	Heater 10-100 MMBTU/HR	No	Natural Gas	

Optional: Mark as Completed

PERP Fuel SCC
No Natural Gas

Click here to [delete](#) this process.

Fuel Usage (Annual Throughput) * *

Throughput Type *

Throughput Origin *

Fuel Usage Comment

Save **Cancel**

Step 3: Criteria Emissions (lbs) Use [Default Emission Factors](#) if available.

Pollutant	EF	Unit	EF Data Source	Emissions
Open				
Open				
Open				
Open				
Open				

14. The AER WebTool will automatically calculate both criteria and toxic pollutant emissions based on your throughput entered previously. Once completed with this spray booth heater you can select another following the same process from step 11 and repeat the process for all heaters.

Reporting Emissions from Spray cleaning equipment and solvent use

1. Facilities must report their usage of solvents used in the cleaning of spray guns and other equipment. This use of solvents is unpermitted and thus will not be automatically added to the tool. Only one device will need to be added to cover the usage of all solvents, regardless of the number of booths used at a facility. Users can do this through the '4. Emission Sources' page and clicking the orange 'Add New Emission Source' button.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting

1. Facility Information

2. Status Update

3. Combustion Fuels

4. Emission Sources (ES)

5. Report Process/Emissions

6. Additional Toxic Substances Production and Usage

7. Perform Data Validation

8. Review Summaries

9. Print Facility Report

10. Report Submission

Build Reporting Structure

Emission Sources (ES) Classification

Summary: 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.

Instruction: Add Devices (emissions sources) by clicking "Add New Emission Source". Edit devices by clicking "Profile" under the Emission Source (ES) Column. Add emission data by clicking "Open" under the Emissions column. Upload storage tank data by clicking on link "Click here" below.

Abbreviated Reporting

Starting in Reporting Year 2022 some facilities can qualify for Abbreviated Reporting. Your eligibility to file Abbreviated Report depends in part on the types of Emission Sources used at your Facility. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Storage Tank Emissions Batch File Import - [Click here](#) for more instructions.

Add New Emission Source

Displaying 1 emission sources.

A/N Permit NO

AER Device ID Permit Device ID

Emission Source (ES)	Emissions	A/N	Permit NO	Permit Device ID	Permit Equipment Description	AER Device ID	ES Name	ES Group Name	Source Category	Has Emissions	Equipment	PERP	Release Location Linked	ES Status
Profile	Open	111111			Heated booth Test	ES4	HEAT Rounds Authorized		External Combustion, Spray Coating/Spray Booth	Y	Heater 10-100 MMBTU/HR	N	NR	Work in progress

Showing 1 to 1 of 1 entries ◀ Previous Next ▶

- Fill out all required information as denoted by the red asterisk next to the field. Required fields including ES Name (the user should enter the name used at the facility for the device for easy reference, e.g., Gun Cleaner), and then select the Operating ES Status from the drop-down menu.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting

1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Additional Toxic Substances Production and Usage
7. Perform Data Validation
8. Review Summaries
9. Print Facility Report
10. Report Submission

Edit Emission Source

Instruction: Add new emissions sources using information found on permits, manufacturers specifications, or identifying placards. Select the Operating ES Status that best reflect the device's operation for this reporting period. All areas with a Red Asterisk (*) must be addressed. Note: Some devices have been pre-populated, verify that the information is correct

Abbreviated Reporting

Starting in Reporting Year 2022 some facilities can qualify for Abbreviated Reporting. Your eligibility to file Abbreviated Report depends in part on the types of Emission Sources used at your Facility. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Permitted	<input type="checkbox"/>
A/N	
PERP Equipment(CARB's Portable Equipment Registration Program)	<input type="checkbox"/> i
Permit No	
Permit Device ID	
Permit Equipment Description	
AER Device ID	will be assigned upon saving
ES Name	Cleaning Solvents *
Operating ES Status	Normal Operation *
Comment	<input style="width: 100%;" type="text"/>
Emission Source Category	Categorize Emission Source *
Design Capacity	0 <input style="width: 100px;" type="text"/>

3. Next, click on the orange Categorize Emission Source button. The pop-up window shown in the image below will appear. Select “Click Here” in Item ‘4. Other Use of Organics’, then check the box for “Other Evaporative Sources”. Then click the orange save button at the bottom of the dialog box.

Facility ID: 999007

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Edit Emission Source

Facility Comments

Abbreviated Reporting

Instruction: Add new emissions sources using information found on permits, manufacturers specifications, or identifying placards. Select the Operating ES Status that best reflect the device's operation for this reporting period. All areas

1. Facility Information

2. Status Update

3. Combustion Equipment

4. Emission Source

5. Report Procedure

6. Additional To Substances Process Usage

7. Perform Data

8. Review Summary

9. Print Facility

10. Report Submission

Categorize Emission Source

All Emission Source with this icon **A** qualify for AER Abbreviated Reporting

Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

- External Combustion Equipment (e.g., boiler, dryer, oven, furnace, heater, afterburner, flare, kiln or incinerator) [click here](#) to select one the following Equipment:
- Internal Combustion Equipment (e.g., internal combustion engine (excluding vehicles), turbine or micro turbine) [click here](#) to select one of the following Equipment:
- Spray Coating/Spray Booth (e.g., coatings, solvents, adhesives, etc.) [click here](#) to select one of the following Equipment:
- Other Use of Organics (e.g., coatings, solvents, inks, adhesives, etc.) except In Spray Coating/Spray Booth, [click here](#) to select one of the following Equipment:
 - Degreaser
 - Coating (Flow / Dip / Roll / Hand Application)
 - Printing
 - Other evaporative sources
- Liquid Storage Tank (e.g. Underground, Aboveground, Small Tanks, Dispensing Systems) [click here](#) to select one of the following Equipment:
- Fugitive Components (Emission Leaks from Process Components per Rule 462, 1173 and 1176), [click here](#) to select all applicable Equipment:
- Other Processes (does not fit in any of the groups mentioned above) [click here](#) to mark "Other Process Equipment":

Save Cancel

Emission Source Category Categorize Emission Source

Design Capacity 0

4. Once the source is categorized you can click the orange ‘Save and Return to List of Emission Sources’ button to return to the previous Emission Source page or click the ‘Save and Proceed to Process Reporting’ button to continue to emissions reporting for this device. For this example, user should click on ‘Save and Proceed to Process Reporting’ button.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting


1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Additional Toxic Substances Production and Usage
7. Perform Data Validation
8. Review Summaries
9. Print Facility Report
10. Report Submission

Edit Emission Source

Instruction: Add new emissions sources using information found on permits, manufacturers specifications, or identifying placards. Select the Operating ES Status that best reflect the device's operation for this reporting period. All areas with a Red Asterisk (*) must be addressed. Note: Some devices have been pre-populated, verify that the information is correct

Abbreviated Reporting

Starting in Reporting Year 2022 some facilities can qualify for Abbreviated Reporting
Your eligibility to file Abbreviated Report depends in part on the types of Emission Sources used at your Facility.
Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Permitted	<input type="checkbox"/>
A/N	
PERP Equipment(CARB's Portable Equipment Registration Program)	<input type="checkbox"/> 
Permit No	
Permit Device ID	
Permit Equipment Description	
AER Device ID	will be assigned upon saving
ES Name	Cleaning Solvents *
Operating ES Status	Normal Operation *
Comment	<input type="text"/>
Emission Source Category	Other Use of Organics Categorize Emission Source *
Design Capacity	0 <input type="text"/> <input type="text"/>

Save or Save and return to List of Emission Sources or

Save and proceed to Process Reporting or Cancel

- The following window will then pop-up showing processes for solvents. Click the blue Open link next to the 'Other Use of Organics' option in the table. The user can also open the processes from the '5. Report Processes/Emissions' page on the left-hand menu of the page and navigating to the 'Other Use of Organics' category.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007
Form data is successfully saved.

Facility Comments

Abbreviated Reporting

1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Additional Toxic Substances Production and Usage
7. Perform Data Validation
8. Review Summaries
9. Print Facility Report
10. Report Submission

Build Reporting Structure

Emission Sources (ES) Classification

Summary: This section contains facility permit profile. Please make sure that every device has a specified Emission Source profile" under the upload storage

Process References

Emissions	A/N	Permit No	Permit Device ID	Permit Device Description	AER Device ID	ES Name	ES Group Name	Source Category	Emissions?	Equipment	PERP	Release Location	Linked
Open					E55	Cleaning Solvents		Other Use of Organics	Y	Other evaporative sources	N		NR

Process ID	Source Group	Process/Material/Fuel Name	Status	Operation Type
Open	P1	Other Use of Organics	Work in progress	routine

[Add Process/Material/Fuel](#) ⓘ

[OK](#)

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting

1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Additional Toxic Substances Production and Usage
7. Perform Data Validation

Combustion

- External Combustion
- Internal Combustion

Use of organics

- Spray Coating/Spray Booth
- Other Use of Organics**
- Storage Tanks
- Fugitive Components
- Other Processes
- Process Upset

Other Use of Organics

← Back to Emission Source Process Reference

Other Use of Organics

Please provide specific information for every process associated with the other use of organics (except in spray coating/spray booth) including usage, emission factor, and control efficiency (if any). **You must select Material/Activity Code and throughput units before reporting emissions.** Detailed instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you **Must** only use AQMD Default Emission Factors. If you select anything other than **AQMD Default Emission Factors** you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Step 1: Process Optional: Mark as Completed

	AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
Open	E55			P1				

Click here to [delete](#) this process.

Step 2: Throughput

	Annual Throughput
Open	

Step 3: Criteria Emissions (lbs)

- The following page will open. Click the 'Open' link under Step 1: Process and fill out all required information as denoted by the red asterisks next to the fields. Users should enter the information shown in the below screenshot into the Major Group, Type of Operation, Application Method, and Type of Material fields. Users should also enter the name of their facility's cleaning solvents into the material description and 'Process Name' fields. Once done click save to exit out of the window.

Work In Progress - Facility ID: 999007 - SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) - Reporting period: 2024

Facility ID: 999007

« Back to Emission Source Process Reference

Other Use of Organics

Please provide specific information for every process associated with the other use of organics (except in spray coating/spray booth) including usage, emission factor, and control efficiency (if any). You must select Material/Activity Code and throughput units before reporting emissions. Detailed instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you Must only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Optional: Mark as Completed

Step 1: Process

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
ES5			P1				

Click here to [delete](#) this process.

Step 2: Throughput

Annual Throughput

Step 3: Criteria Emissions (lbs)

Pollutant	EF	Unit	EF Data Source	Overall CE	Emissions
Add New					

Step 4: Toxic (TAC/ODC) Emissions (lbs)

TAC/ODC Group	CAS #	EF	Unit	EF Data Source	Overall CE	Emissions
Add New						

« Back to Emission Source Process Reference

Edit Emission Process - Other Use of Organics

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
ES5			P1	1171	Solvents:Solvent Cleaning Operations:Wipe Cleaning:Repair and Maintenance Cleaning	3M High Power Spray Gun Cleaner	

AER Device ID: ES5 AER Device Name: Cleaning Solvents
 NON-PERMITTED Permit Device ID:
 Process ID: P1 Process Name:
 Process Comment:
 SCC:
 Equipment: Other evaporative sources
 Material / Activity:
 Major Group: Solvents
 Type of Operation: Solvent Cleaning Operations
 Application Method: Wipe Cleaning
 Type of Material: Repair and Maintenance Cleaning
 Material Description: High Power Spray Gun Cleaner *
 Additional Rules: [Add Rule](#)

Save Cancel

- Click the Open link under 'Step 2: Throughput' and fill out all required information as denoted by the red asterisks next to the fields. This will include the throughput, unit, and how the throughput measurement was acquired or recorded.

Work In Progress · Facility ID: 999007 · SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) · Reporting period: 2024

Facility ID: 999007

[Back to Emission Source Process Reference](#)

Other Use of Organics

Please provide specific information for every process associated with the other use of organics (except in spray coating/spray booth) including usage, emission factor, and control efficiency (if any). **You must select Material/Activity Code and throughput units before reporting emissions.** Detailed instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you must only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Step 1: Process Optional: Mark as Completed

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
Open	ES5		P1	1171	Solvents:Solvent Cleaning Operations:Wipe Cleaning:Repair and Maintenance Cleaning	Spray Gun Cleaner	

Click here to [delete](#) this process.

Step 2: Throughput

Annual Throughput
Open

Step 3: Criteria Emissions (lbs)

Pollutant	EF	Unit	EF Data Source	Overall CE	Emissions
Add New					

Edit Throughput Information - Other Use of Organics

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
ES5			P1	1171	Solvents:Solvent Cleaning Operations:Wipe Cleaning:Repair and Maintenance Cleaning	Spray Gun Cleaner	

Annual Throughput
55.00000000 gal

Usage (Annual Throughput)	<input type="text" value="55.00000000"/> * gal *
Throughput Type	<input type="text" value="Input"/> *
Throughput Origin	<input type="text" value="Product or raw material records e.g. receipts/invoices/bills"/>
Usage Comment	<input type="text"/>

[Save](#) [Cancel](#)

- Default emission factors are not available for solvents and must be entered based on information from the packaging, Safety Data Sheet (SDS), technical sheet, or the Rule limit. Select the orange 'Add New' button under 'Step 3: Criteria Emissions' then from the pollutant drop down select 'VOC' and under the 'Emission Factor (EF)' header enter your cleaning solvents VOC according to the SDS. Users should select 'Manufacturer Specification' as their data source then press Save when done.

Work In Progress - Facility ID: 999007 - SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) - Reporting period: 2024

Facility ID: 999007

Facility Comments

Abbreviated Reporting

- Facility Information
- Status Update
- Combustion Fuels
- Emission Sources (ES)
- Report Process/Emissions

Combustion

- External Combustion
- Internal Combustion

Use of organics

- Spray Coating/Spray Booth
- Other Use of Organics**
- Storage Tanks
- Fugitive Components
- Other Processes
- Process Upset

5. Additional Toxic Substances Production and Usage

- Perform Data Validation
- Review Summaries
- Print Facility Report
- Report Submission

Other Use of Organics

Please provide specific information for every process associated with the other use of organics (except in spray coating/spray booth) including usage, emission factor, and control efficiency (if any). **You must select Material/Activity Code and throughput units before reporting emissions.** Detailed instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting

Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you **Must** only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Step 1: Process Optional: Mark as Completed

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
Open	ES5		P1	1171	Solvents:Solvent Cleaning Operations:Wipe Cleaning:Repair and Maintenance Cleaning	Spray Gun Cleaner	

Click here to [delete](#) this process.

Step 2: Throughput

Annual Throughput
Open
55.00000000 lbs

Step 3: Criteria Emissions (lbs)

Pollutant	EF	Unit	EF Data Source	Overall CE	Emissions
Add New					

Open Criteria Emission Information - Other Use of Organics

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
ES5			P1	1171	Solvents:Solvent Cleaning Operations:Wipe Cleaning:Repair and Maintenance Cleaning	3M High Power Spray Gun Cleaner	

Annual Throughput
55.00000000 gal

Pollutant: VOC *

Emission Factor (EF): 1.6700000e-1 * lbs/gal

Overall Control Efficiency:

Emission Factor Comment:

If not using AQMD default emission factor please provide detailed references in the Emission Factor Comment box above or upload file with the information. Processes without this information are subject to audit.

Emission Factor Data Source: SDS *

Emissions: 9.1850000e+0 lbs

Save Cancel

9. A similar process will need to be followed to add toxic pollutants that may be present in the solvents as well. This information will also be listed in the SDS of the material and is presented as a density or percentage of the weight. Users should select the orange 'Add New' button under 'Step 4: Toxic (TAC/ODC) Emissions (lbs)' and the following window will appear. Search for the toxic pollutant you would like to add in the pollutant search bar and then report its density in lbs/gal. A unit conversion may be necessary for this and conversion factors are given in the technical appendix of this document. The reported 'Emission Factor Data Source' should be 'Manufacturer Specification' or 'SDS'.

Step 1: Process

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
Open E55			P1	1171	Solvents:Solvent Cleaning Operations:Wipe Cleaning:Repair and Maintenance Cleaning	Spray Gun Cleaner	

Step 2: Throughput

Annual Throughput
55.00000000 gal

Step 3: Criteria Emissions (lbs)

Pollutant	EF	Unit	EF Data Source	Overall CE	Emissions
Open VOC		lbs / gal			

Step 4: Toxic (TAC/ODC) Emissions (lbs)

TAC/ODC Group	CAS #	EF	Unit	EF Data Source	Overall CE	Emissions
Add New						

Open Toxic (TAC/ODC) Emission Information - Other Use of Organics

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC
E55			P1	1171	Solvents:Solvent Cleaning Operations:Wipe Cleaning:Repair and Maintenance Cleaning	3M High Power Spray Gun Cleaner	

Annual Throughput
55.00000000 gal

TAC/ODC Toxic Pollutants / Ozone Depleting Compounds

Pollutant: 41 - Glycol ethers and their acetates
111762 - Ethylene glycol monobutyl ether

TAC Group: 41 - Glycol ethers and their acetates
CAS # (Pollutant): 111762 - Ethylene glycol monobutyl ether
Emission Factor (EF): 3.3500000e-1 lbs/gal
Overall Control Efficiency:
Emission Factor Comment:

If not using **AQMD default** emission factor please provide detailed references in the Emission Factor Comment box above or upload file with the information.
Processes without this information are subject to audit.

Emission Factor Data Source: SDS
Emissions: 1.84250000e+1 lbs

Save **Cancel**

10. If the facility uses more than one brand or type of cleaning solvent each one must be reported following these same steps by adding another process to the Solvent Cleaning device. Return to the 'Other use of Organics' tab of the '5. Report Processes/Emissions' page. Click the orange 'Add new Process to ES' button and the following screen will display. Then follow steps 6-9 again for the new material.

Work In Progress - Facility ID: 999007 - SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) - Reporting period: 2024

Facility ID: 999007

Other Use of Organics

Please provide specific information for every process associated with the other use of organics (except in spray coating/spray booth) including usage, emission factor, and control efficiency (if any). You must select Material/Activity Code and throughput units before reporting emissions. Detailed instructions are available by clicking on Help icon in the tool bar.

Abbreviated Reporting
 Certain combination of equipment code and fuel source may disqualify you from Abbreviated Reporting. As part of Abbreviated Reporting, you Must only use AQMD Default Emission Factors. If you select anything other than AQMD Default Emission Factors you will be disqualified from Abbreviated Reporting. Click [here](#) to find out more details about Abbreviated Reporting and its possible benefits.

Other Use of Organics Process List Overview

[Add New Process to ES](#) Print Preview

Open	AER Device ID	Permit Device ID	A/N	Process ID	Status	Material Description	Usage	Units	ROG	SPO
	ES5			P1	Work in Progress	Spray Gun Cleaner		55 gal		0

Search:

Edit Emission Process - Other Use of Organics

AER Device ID: **ES5** or [Add new emission source](#)

AER Device Name: Cleaning Solvents

Permit Device ID:

Process Name:

Process ID:

Process Comment:

SCC:

Equipment: Other evaporative sources

Material / Activity *
 Major Group:

Type of Operation:

Application Method:

Type of Material:

Material Description: *

Additional Rules: [Add Rule](#)

Save **Cancel**

Technical Appendix

The following sections of this guidance document refer to procedures for using non default (product specific) emission factors. Any reporter electing to use product specific emission factors shall use material specifications provided in product Safety Data Sheet (SDS), technical sheets, or other manufacturer supplied documents for products used at the facility. Facilities shall include any relevant documentation that they used to determine these product-specific emission factors with their report using the ‘Upload Supporting Documentation’ option in the upper right-hand corner of the WebTool:



Unit Conversions

The AER WebTool requires the input of paint throughput to be in units of gallons, but many paint systems are measured in liters. The following conversion factors are used to convert from liters to gallons.

Expressions for converting grams to pounds²: 1 liter \cong 0.2642 gallons; 1 gallon \cong 3.7854 liters. Sample calculations below use both expressions and are equivalent.

Example to convert 25 liters to gallons:

$$25 \text{ liters} \times \frac{0.2642 \text{ gallon}}{1 \text{ liter}} \cong 6.6 \text{ gallons}$$

Alternate example to convert 25 liters to gallons:

$$25 \text{ liters} \times \frac{1 \text{ gallon}}{3.7854 \text{ liters}} \cong 6.6 \text{ gallons}$$

The density of a coating is necessary in determining specific emission factors for both VOC and TAC. Density is the weight of the coating for a given volume of the coating. However, some coatings SDS provide the specific gravity of a product rather than density. Specific gravity is a unitless ratio of the density of a substance compared to pure water (the density of pure water is approximately 8.34 lb/gallon). If only specific gravity is given use the following conversion to obtain density.

Example to convert specific gravity of 1.17 to pounds per gallon:

$$1.17 \times \frac{8.34 \text{ lb}}{1 \text{ gallon}} \cong 9.76 \text{ lb/gal}$$

² Note these are not exact but are close approximations

VOC Emissions

For annual emission reporting purposes, reporters are allowed three options. The first is to use a default emission factor, as described earlier in this document. The second is to use the highest VOC content for all coatings belonging in the coating category used at the facility. The third option is to use the VOC content from each of the specific coatings in the category.

Example using highest VOC content from product category: a facility applies 30 different color coatings (some are multiple component mixtures) during the year. The range of VOC is from 0.7 lb/gal for one product to 1.6 lb/gal for another. Report using the total gallons (throughput) for color coat and use a VOC emission factor of 1.6 lb/gal.

Toxic Air Contaminant Emissions

Content values in SDS or tech sheets are given as a percentage of the total weight of a product and often as a range. When determining emission factors, the highest value of the range shall be used. For example, if a given chemical component is given a range of 5-10% of the total weight, the estimated emission factor shall be based on 10% for that chemical component.

For annual emissions reporting purposes, reporters are allowed two options: the first is to use default emission factors, as described earlier in this document. The second is to use product-specific information from SDS to estimate emission factors for each toxic air contaminant. Estimating toxic air contaminants involves reviewing SDS for substance/mixtures with each substance typically provided in percent ranges. Not all listed substances in an SDS are necessarily required to be reported (refer to the Excel file on AER webpage for required TAC³). If a chemical component does not appear on the TAC list it does need to be reported in the AER WebTool. Note that many chemical compounds can go by different names, and so it is best to verify using the Chemical Abstract Service (CAS) number rather than name.

Example:

From the sample SDS, the clear coat contains mixed xylenes at a range of between 29 and 34 percent by weight. Xylenes is categorized as a VOC⁴, so reporter may not assume any control efficiency for standard paint spray booth filters.

$$\text{Mixed Xylene Emission Factor} = 0.34 \times \frac{7.93 \text{ lb}}{\text{gallon}} \cong 2.70 \text{ lb/gal}$$

³ <https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/tac-list-dy2024.xlsx>

⁴ For other TAC categorized as PM, standard filter control efficiency for is allowed as described in this guideline.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Product name : URETHANE CLEAR

Ingredient name	%	CAS number
xylene	≥29 - <34	1330-20-7
neptan-2-one	≥10 - <16	110-43-0
ethylbenzene	≥5 - <6	100-41-4
acrylic acid, monoester with propane-1,2-diol	≥0.3 - <1	25584-83-2
styrene	≥0.3 - <1	100-42-5
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	≥0.1 - <0.3	41556-26-7
methyl methacrylate	≥0.1 - <0.3	80-62-6

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.
Color : Not available.
Odor : Not available.
Odor threshold : Not available.
pH : Not available.
Melting point : Not available.
Boiling point : 92.78°C (199°F)
Flash point : Closed cup: 27.78°C (82°F)
Material supports combustion. : es.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Flammability (solid, gas) : Not available.
Lower and upper explosive (flammable) limits : Lower: 1.1%
Evaporation rate : 0.56 (butyl acetate = 1)
Vapor pressure : 0.87 kPa (6.5 mm Hg) [room temperature]
Vapor density : Not available.
Relative density : 0.95
Density (lbs / gal) : 7.93
Solubility : Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water : Not available.
Viscosity : Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)
Volatility : 57% (v/v), 50.78% (w/w)
% Solid. (w/w) : 49.22