# South Coast Air Quality Management District Annual Emissions Reporting (AER) 

Help and Support Manual for the AER Reporting Tool

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## INTRODUCTION

The Annual Emissions Reporting (AER) Program provides facilities that are subject to Rule 301(e) with a new computer tool (AER Reporting Tool) to estimate emissions for criteria pollutants (VOC, NOx, SOx, CO and PM), Specific Organic Compounds (HFC \& HCFC) and toxic air contaminants/ozone depleting compounds (TAC/ODC) and prepare the annual emission reports.

## AER Reporting Tool Features

Work at your own pace - Users can stop a session anytime. Entered and saved data is automatically stored and will remain in the South Coast AQMD's central database. Users will be logged out automatically if a session is inactive for a long period.

Security - Only registered users will be able to use the AER Reporting Tool. Facility ID\# and PIN Code are required to access facility information.

Flexibility - The AER Reporting Tool allows a single user to access multiple facilities with separate ID\#'s and PIN codes. Likewise, multiple users can concurrently work on different sections of an emission report for a single facility.

Ease of Access - AER Reporting Tool is a web-based program that allows users access to the reporting process using a personal computer from anywhere with an internet connection. Please check "Internet Browser Requirements" below for compatibility.

Ease of Navigation - Users can navigate to different sections of an emissions report and check the reporting progress.

Emissions Sources - The AER Reporting Tool uploads permitted equipment as Emission Sources (ES). The permit profile contains devices identified by ES\# and, sometimes, other information such as Permit Device Id (D, C or E), Permit Number (Permit NO), Application Number (A/N).

Default Emission Factors - The AER Reporting Tool contains default emission factors for certain limited types of operations/processes/equipment. Additional default factors are available in a separate guidance document posted on the South Coast AQMD AER web page. Default emission factors should only be used when source-specific data is not available.

Importing of Tank Emissions - Users may import batch emissions data from liquid storage tanks using EPA's TANKS format. Storage tanks must be properly identified with the ES\# matching those listed in the facility permit profile. Detailed guidelines are available on the AER web page on how to import the results into the AER reporting tool.

Importing of Previous Year Data - This command is available on the AER Reporting Tool Home Page for importing and merging previous year's emissions data with current uploaded permit profile, with exception to throughput data.

Export to Excel - This command is available for users to export all emission sources and process data into an Excel spreadsheet.

Reporting Emissions from Similar Equipment - The AER Reporting Tool allows the user to build a model for one emission source (i.e., combustion equipment) and apply it to similar emission sources in order to minimize redundant data entry. For detailed instructions and restrictions, see the document titled "Guidelines for Reporting Emissions from Multiple Identical Devices/Equipment."

On-line Help and Support - Available in electronic form. No more hard-copy guidelines to thumb through.

## Internet Browser Requirements

Supported browsers:

- Microsoft Edge
- Internet Explorer
- Firefox, and
- Chrome
- 

Compatibility View must be turned off for Internet Explorer users.
Cookies and Javascript execution must be enabled in the browser.

## Navigation

Every screen in the AER Reporting Tool displays the navigation toolbar along the top of the screen and along the left side of the screen. The links will take users to different parts of the reporting tool.


AER Home - This is the starting point where existing users can log in with username and password (created by the user during the registration process) or request to reset a forgotten password. This page also provides a link so that new users can register to use the tool.

Access Facility - Clicking on this tab will take users to the main page of the AER Reporting Tool where users can select the reporting year to work on or access a different facility.

START HERE- This is the starting page where users can download data from the previous AER or navigate to different sections of a facility's annual emission report.

Conversion Calculator Icon Button - It is not an ordinary calculator. Clicking on this icon will open a conversion tool for a limited number of units.

Print Icon Button - Clicking this icon allows users to print the page they are working on, similar to the "print screen" function on most computers. Note: If you wish to print a full list of emission sources from a facility's permit profile, please select the "Print Preview" button on the Emission Source (ES) Classification page, instead of the printer icon.

Upload Supporting Documentations Icon Button - Clicking on this icon will open a tool for uploading supporting documents in electronic form. There is no limit on the number of documents for uploading. Each file must be 5 megabytes (MB) or less.

Help and Support - Clicking on this icon will open the AER Reporting Tool Help and Support Manual, which contains detailed instructions on how to use the web tool as well as a listing of default emission factors for select equipment/ processes.

## Import Data from Last Year Link

Clicking the START HERE link on the brown menu bar will take the user to the Facility Home Page.
Clicking on the Import Last Year link will import available data from the previous reporting year to the current report.

```
AER Home Access Facility START HERE (a)
```

Facility ID: 999125

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

Work In Progress • Facility ID: 999125 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021
Summary: This section allows the user to import information from the most recently submitted report from a prior data year. This data includes, but does not solely comprise, facility information, combustion fuels, and emission sources. Some information such as throughputs and storage tank data are not imported and will need to be manually updated.
Instruction: Instruction: Click "Import Last Year" to start the report. Otherwise, click on the link "1. Facility Information" on left menu to start a new report.

Click here to Import Last Year information
AQMD web site Home I AER Web Site I Submit question/comment I Report a Bug

## Left Navigation Menu:



1. Facility Information - The link on this menu opens the facility information page where users can input facility information, provide facility operational status], and enable special features for the tool to create specialized reports.
2. Build Report Structure - This link opens the Status Update page, which informs the South Coast AQMD about any changes in business operating status.
3. Combustion Fuels - This link opens combustion fuel specification section. This section must be completed before combustion emission sources can be completed in the Process pages.
4. Emission Source (ES) - This link opens the Emission Sources (ES) Classification page. The table with a green table on this page lists all emission sources. Emission sources are also referred to as devices.
5. Report Process/Emissions - This link opens a page containing worksheets based on Emission Source Group Categories (e.g., external combustion, internal combustion, other processes, etc.) as defined by the user in the previous steps. By clicking on the "Open" link next to an emission source on these worksheets, users can begin entering specific data to calculate emissions.
6. Perform Data Validation - Clicking this link will execute the preliminary quality control procedures and display warnings and errors. Warnings alert users to review the entered data for reasonableness and accuracy. Errors require users to revisit and correct the data. Once all errors have been corrected, users can submit the report.
7. Review Summaries - Clicking this link opens emissions summary pages for criteria pollutants, toxic air contaminants, greenhouse gases (if GHGs are selected for reporting), and associated emissions fees.

Criteria Pollutants - Link for a summary of criteria pollutants emissions.
Toxic (TAC/ODC) Pollutants - Link for a summary of toxic air contaminants (TAC) and ozone depleting compounds (ODC) emissions, including the AER Toxic Fees Breakdown which provides a detailed accounting of toxic emissions and applicable toxics fees.
GHG Pollutants - Link for a summary of greenhouse gases emissions.
Fees- Link for summary of emissions subject to fees and associated fees due.

## 8. Print Facility Report -

Print Full AER PDF Report (all listed below) - Clicking on this check box allows the user to select all sections of the AER PDF Report to print.

Print Individual PDF Sections - Clicking on individual check boxes allows the user to selectively generate and print the reports in pdf format for recordkeeping purposes.

Excel Reports - Clicking the Download Report button will export all reported emission sources and process data into an Excel spreadsheet. Clicking on the Download TAC Report button will export all reported TAC emission sources and process data, and associated emission fees into an Excel spreadsheet. The TAC Report also includes facility information, and total and individual summaries of each type of TAC emission fee.
9. Report Submission - Clicking this link opens the report submittal page, where users should perform a final review of emissions data prior to submitting the annual emissions report in electronic form.

Request Amendments Button - Clicking this link will enable users to submit proposed amendments to a submitted report. For detailed instructions, see the guideline document titled, "How to Amend an Annual Emission Report."

## General Tips

South Coast AQMD periodically reviews selected Annual Emissions Reports to verify accuracy, completeness, and correct fee payment. Carefully noting the following tips can help minimize possible emission and fee discrepancies:

- Follow all instructions.
- Make sure units of measure are correct. Common conversion factors have been provided in the AER Reporting Tool to assist with unit conversions and emission calculations.
- Document all emission factors other than default factors. Upload documentation with report submittal as needed including, but not limited to: Material Safety Data Sheets; CEMS summary data; South Coast AQMD pre-approved source test results; permit evaluation data or rule/permit emissions limits or BACT emissions requirements.
- Use comment fields as needed to provide additional explanation.


## Common Mistakes

Review this list to avoid mistakes when completing your annual emissions report (AER):

- Late submittal due to a delay in issuing the check for emission fees.

The report is completed on time. However, a delay in issuing the check for emission fees causes the report to be submitted past the deadline, thus incurring a surcharge. Anticipate a delay in approval and issuing of the check from facility's headquarters or central office to avoid a late surcharge.

- Reporting emissions from fuel combustion in mobile equipment such as forklifts, bulldozers, and tractors.
Emissions from self-propelled on-road or off-road mobile source vehicles should not be reported in this program.
- Reporting liquid fuel (e.g., diesel) in wrong units.

The default emission factors provided for burning of liquid fuel or fuel dispensing are given in pounds per 1,000 gallons ( $\mathrm{lbs} / 1000 \mathrm{gals}$, or $\mathrm{lbs} / \mathrm{Mgal}$ ). Therefore, please convert all liquid fuel used or dispensed to 1,000 of gallons when using the default emission factors.

- Annual throughput units not consistent with emission factor units.

Throughput units must be consistent with emission factor units to ensure that emissions are calculated correctly (in pounds). For example, if you report material usage (throughput) in pounds, then your emission factor units should be in pounds of pollutant per pound of material used (i.e., $\mathrm{lb} / \mathrm{lb}$ ). If reporting throughput in gallons, then your emission factor units should be in pounds of pollutant per gallon of material used (i.e., $\mathrm{lb} / \mathrm{gal}$ ).

## How to Get Help and Support

Support is available from South Coast AQMD staff between 8:00 a.m. and 5:00 p.m., Tuesday through Friday through the following channels.

- Help Hotline: (909) 396-3660

South Coast AQMD staff will be available to provide immediate responses to the extent possible.

- E-mail: $\underline{\text { aer@aqmd.gov }}$

Always include Facility ID\# with inquiries.

- Internet: http://www.aqmd.gov/home/regulations/compliance/annual-emission-reporting Information relative to the AER Program is incorporated herein. The AER Reporting Tool Help and Support includes specific instructions for each screen, supplemental instructions, tables of default emission factors, etc. In addition, other useful information is available on the web such as the South Coast AQMD rules and Clean Air Solvents.


## - In-Person:

Scheduled in-person/virtual appointments may be arranged upon request. Support staff will help you with your questions on how to enter your data into the Annual Emissions Reporting system. There is no charge for this service. However, support staff cannot enter the data and submit the report for facility. Please call the AER Hotline at (909) 396-3660 or email to aer@aqmd.gov . Appointment times are limited and usually fill up rapidly the last three weeks before the reporting deadline.

## How to Submit a Completed AER

Submitting a completed report is done entirely online.
Once the AER has been reviewed for completeness and verified for accuracy, the user should run Data Validation to ensure that there are no errors or warnings. If all errors have been corrected, and warnings have been reviewed, users should navigate to the Report Submission Process and complete the following steps:

1) Click on the "Generate AER Submission Report" button, which will create one pdf and two Excel files of your completed report. Once the reports have been generated, please review the final documents prior to submittal.
2) Following report generation, users will be routed to the Certify and Submit Generated AER Report page. Once the final report has been reviewed, check the three boxes indicating "I have read and accepted this document" in Step 1 on the Certify and Submit Generated AER Report page.

- If any corrections to the AER are deemed necessary upon review, proceed to Step 2 and click the "Cancel Generated Report \& Modify Report Data" button to return to the AER data entry module. Note: Clicking this button will only delete the pdf and Excel files generated in the previous step and will not delete any entered AER data.

3) At Step 2, read the South Coast AQMD Certification Statement, then check the two boxes acknowledging and agreeing with the Certification Statement.
4) Next, for security and identity verification purposes, you are required to enter your user password and facility pin code.
5) Finally, click on the "Certify \& Submit AER Report" button to electronically deliver the AER data to the South Coast AQMD database. A confirmation email will be generated by the AER Reporting Tool and sent to the AER user.

Once the report has been submitted, you will be redirected to the online payment portal, where you can pay your emission fees via credit card or e-check. The online payment option is only available to you for the initial submittal and when total emission fee for the submitted report is less than $\$ 300,000$.

If you prefer or are required to pay via check, please print the "AER Payment Voucher" and include it with your check. Mail the AER Payment Voucher along with any fee payments to the South Coast AQMD in the provided envelope. If a different envelope is used, please mail the required forms and fees to the following address:

South Coast Air Quality Management District<br>Annual Emission Reporting Program<br>File No. 54493<br>Los Angeles, CA 90074-4493

If a messenger service is used (or hand delivered), the package should be delivered to Cash Management at South Coast AQMD Headquarters at the address listed below in Diamond Bar on or before 5:00 p.m. on the last day of the filing period. Please note that South Coast AQMD is closed on Mondays.

South Coast Air Quality Management District<br>ATTN: Cash Management<br>Annual Emission Reporting Program<br>21865 Copley Drive<br>Diamond Bar, CA 91765-4178

## How to Amend an Annual Emission Report

## How to Amend Calendar Year 2019 or Later Annual Emission Reports Using the AER Reporting Tool

Amendments to the 2019 AERs or later can be made within the AER Reporting Tool．
1．Click on Report Submission on the right－hand menu of the AER Reporting Tool．


2．Enter the reason for your amendment in the text box and click the gold request button（see screenshot above）．

3．You will see a confirmation note on the screen．You will be sent an email confirming the amendment submittal and be assigned an AER staff member who will assist you with the amendment process．

| AER Home Access Facility | START HERE | 関旦田（2） |
| :---: | :---: | :---: |
|  | Request Amendment－Facility ID： 999125 －ABC Tracking Company－Reporting period： 2019 |  |
| Facility ID： 999125 | Report Amendments Process |  |
| 1．Facility Information <br> 2．Status Update |  |  |
|  |  |  |  |  |
| 3．Combustion Fuels | A Your request is awaiting for South Coast AQMD staff approval． |  |
| 4．Emission Sources（ES） <br> 5．Report Process／Emissions | Once it is approved，you can re－generate and submit the report |  |
| 6．Perform Data Validation | amendment． |  |
| 7．Review Summaries |  |  |
| 8．Print Facility Report |  |  |
| 9．Report Submission |  |  |
|  | AER Report Status |  |
|  | Report Status： | Request Amendment |
|  | Requested Date／Time： | 12／16／2021 9：37：58 AM |
|  | Requested By： | test 2014 （testaer2014＠gmail．com） |
|  | Comment： | Please open the 2019 AER for amendment．We forgot to add PM emissions for Device ID E5． |

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## How to Amend 2018-2013 Annual Emission Reports Using the AER Reporting Tool

Prior to 2019 emissions reporting, the AER Reporting Tool is not able to accept online amendments in its current design. In order to facilitate amendments, please follow these steps:

1. Print the reports with relevant data to be amended,
2. On the print-out, manually strikeout the INCORRECT DATA,
3. Write the NEW DATA above the old one,
4. Correct the new total emissions on the Summaries,
a. If amended total emissions resulted in underpayment of emission fees, refer to Rule 301(e)(10)(C) and (D),
b. If amended total emissions resulted in overpayment of emission fees (or refund), refer to Rule 301(e)(9)(B),
c. For amendments with NO FEE impact, please refer to Rule 301(e)(9)(A) for a nonrefundable standard evaluation fee.

DO NOT send additional emissions/evaluation fees or surcharges. Finance Billing Services will send an invoice for any additional fees or surcharges after the amendment process is complete.
5. Submit the authorized (signed) amendment and applicable fees to:

## South Coast Air Quality Management District AER Program <br> 21865 Copley Drive <br> Diamond Bar, CA 91765

## How to Amend 2013-2008 Annual Emission Reports Using Old AER Reporting Tool

For amending calendar year 2008-2013 annual emission reports submitted under the old AER-Web Tool, users must follow these steps:

1. Login to the AER-Web Tool (at http://www3.aqmd.gov/webappl/wc/security/login.aspx) using username and password registered with that old tool,
2. After entering facility ID, select the AER year to amend,
3. On the AER-Web Tool menu bar - click Forms \& Reports tab,
4. Select and Re-generate All Report,
5. Select and print Summary Forms (S, X, A, C, CU, TACS and CR - if applicable). Sign on Form X,
6. Select and print the AER form(s) to amend. (i.e. B1, B2, B3, B4, TAC, etc.),
7. On the print-out, manually strikeout the INCORRECT DATA,
8. Manually write the NEW DATA above the old one,
9. Correct the new total emissions on the Summary Forms (C, CU, S, TACS).
10. If amended total emissions resulted in underpayment of emission fees, refer to Rule 301(e)(10)(C) and (D).
11. If amended total emissions resulted in overpayment of emission fees (or refund), refer to Rule 301(e)(9)(B).
12. If amendment was submitted after one year and sixty days from the official due date with NO FEE impact, the amendment should include a non-refundable standard evaluation fee. Please refer to Rule 301(e)(9)(A) for evaluation fee rate.
13. Submit ALL amended forms, signed Form X, and applicable fees to the South Coast AQMD Headquarters listed above.

## Review of the amendments can result in any of the following actions:

- Additional Fees - Additional fees are subject to the surcharge provisions and time frame outlined earlier under the "Underpayment Surcharge" section. Emission data will be updated accordingly after the amendment has been verified.
- Refund - A refund may be made as a result of the amendment only if a written claim for refund is filed with South Coast AQMD within one year and sixty days from the official due date, or three years in case of South Coast AQMD errors (not including revisions to applicable emission factors). However, the facility emissions will be updated accordingly, after the amendment has been verified.
- Denial - As a result of South Coast AQMD evaluation, the amendment or fee refund may be denied. This action can be appealed to the Fee Review Committee. See "Other Fee Issues" in Help and Support manual.

Any questions regarding amending AERs can be emailed to AER staff at aer@aqmd.gov or by calling the AER Support Hotline at (909) 369-3660.

## Non-Payment/Late Payment Surcharge

If no fee payment is received by South Coast AQMD or postmarked by the deadline of the reporting period, a surcharge shall be assessed and the emission fee due shall be increased as follows:

## When payment is received late:

- Less than 30 days,
- 30 to 90 days,
- 91 days to one year,
- More than one year,
* Based on fee schedules in effect at the time the emissions occurred.

If emission fees are paid on time, but the amount paid is determined to be underestimated, total fees due shall be calculated as follows:

Within one year after the seventy-fifth $\left(75^{\text {th }}\right)$ day from the official due date:
If the payment was
Underpayment and surcharge due are as below:

- Less than $90 \%$ of amount due,
- $90 \%$ or more of the amount due,

After one year and seventy five days from the official due date, all underpayments as determined by the District or as disclosed by the facility will be assessed a 50 percent surcharge on the underpayment, calculated based on the fee schedules in effect when the emissions actually occurred.

## Refund Request

Rule 301(e)(9)(B) requires all requests for refund of overpayment of emission fees be submitted in writing. A written request can be in the form of letter, email, Facility Status Update, or a negative fee figure as calculated and displayed on Fees Due Summary. Refund requests are considered valid if submitted within one year and seventy-five days from the official due date. Note that credit from previous year cannot be applied toward the current year's Annual Emissions Report fees.

## Other Fee Issues

Facility may contact the South Coast AQMD Fee Review Committee for the following matters:

- Financial hardships;
- Alleged District billing or fee errors; and
- Surcharges assessments.

Coordinator for the Fee Review Committee can be contacted at (909) 396-3529. More information relative to Fee Review Committee can be found at the following web page:
http://www.aqmd.gov/home/permits/fees
Questions related to billing or payment may be direct to South Coast AQMD Finance Billing
Services toll free at 866-888-8838 from inside California, or call (909) 396-2900.

## Greenhouse Gases (GHG) General Information

The GHG reporting in AER Reporting Tool is optional for estimating facility's carbon footprint for information purpose.

## GHG Useful Links

US EPA: http://www.epa.gov/
Climate Change: http://www.epa.gov/climatechange/
What EPA is doing: http://www.epa.gov/climatechange/EPAactivities.html
What you can do: http://www.epa.gov/climatechange/wycd/
If you are required to report emissions under EPA's Greenhouse Gas Reporting
Program http://www.epa.gov/ghgreporting/
CARB: http://www.arb.ca.gov/homepage.htm
Climate Change: http://www.arb.ca.gov/cc/cc.htm
AB 32: http://www.arb.ca.gov/cc/ab32/ab32.htm
In 2006, the Legislature passed and Governor Schwarzenegger signed AB 32, the Global Warming Solutions Act of 2006, which set the 2020 greenhouse gas emissions reduction goal into law. It directed the California Air Resources Board (ARB or Board) to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit.

Cap \& Trade: http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm
Cap-and-trade is a market based regulation that is designed to reduce greenhouse gases (GHGs) from multiple sources. Cap-and-trade sets a firm limit or "cap" on GHGs and minimize the compliance costs of achieving AB 32 goals.
Mandatory Reporting: http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm
The Mandatory Reporting Regulation of AB 32 requires greenhouse gases by major sources to report their greenhouse gases emissions.
Reporting Verification: http://www.arb.ca.gov/cc/reporting/ghg-ver/ghg-ver.htm
The Mandatory Reporting Regulation of AB 32 requires the third-party verification of their GHG emissions data reports verified each year by an ARB-accredited verification body, beginning in 2010 for 2009 emissions..
Compliance Offset Program: http://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm
The Cap-and-Trade Regulation of AB 32 allows for the registration and reporting of offset projects, which would eventually result in the issuance of offset credits. These ARB offset credits may be used by regulated facilities to meet their compliance obligation.

Offset Verification: http://www.arb.ca.gov/cc/capandtrade/offsets/verification/verification.htm The Cap-and-Trade Regulation of AB 32 requires the third-party verification of all GHG emission reductions or removal enhancements before any ARB offset credits may be issued.

## Overview Comparison of State and Federal GHG Reporting Requirements

| Description | CARB | EPA |
| :---: | :---: | :---: |
| $\begin{array}{c}\text { Guiding } \\ \text { Principle }\end{array}$ | $\begin{array}{c}\text { Capture approximately } 87 \% \text { of California's } \\ \text { GHG emissions. Provides inventory for } \\ \text { facilities in Cap and Trade program and } \\ \text { provides accounting for CA inventory to meet } \\ \text { goals of AB32. }\end{array}$ | $\begin{array}{c}\text { Capture approximately 85\% of US } \\ \text { GHG emissions through reporting } \\ \text { by direct emitters as well as } \\ \text { suppliers of fossil fuels and }\end{array}$ |
|  |  |  |
|  |  |  |
|  |  |  |$]$


| Description | CARB | EPA |
| :---: | :---: | :---: |
| Applicability | Facilities emitting $\geq 10,000$ metric tons $\mathrm{CO}_{2}$ e Abbreviated reporting for facilities $<25,000$ MT $\mathrm{CO}_{2}$ e using default emission factors except for suppliers or electric power entities. Required - refineries, electricity generating units under 40 CFR part 75, cement, lime, and nitric acid producers. <br> Fuel and $\mathrm{CO}_{2}$ suppliers that produce, import, and/or deliver quantities that would result through use in California emissions $\geq 10,000$ metric tons $\mathrm{CO}_{2} \mathrm{e}$. <br> Petroleum and natural gas producers - includes onshore and offshore production. <br> Emissions from producer's $\geq 10,000$ metric tons $\mathrm{CO}_{2}$ e for process and stationary <br> - combustion. <br> Emissions from producer's $\geq 25,000$ metric tons $\mathrm{CO}_{2 \mathrm{e}}$ must also include fugitive and vented emissions. | Downstream facilities emitting 25,000 metric tons or more of $\mathrm{CO}_{2} \mathrm{e}$ per year. |
|  |  | Upstream suppliers of fossil fuels, industrial GHGs, and vehicle/ engine manufacturers (includes aircraft engine manufacturers, marine diesels). |
| Reporting Scope | Direct stationary combustion emissions | Indirect sources not required |
|  | Specified process and fugitive emissions | For suppliers, the GHG emissions reported are the emissions that would result from combustion or use of the products supplied. |
|  | Fuel usage by fuel type |  |
|  | Indirect energy usage (electricity in kWh and thermal in BTU) |  |
| Use of CEMS | May use CEMS to determine emissions. | May use CEMS to determine emissions. |
| Timeframe | Annual, calendar year report. | Annual, calendar year report. |
|  | April 10 or June 1st, depending on industry. | Report 2010 data by March 31st. Engine and vehicle manufacturers outside of light duty |
|  | Verification by September 1st | year, other GHGs required to report in subsequent years. <br> No verification deadline. |
| Verification | Third-party CARB accredited | Self-certification with EPA emissions verification. |
|  | Annually for sources above 25,000 MT CO2 $\mathrm{CO}_{2}$ and all operators in Cap and Trade |  |


| Description | CARB | EPA |
| :---: | :---: | :---: |
| Falling <br> Below <br> Reporting <br> Threshold | Allowed to stop reporting if emissions fall below reporting level for three years. | Cease reporting after 5 consecutive years of emissions below 25,000 $\mathrm{mtCO}_{2} \mathrm{e}, 3$ consecutive years of emissions below $15,000 \mathrm{mtCO}_{2} \mathrm{e}$, or if emitting process is shut down. |
| Biomass | Account and report biomass emissions separately. | Account and report biomass emissions separately. |
| De Minimis | No more than $3 \%$ of facilities overall emissions including emissions from biomass derived fuels, not to exceed 20,000 MT <br> $\mathrm{CO}_{2} \mathrm{e}$. Emissions must be reported but estimation methods can be used with verifier concurrence. GWPs in regulation still apply. | None |
| Link to Regulation | $\frac{\mathrm{http}: / / \mathrm{www} . a r b . c a . \mathrm{gov} / \mathrm{regact} / 2010 / \mathrm{ghg} 2010 / \mathrm{gh}}{\text { g2010.htm }}$ | http://www.arb.ca.gov/cc/reporting/ ghg-rep/regulation/mrrregulation.htm |
| Link to GHG Reporting | http://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/ghg-reports.htm | $\frac{\text { https://ghgreporting.epa.gov/ghg/lo }}{\text { gin.do }}$ |

## Detail Comparison of State and Federal GHG Reporting Requirements

The GHG Reporting Database is a free online tool that compares federal, regional, state and voluntary greenhouse gas (GHG) reporting requirements. Funded by U.S. EPA, the database helps organizations navigate the patchwork of GHG regulations, which include the federal Greenhouse Gas Reporting Program (GHGRP), California's Mandatory Reporting Regulation (MRR), and state-by-state Regional Greenhouse Gas Initiative (RGGI) requirements.

The database allows users to search the database by keyword, conduct side-by-side program comparisons, and search for variation in requirements between specific reporting programs or U.S. EPA sub-part. There is also a community forum that allows database users to ask questions as well as share information and insights.

Access the database at: $\underline{\text { http://usghgclearinghouse.org/CLEARINGHOUSE/. }}$

## GETTING STARTED

This section includes instructions and procedures for accessing the AER Reporting Tool. The following screen displays the place where new users can start the registration process; existing users can $\log$ in or request to reset Password or find the Username, if forgotten.


## New User Registration

New users are required to register to access the AER Reporting Tool. Clicking on the "Register here" button will bring user to the registration screen as shown below. Note that fields marked with an asterisk $\left(^{*}\right)$ are mandatory and user's email must be a valid and unique email for communication and tracking purposes. During registration, users will create their own individual USERNAME and PASSWORD.


Upon "Sign Up", the tool will acknowledge the registration with a summary as shown in the next section.

## Registration Summary

## Create User Complete

Ana Bree user profile has been created.
Please dose this screen. To complete the AQMD AER registration process, please dick-on the link sent to the provided E-mail Address: that
will confirm you e-mail address and bring you back to the AQMD AER web application.
Username: Anabree
E-mail: breeanablazicevic@gmail.com
Title:
First Name: Ana
Last Name: Bree
Work Address
Company: ABC
Street Number:
Street Name: Beach
Street Suffix: BLVD
Street Direction:
Suite:
City: Huntington Beach
State: CA
Zip: 92647
Zip Four:
Work Phone

Phone Number: 714 596-8837 Ext.
Fax Number:

An email with link for confirmation of the registration will be sent to the valid email address in the user profile as illustrated in the image below. The link for confirmation will stay active for $\mathbf{7 2}$ hours. It is essential that the user confirms the registration within the allotted time. Upon confirmation, the tool will activate user account and direct user back to the AER Program home page.


## Existing User Log-In

Once registered, returning users can log into the AER Reporting Tool using the registered Username and Password. For problems with LOG-IN, please contact program Help and Support via an e-mail to $\mathbf{a e r @ a q m d . g o v , ~ o r ~ c a l l ~ t h e ~ A E R ~ H e l p ~ a n d ~ S u p p o r t ~ H o t l i n e ~ a t ~ 9 0 9 - 3 9 6 - 3 6 6 0 . ~}$

## Resetting Password

The tool also allows user to reset a password, if forgotten. Note that the requestor must provide the registered email address as shown in image $\# 1$ below; otherwise, the tool will display an error message as shown in image \#2 below.

To reset your password, click on the blue link.

## Image \#1



## Image \#2

## AER Home Access Facility

## Welcome to South Coast AQMD Annual Emissions Reporting (AER)

## About AQMD Annual Emissions Reporting (AER)

The South Coast Air Quality Management District's (AQMD's) Annual Emission Reporting (AER) program was developed to track emissions of air contaminants from permitted facilities. Emission fees are also assessed based on reported data. The data collected by AER is used to update the comprehensive emissions inventory for the AQMD, which includes Orange County, the non-desert portions of Los Angeles and San Bernardino counties, and the Riverside county areas west of the Palo Verde Valley.
This annual emissions inventory of pollutants and source categories is essential to effectively design and evaluate clean air strategies to comply with state and federal public health standards.

The AER is required for all facilities subject to Rule 301(e) and 301(l) (10). Additional information on the AER Program can be found at www,aqmd.gov/aer/aer.html

## User Login

Know your username and password? Back to login form.
If your e-mail address is registered as valid user address, the link with additional information will be sent to you. Please check your e-mail in few minutes.


New User? Complete a one-time registration process.

## Register here

After establishing a user account, you can access and update the AERs for your facility(ies) using AQMD-assigned access pin codes.

## Notice

All information entered on this computer system may be monitored, recorded, read, copied, and disclosed by and to authorized personnel for official purposes. Access or use of this computer system by any person, whether authorized or unauthorized, constitutes consent to these terms.

## Image \#3

## AER Home Access Facility

## Welcome to South Coast AQMD Annual Emissions Reporting (AER)

## About AQMD Annual Emissions Reporting (AER)

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This annual emissions inventory of pollutants and source categories is essential to effectively design and evaluate clean air strategies to comply with state and federal public health standards.

The AER is required for all facilities subject to Rule 301 (e) and 301 (l) (10). Additional information on the AER Program can be found at www,aqmd.gov/aer/aer.html

## User Login

Know your username and password? Back to login form.
If your e-mail address is registered as valid user address, the link with additional information will be sent to you. Please check your e-mail in few minutes.

E-mail: aer@aqmd.com


No record of this email has been found, please register as a user.
New User? Complete a one-time registration process.
Register here
After establishing a user account, you can access and update the AERs for your facility(ies) using AQMD-assigned access pin codes.

## Notice

All information entered on this computer system may be monitored, recorded, read, copied, and disclosed by and to authorized personnel for official purposes. Access or use of this computer system by any person, whether authorized or unauthorized, constitutes consent to these terms.

Once the registered email address of the active user is entered, a link with a reset password token will be sent to the requestor's email as shown.

Here is a sample of email with link to reset password. NOTE that the registered Username is also included in the email.

## AER web site retrieve password token

aer@aqmd.gov
Sent: Fri 3/14/2014 9:18 AM
o: bblazicevic@ecotek.com
A password reset was requested for account with username bblazicevic.
If you didn't submit this request, ignore this email.
Your password can be reset by visiting http://aerreportingtoolpro.aqmd.gov/Public/ResetPassword?
$t=J C 3 V i 1560 d t L h L a 8 y J D N a Q b P T Z h V k n U V t y q \% 252 F z v z O B w z h p V M 58 \% 252 B k n 6 E \% 252 F e M 4 X E F Z \% 252 B \% 252 B$
If you have any issues please contact us:
E-mail: aer@aqmd.gov
AER Hotline: 909-396-3660

Clicking on the link included in the email will take the user to the password reset screen as shown below.


Once your password has been reset you can login in with your username and new password by clicking the AER Home button on the top left corner.


## Update User Profile

Users can always update their User profile by following the "Edit Profile" link under Username at the top right corner of the tool as shown. Make sure to always "Save" any changes.


## Welcome to South Coast AQMD Annual Emissions Reporting (AER)




## ACCESSING THE FACILITY'S AER AND COMPLETING THE REPORT

This section contains information and instructions for accessing facility information, entering emission data, preparing and submitting the reports.

## Accessing Facility Data

Accessing facility data for preparing and reporting emissions requires two important pieces of information: Facility ID\# and PIN code. The combination of ID\# and PIN serves as a key to open the gate for accessing the facility permit profile where emission data can be reported for each device. PIN codes are issued by the South Coast AQMD for each Facility ID and must be entered exactly as presented.

## Access Facility

$$
\begin{array}{ll}
\text { Summary: } & \text { Alphanumeric PIN is issued by the SCAQMD } \\
\text { and mailed out yearly in the Facility } \\
& \text { Notification to Report Letter. If you need } \\
\text { assistance on locating the PIN, please } \\
\text { contact AER Support by email at } \\
\text { aer@aqma.gov or Hotline at (909)396-3660. } \\
\text { Instruction: Please enter a facility ID\# and PIN code to } \\
\text { access facility detail information. }
\end{array}
$$

```
Facility ID: }99912
```

Facility PIN: ........
Access Facility

Upon successful access to a facility's information, the tool will open the facility's home screen where the facility's basic information such as ID\#, name, and address are presented. User can access the facility's device level emission data for a specific year by clicking on the "Open..." link adjacent to the desired reporting year, as shown below. At any time, the user can access a different facility by entering the Facility ID\# and PIN on the "Access Different Facility" section located on the right side of the screen, as shown below. Please note that users may not work on more than one facility at a time. Attempting to enter data for multiple facilities simultaneously (e.g., attempting to access more than one facility by logging in using multiple browser tabs/windows at the same time) may result in data loss or other system errors.


## Facility Home

The START HERE page allows users to import information from previous AERs. User's that want to use data imported from the previous reporting year should click on the link "Import Last Year" info. A previous AER must have been submitted using the AER Web Tool to use the data import feature.

## Importing Previous Year Data

A previous AER must have been submitted using the AER Web Tool in order to use the data import feature. In the following Facility Home screen, click the link to "Import Last Year" to import the Reporting Structure from the previous year's AER.

| AER Home | Access Facility | START HERE |
| :--- | :--- | :--- |

A pop-up message will warn the user that importing last year's data will erase any data entered in the current year. Click "Yes" to continue with Import:


A report will be provided once the data is successfully imported:


During uploading of facility's permit profile, the current permit profile is compared to the previous year data and the matching emission sources (ESs) are assigned the same AER Device ID (ES number). ESs are matched first by Permit Device ID, then by Application Number (A/N) and the indicator for ESs uploaded from facility permit profile last year.

During import, all data from "last year" will be imported except:

- Throughput,
- Proposed NAICS for Next Year in Facility Information,
- Proposed SIC for Next Year in Facility Information,
- Status Code in Facility Information,
- Status Code Year if any, in Facility Information,
- Facility Status Update data,
- Fee Summary installments and postmark date,
- Imported EPA TANKS process data (ES data is imported, but all process data is blocked),
- Any data on Upset Worksheet.

After importing data from last year, click on the 1. Facility Information link in the left-side menu to begin updating data for the current reporting year.


## 1. Facility Information

The following screen will be displayed after clicking on the " 1 . Facility Information" link on the navigation menu located at the left side of the screen. This page contains the facility's general information that is extracted from the South Coast AQMD Permitting database. It also identifies the facility as subject to various programs: local (i.e., RECLAIM), state level (i.e., AB2588), and federal level (i.e., Title V). Please verify the equipment location address and enter the Mailing Address (if different from equipment location). Notify South Coast AQMD if any errors or discrepancies are noted in the "Equipment Location" section. Note that all fields marked with a red asterisk (*) are mandatory and must be completed before submitting the report.

## AER Home Browse Facilities Access Facility Facility Home

Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021
Facility ID: 999001

1. Facility Information

- General Info - AB2588 Info

2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

## Facility Information

Summary: This section contains the facility's general information such as business classification, business location, operating schedule, and contact information.
Instruction: Verify that all pre-filled information is correct and fill in any missing information. All areas with a Red Asterisk (*) must be filled to submit the report.

General Facility Info

| Facility ID | 999001 |
| :--- | :--- |
| Reporting |  |
| Year | 2021 |

Year 2021
RECLAIM $\downarrow$

RECLAIM
Designation
R2N
Title V $\checkmark$
AB2588 $\checkmark$

- AB2588 1A

Phase

- AB2588

Reporting $\checkmark$
Year

| AER |
| :--- |
| CTR |

- MRR $\checkmark$ Mandatory Reporting Regulation
- MRR CARB 56543643 *
- Over 250
tons/yr
(pte)
- High

Priority

- Other $\quad \checkmark$ Other Facilities

County LOS ANGELES $\checkmark$
Air Basin SOUTH COAST $\checkmark$
CPWE Fee
Exemption $\square$ Facility located over 1 mile from any sensitive receptor is exempt from Cancer-Potency Weight


The "Other Information" section requires the user to enter additional information relative to the facility's operations. It also provides options for the user to further classify facility's activities as well as types of information or emissions to be tracked, including Greenhouse Gases (GHG). Note that fields with a red asterisk are mandatory fields.

## Other Information

Check here to include GHGCheck here if your facility produces electricityCheck here to report fugitive emissions subject to Rule 1173 and/or 1176.Check here for Small Business as defined in Rule 102.Check this box to report non-routine emissions such as Upsets, Break-down, Spills, Start-up, Shut-down, and Turn-around.

The "Contacts" section provides the user with spaces to enter contact information and the facility's operating schedule. Information entered on each Facility Information section must be saved (by clicking the "Save" button at the bottom left of the screen) before user can move on the next screen.

If the preparer and authorized Facility Representative are the same as the Main contact, then the boxes under Preparer and Authorized Facility Representative can be checked.

Contacts
Main Contact

| First Name | John |
| :--- | :--- |
| Last Name | Smith |
| Title | $\square$ |
| Telephone \# | * 123$) 456-1234$ * Ext. $\square$ |
| Fax \# | $\square$ |
| Email | js@aer.com |

Preparer
$\checkmark$ Same as Main Contact
Authorized Facility Representative
$\checkmark$ Same as Main Contact
Operating Schedule

| Average Hours Per Day | 8 |
| :--- | :--- |
| Average Days Per Week | 5 |
| Average Weeks Per Year | 52 |

Data Confidentiality

| Data is Confidential |
| :--- | :--- |
| Comments: |

## Save updated information

You must click the following button if changes in this form should be saved.

The following screens are designated for facilities that are subject to quadrennial reporting of toxic air contaminants (TACs) under California's AB2588 program. The information will help South Coast AQMD staff in estimating the facility's Priority Score.

Facility ID: 999125

1. Facility Information

| - General Info |
| :---: |
| - AB2588 Info |
| 2. Status Update |

2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission


Sensitive
$\square$ Report Sensitive

Fenceline

| ID | Description | UTM E | UTM N |
| :--- | :--- | :--- | :--- |
| Add... |  |  |  |

Buildings
Add building.

## Residential and Worker Receptors (mandatory):

Facilities preparing their quadrennial update (once every four years) for the AB2588 Program must provide the distance (in feet) from their facility to the nearest residential and worker receptors. Clicking on the "Edit" or "Add" button will pop up a data entry screen as shown in the following images.

- Identifier (mandatory): User defined IDs for the receptors, max four characters. For example, RR01, WR01, etc.
- Description (non-mandatory): User defined description of the receptor. The purpose of the description is to help user document facility's entered data.
- Distance (mandatory): Distances in feet from the primary emission source to the nearest residential and worker receptors.
- UTM E \& UTM N (non-mandatory): Universal Transverse Mercator (UTM) coordinates (East and North) if available and known. Units can be either meters or kilometers.

Receptor data sample:

| Edit Receptor |  |  |  |
| :---: | :---: | :---: | :---: |
| Identifier <br> Description | WR01 | * |  |
|  | Closest Work Receptor |  | ヘ |
| Distance <br> UTM E <br> UTM N | 30 | ft * |  |
|  | 312345 | m V |  |
|  | 3123456 | m V |  |
|  |  | OK | Cancel |

## Fence Line and Building Information (non-mandatory)

Although not required, users can enter their facility's property boundary (or fence-line) and building information for dispersion modeling.

- Building Identifier, Corner ID \& Descriptions, and Tier are to be defined by user.
- UTM E \& N coordinates must be entered in meters or kilometers.
- Elevation above sea level must be entered in feet or meters.

Fence-line corner data sample:


Building data sample:


Tier data sample:

| Edit Tier |  |  |
| :---: | :---: | :---: |
| Tier 1 | $\times$ |  |
| Height 15 |  | ft V |
|  | OK | Cancel |

## 2. Status Update

The next two screens are designated for facilities with status changes (if any). If the Fees Due in the Fee Summary is negative (due to paid Installments), an additional section for a Refund Request will automatically be displayed (not shown). Again, data must be saved before user can move on to the next screen.


## 3. Combustion Fuel Specification

Clicking on the first Bold blue bar (or "OPEN" or "Combustion Fuels" on the left navigation menu) will open a screen that displays the overview of the combustion fuels listed by the facility. To allow the user to build a list of fuels specific to a facility's operations click "Add New Fuel".

## AER Home Browse Facilities Access Facility Facility Home <br> 用 是 (7)

Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021
Facility ID: 999001

1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. 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 n |  |  |  |  |  |  |
| dew Fuel (i) |  |  |  |  |  |  |
| Action |  | Fuel Name | HHV | Default | Comment | Data Source Name |
| Open | Distillat <br> (Diesel) | Fuel Oil No. 2 | 138.00 | YES |  |  |
| Open | Natural |  | 1,028.00 | YES |  |  |
| Open | LPG |  | 92.00 | YES |  |  |
| Open | Gasoline |  | 125.00 | YES |  |  |
| Open | Digester | Gas (Biogas) | 841.00 | YES |  |  |
| Open | Landfill | Gas (Biogas) | 841.00 | YES |  |  |
| Open | Propane |  | 91.00 | YES |  |  |

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

Clicking on the "Add New Fuel" link will send user to the "Edit Combustion Fuel Data" screen. Click on the down arrow in the fuel field to see a list of all fuels that are applicable in the South Coast AQMD.


By selecting any fuel, the tool will display a default high heating value (HHV) for consideration.

```
AER Home Browse Facilities Access Facility Facility Home

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
HHV
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

Edit Combustion Fuel Data


\section*{AQMD web site Home I AER Web Site \| Submit question/comment I Report a Bug}

If non-default HHV is available, the user can uncheck the "use default" box and enter the actual value as shown in the next screen. Spaces are provided for user to elaborate on the source of non-default HHV. Upload supporting documentation for the new HHV value, if available.

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

Edit Combustion Fuel Data
\begin{tabular}{l|l|}
\hline Fuel & Natural Gas \\
\hline HHV & \(\square\) Use Default \\
\hline & \(1,065.00\) \\
\hline mmBtu/mmscf
\end{tabular}

Save or Cancel

Data must be saved before user can move on to the next section for classifying the emission sources (ES). This can be done by clicking on the "Next" button at the bottom of the screen or following the "Emission Sources (ES)" link on the left navigation menu. Prior to continuing to the next step of data entry, please ensure all combustion fuels used at the facility have been entered on this page. Fuels not included on this page will not be available for selection in other data entry pages.

\section*{}

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021
Form data is successfully saved.

\section*{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.


\section*{4. Emission Source (ES) Classification}

This page allows the classification of emission sources (ES). Click on the "Emissions Sources" link on the left navigation menu or the second blue bar in the Build Reporting Structure to go to the next screen for an overview of the emission sources at the facility based on South Coast AQMD's permit database. A list of devices is preloaded for each facility. If the list of devices is not available in the South Coast AQMD database, the user must add the devices manually by clicking the "Add New Emission Source" link. If the device to be entered has a valid South Coast AQMD permit, it should be referenced using the appropriate permit Application Number ( \(\mathrm{A} / \mathrm{N}\) ). User can also sort the Emission Sources table by clicking on the header of the column to be sorted. User can sort similar equipment by entering keywords in the "Search" box located above the ES list (e.g., to view a list of only the boilers, enter "boiler" in the search field and the list will display all equipment with the word "boiler" in the permit equipment description). Clicking the "Print Preview" button above the ES list will enable the user to print the entire ES list.

Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021
Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels 4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{Build Reporting Structure}

Emission Sources (ES) Classification

> Summary: \(\begin{aligned} & \text { This section contains facility permit profile. Please make sure that every } \\ & \text { device has a specified Emission Source (ES). New emission sources can also be } \\ & \text { added. }\end{aligned}\) Instruction: Add Devices (emissions sources) by clicking "Add New Emission Source". Edit devices by clicking "Open" under the Action Column. Add emission data by clicking "Reference" under the Process Reference column. Upload TANKS files here if applicable.

Storage Tank Emissions Batch File Import - Click here for more instructions.

Add New Emission Source

Displaying 7 emission sources.


The next few screens provide user with a closer look at different parts of this screen for data entry. The top part of this screen contains one useful tool: Storage tank emissions data import.

\section*{Tank Data Import}

Instructions for importing storage tank data files can be found in "Guidelines for Importing Storage Tank Data into the New AER System" posted in the "Guideline Documents" section of the main AER webpage.

\section*{Adding an Emission Source}

An Emission Source (ES) can be added for one of the following cases:
1. Equipment that does not require a written permit (Rule 219) or un-permitted operation,
2. An additional device connected within an existing permit listed in the facility permit profile, and
3. A permitted source that is missing from the facility permit profile.

The examples below illustrate how a facility can add an ES to the facility permit profile. All three cases begin by clicking the "Add New Emissions Source" button at the Emission Sources (ES) Classification screen, as shown in the image below. Clicking the "Add New Emissions Source" button will open the "Edit Emission Source" window.


\section*{Case 1: Adding equipment that does not require a written permit (Rule 219) or un-permitted operation}

In the "Edit Emission Source" window (below), enter the "ES Name" as the Rule 219 equipment name (e.g., Rule 219 - Ink jet printer). Identify the "Operating ES Status" by selecting from the drop-down list. Next, classify the equipment/operation by clicking on the orange button labeled "Determine Emission Source Group Type." Once you have classified the equipment/operation, click "Save and Proceed to Process Reporting."


\section*{Case 2: Adding a source connected with an existing permit listed in the facility permit profile (i.e., there is more than one device associated with an existing application number.)}

An example of when this would be applicable is if there is a permitted control device attached to basic equipment which is not listed in the permit profile. In this example, both devices may be associated with the same permit application number ( \(\mathrm{A} / \mathrm{N}\) ), but the emissions would be reported under the basic equipment. The "Operating ES Status" for the control equipment should be marked as "Not Generating Emissions." (Note: Some control devices, such as afterburners/oxidizers, will have reportable emissions from fuel combustion). To add the basic equipment in this example, first, in the "Edit Emission Source" window (below), indicate this is connected to a permitted device by clicking the checkbox for "Permitted." From the drop-down list of available permitted devices, select the appropriate application number ( \(\mathrm{A} / \mathrm{N}\) ) for that device. Identify the operating status, classify the equipment/operation, and then click "Save and Proceed to Process Reporting".


\section*{Case 3: Adding a permitted source that is missing from the facility permit profile (i.e., application number is not available in the drop-down list)}

In the "Edit Emission Source window (below), indicate (check the box for "Permitted") this is a permitted device; select "Add New" from the drop down list of application number ( \(\mathrm{A} / \mathrm{N}\) ) for that device; type in the application and permit number; select the operating status, and emission source group type; then, click "Save and Proceed to Process Reporting."


Defining Emission Source
Clicking on the "Open" link in the first column (labelled "Action") of the Emission Source list will open the "Edit Emission Source" screen for a specific device, as shown below. Note that each emission source is identified by applicable information including Application Number (A/N), Permit Number, Permit Device ID, and AER Device ID as shown in the screen below. The information including Equipment Description is uploaded from the South Coast AQMD permit database. Data entry by user is illustrated in the next several screens.
\begin{tabular}{lll} 
AER Home & Browse Facilities & Access Facility
\end{tabular} Facility Home

Select an operating status for an ES. The following table defines each Operating ES Status type.
\begin{tabular}{|l|l|}
\hline Operation ES Status & Definition \\
\hline Normal Operation & \begin{tabular}{l} 
Operated during the Reporting Period and operation resulted in \\
emissions
\end{tabular} \\
\hline Not Generating Emissions & Operated but was not generating emissions \\
\hline Not in Operation & Did not operate during the reporting period \\
\hline Shut-Down or Removed & \begin{tabular}{l} 
ES permanently shut down or removed prior to the reporting \\
period
\end{tabular} \\
\hline Duplicate & Duplicate device (ES) number \\
\hline
\end{tabular}

For control device that generates emissions (e.g., afterburners, etc.), select ES Status "Normal Operation" and report associated emissions. For control device that does not generate emissions (e.g., absorbers, baghouses, filters, etc.), select ES Status "Not Generating Emissions" (normal operation and not an emission source).

Note that by selecting the first choice, which is "normal operation", the tool offers a button to "Categorize Emission Source". Other selections will not enable this button. The "Comment" field is for user to elaborate the details relative to this device. The "ES Name" field should also be completed
to identify any specific information about the device that is not described in the Permit Equipment Description or Comment fields.


Clicking on the "Determine Emission Source Group Type" button (above) will bring up a screen with 7 category options for the device, as shown below.
```

Categorize Emission Source

| Permitted | A/N | Permit No | Permit Device ID | Permit Equipment Description | AER Device ID | ES Name |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |

1. External Combustion Equipment (e.g., boiler, dryer, oven, furnace, heater, afterburner, flare, kiln or incinerator) click here to select one the following Equipment:
2. Internal Combustion Equipment (e.g., internal combustion engine (excluding vehicles), turbine or micro turbine) click here to select one of the following Equipment:
3. Spray Coating/Spray Booth (e.g., coatings, solvents, adhesives, etc.) click here to select one of the following Equipment:
4. 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:
5. Liquid Storage Tank (e.g. Underground, Aboveground, Small Tanks, Dispensing Systems) click here to select one of the following Equipment:
6. Fugitive Components (Emission Leaks from Process Components per Rule 462, 1173 and 1176), click here to select all applicable Equipment:
7. Other Processes (does not fit in any of the groups mentioned above), click click here to mark "Other Process Equipment":
```

Under category \#1, FURNACE is displayed as an external combustion source, which is applicable for this device according to the permit description shown right above the categories list, as shown above. User then selects "Furnace \(<10 \mathrm{MMBTU} / \mathrm{HR}\) " because this emission source is rated at 6 MMBTU/HR and clicks on "Save" as shown in the image below.


In this example, in addition to burning fuel, this furnace also processes material. User then scrolls down to category \#7 and checks the "Other Process Equipment". User can change the selection or cancel the classification with "Cancel" button. Clicking on "Save" button will bring user back to "Edit Emission Source" screen.
```

Categorize Emission Source
|urnace <10 MMBTU/HR
\square Furnace 10-100 MMBTU/HR \square Charbroiler
\squareurnace >100 MMBTU/HR \square
A In addition to burning fuels, if this device processes other
materials, make sure box "Other Process Emissions" is
checked under Category }7\mathrm{ below.
2. Internal Combustion Equipment (e.g., internal combustion engine (excluding vehicles), turbine or micro turbine) click here to select one of the
following Equipment:
3. Spray Coating/Spray Booth (e.g., coatings, solvents, adhesives, etc.) click here to select one of the following Equipment:
4. 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:
5. Liquid Storage Tank (e.g. Underground, Aboveground, Small Tanks, Dispensing Systems) click here to select one of the following Equipment:
6. Fugitive Components (Emission Leaks from Process Components per Rule 462,1173 and 1176), click here to select all applicable Equipment:
7. Other Processes (does not fit in any of the groups mentioned above), click click here to mark "Other Process Equipment":

```

ther process equipment

\section*{Two Navigation Paths}

After defining an ES, the AER Reporting Tool presents two (2) paths (navigation options) for reporting emissions. User can access a Process by:

Path \#1: Define all ESs first, then go through worksheets and complete all Processes, or Path \#2: Go straight to next step to work on the process and report emissions.

PATH \#1 - Save and Return to List of Emission Sources: clicking on this button will save the data and return user to the emission source profile where user can continue with another device prior to starting Process reporting.
AER Home \(\quad\) Browse Facilities \(\quad\) Access Facility \(\quad\) Facility Home

Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

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


Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels 4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{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 "Open" under the Action Column. Add emission data by clicking "Reference" under the Process Reference column. Upload TANKS files here if applicable.

Storage Tank Emissions Batch File Import - Click here for more instructions.

\section*{Add New Emission Source}

Displaying 8 emission sources.


Search Emission Sources

Search:
Print Preview
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Emission Source (ES) & A/N & \[
\begin{aligned}
& \text { Permit } \\
& \text { NO }
\end{aligned}
\] & Permit Device ID & Permit Equipment Description & AER Device ID & \[
\begin{gathered}
\text { ES } \\
\text { Name }
\end{gathered}
\] & ES Group Name & Source Category & Has Emissions & Equipment & \[
\begin{gathered}
\text { ES } \\
\text { Status }
\end{gathered}
\] & Emissions \\
\hline Open & 111111 & & & & ES39 & & & & Y & & Work in progress & \\
\hline Open & 111111 & & & & ES38 & & & \begin{tabular}{l}
Other \\
Processes
\end{tabular} & Y & Other process equipment & Work in progress & Open \\
\hline Open & & & & & ES37 & & & \begin{tabular}{l}
Other \\
Processes
\end{tabular} & Y & Other process equipment & Work in progress & Open \\
\hline Open & & & & & ES36 & & & \begin{tabular}{l}
Other \\
Processes
\end{tabular} & Y & Other process equipment & Work in progress & Open \\
\hline Open & & & & & ES35 & & & External Combustion & Y & Boiler < 10 MMBTU/HR & Work in progress & Open \\
\hline Open & & & & & ES34 & & & Storage Tanks & Y & Storage tank and Dispensing & Work in progress & Open \\
\hline Open & & & & & ES33 & & & Internal Combustion & Y & Stationary I.C. Engines, 4 StrokeLean Burn & Work in progress & Open \\
\hline Open & & & & & ES32 & & & Internal Combustion & Y & \begin{tabular}{l}
Stationary I.C. \\
Engines, 4 \\
Stroke- \\
Lean Burn
\end{tabular} & Work in progress & Open \\
\hline \multicolumn{13}{|l|}{Showing 1 to 8 of 8 entries} \\
\hline
\end{tabular}

The tool provides an alternative look at the reporting structures that were built during the process emission source classification. The emission sources are grouped by the selected categories as highlighted in BLUE at both: Report Process/Emissions overview and left navigation menu. By clicking on "Report Process/Emissions" on this screen (or on the left navigation menu), user will be able to see a list of all worksheets that were assigned based on information provided on Emission Sources. As an alternative, user can access emission sources, assigned processes or add new processes from here for reporting emission by categories.


PATH \#2 - Save and Proceed to Process Reporting - Selecting this button will save the data and bring up a screen displaying two processes associated with this emission source for immediate reporting: in this sample case P1 for fuel combustion and P2 for processing of material. Clicking on P 1 or P2 processes will take user to the applicable worksheet screen(s) for entering emissions data.

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{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 prepopulated, verify that the information is correct


Optional: Save and Mark as Completed Click here to delete this emission source and associated data.


\section*{Process/Equipment Samples}

Users are recommended to closely follow the examples in the next two sessions that demonstrate the flexibilities of the AER Reporting Tool in reporting emissions from two processes: P1 for fuel burning process where default emission factors are available and P2 for processing of material throughput.

\section*{P1 - External Combustion Sample}

The tool presents several sections on this screen: Process details, Throughput, Criteria Emissions, Toxic (TAC/ODC) Emissions, and GHG Emissions (optional). Each section must be completed in sequential order and data must be saved before the start of the next section. User must select Fuel and throughput units before reporting emissions. Following the "Open" link will pop up the data entry screen for each section.

AER Home Browse Facilities Access Facility Facility Home

\section*{用 会 (1)}

Facility ID: 999001
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. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{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). You must select Fuel and throughput units before reporting emissions. Detail instructions are available by clicking on Help icon in the tool bar.

Step 1: Process
Optional: Mark as Completed
\begin{tabular}{|l|l|c|c|c|c|c|c|c|}
\hline & AER Device ID & Permit Device ID & A/N & Process ID & Rule \# & Equipment & Fuel & SCC \\
\hline Open & ES35 & & & P1 & 1146 & Boiler \(<10\) MMBTU/HR & LPG & \\
\hline
\end{tabular}

Step 2: Throughput
\begin{tabular}{|c|c|c|c|}
\hline & Annual Throughput & Criteria/Toxic Throughput & GHG Throughput \\
\hline Open & \(M\) gal & \(M\) gal & gal \\
\hline
\end{tabular}

Step 3: Criteria Emissions (lbs) Use Default Emission Factors if available.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & Pollutant & EF & Unit & EF Data Source & Emissions \\
\hline Open & SOx & \(4.60000000 \mathrm{e}+0\) & lbs / M gal & AQMD default & \\
\hline Open & CO & \(3.20000000 \mathrm{e}+0\) & lbs / M gal & AQMD default & \\
\hline Open & VOC & \(2.60000000 \mathrm{e}-1\) & lbs / M gal & AQMD default & \\
\hline Open & PM & \(2.80000000 \mathrm{e}-1\) & lbs / M gal & AQMD default & \\
\hline Open & NOx & \(1.00000000 \mathrm{e}+0\) & lbs / M gal & Source Test & \\
\hline
\end{tabular}

Step 4: Toxic (TAC/ODC) Emissions (lbs)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & TAC/ODC Group & CAS \# & EF & Unit & EF Data Source & Emissions \\
\hline Open & Benzene & 71432 & \(0.00000000 \mathrm{e}+0\) & lbs / M gal & Source Test & \\
\hline Open & Formaldehyde & 50000 & \(1.50833333 \mathrm{e}-3\) & lbs / M gal & AQMD default & \\
\hline Open & Toluene & 108883 & 3.24735294e-3 & lbs / M gal & AQMD default & \\
\hline Open & Xylenes & 1330207 & \(2.41333333 \mathrm{e}-3\) & lbs / M gal & AQMD default & \\
\hline Open & PAHs [PAH, POM] & 1151 & \(8.87254902 \mathrm{e}-6\) & lbs / M gal & AQMD default & \\
\hline Open & PAHs [PAH, POM] & 91203 & \(2.66176471 \mathrm{e}-5\) & lbs / M gal & AQMD default & \\
\hline Open & Acetaldehyde & 75070 & \(3.81519608 \mathrm{e}-4\) & lbs / M gal & AQMD default & \\
\hline Open & Ethyl benzene & 100414 & 8.42892157e-4 & lbs / M gal & AQMD default & \\
\hline Open & Hexane & 110543 & \(5.58970588 \mathrm{e}-4\) & lbs / M gal & AQMD default & \\
\hline Open & Acrolein & 107028 & \(2.39558824 \mathrm{e}-4\) & lbs / M gal & AQMD default & \\
\hline Open & Ammonia & 7664417 & \(3.00000000 \mathrm{e}-1\) & lbs / M gal & AQMD default & \\
\hline \multicolumn{7}{|l|}{Add New} \\
\hline
\end{tabular}

Process Pop-Up window- User enters additional information such as process name and comment. Natural gas is selected as the primary fuel.


Process Pop-Up window - User selects Rule 1117 for a glass furnace.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline AER Home & Browse Facilities & Access Facility & Facility Home & 置 & 昌 & (1) & (2) \\
\hline
\end{tabular}

Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021
Facility ID: 999001
External Combustion
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)

Please provide specific information for every process associated with your external combustion Emission Sources including usage, emission factor and control efficiency (if any). You must select Fuel and throughput units before reporting emissions. Detail instructions are available by clicking on Help icon in the tool bar.
5. Report Process/Emissions

Combustion External Combus Use of organics Spray Coating/Sp
Booth Other Use of 0
Storage Furitive Other Processes Process Upset 6. Perform Data Vali 7. Review Summarie 8. Print Facility Repo 9. Report Submissio


Process Pop-Up window - User can add more rules that are applicable to the operation by clicking on the link.


Clicking on "Save" button will bring user back to worksheet for entering throughput.
At the Throughput Pop-Up window, user enters throughput data and selects the proper unit. User can also provide comment on the throughput data. Again, clicking on "Save" button will bring user back to worksheet.


User selects "Use Default Emission Factors" for the tool to populate available default emission factors and emission calculations for all: criteria, toxics (from fuel combustion), and GHG (optional).

Facility ID: 999001
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. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{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). You must select Fuel and throughput units before reporting emissions. Detail instructions are available by clicking on Help icon in the tool bar.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{6}{|l|}{Step 1: Process} & \multicolumn{3}{|l|}{Optional: Mark as Completed} \\
\hline & AER Device ID & Permit Device ID & A/N & Process ID & Rule \# & Equipment & Fuel & SCC \\
\hline Open & ES35 & & & P1 & 1146 & Boiler <10 MMBTU/HR & LPG & \\
\hline
\end{tabular}

Step 2: Throughput
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Annual Throughput} & \multicolumn{2}{|l|}{Criteria/Toxic Throughput} & \multicolumn{2}{|l|}{GHG Throughput} \\
\hline Open & \multicolumn{2}{|c|}{M gal} & \multicolumn{2}{|l|}{M gal} & \multicolumn{2}{|l|}{gal} \\
\hline \multicolumn{4}{|l|}{Step 3: Criteria Emissions (lbs)} & \multicolumn{3}{|l|}{Use Default Emission Factors if available.} \\
\hline & Pollutant & EF & Unit & \multicolumn{2}{|l|}{EF Data Source} & Emissions \\
\hline Open & SOx & \(4.60000000 \mathrm{e}+0\) & lbs / M gal & \multicolumn{3}{|l|}{AQMD default} \\
\hline Open & CO & \(3.20000000 \mathrm{e}+0\) & lbs / M gal & \multicolumn{3}{|l|}{AQMD default} \\
\hline Open & VOC & \(2.60000000 \mathrm{e}-1\) & lbs / M gal & \multicolumn{3}{|l|}{AQMD default} \\
\hline Open & PM & \(2.80000000 \mathrm{e}-1\) & lbs / M gal & \multicolumn{3}{|l|}{AQMD default} \\
\hline Open & NOx & \(1.00000000 \mathrm{e}+0\) & lbs / M gal & \multicolumn{3}{|l|}{Source Test} \\
\hline
\end{tabular}

Emission Factor Pop-Up window - User can open a pop-up window of an emission factor (NOx in the sample below) to uncheck the "Use default" and enter a specific emission factor. User can also enter comments and must cite the source of emission factor. This can also be done for toxic air contaminants as well as GHG. NOTE that the RECLAIM box is checked for NOx emissions since this facility is classified as RECLAIM.


Again, clicking on "Save" button will bring user back to the worksheet. At this point, user has an option to lock up and mark the data as completed for this process by clicking on the GRAY button on the top right corner of the screen.

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions

\section*{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. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{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). You must select Fuel and throughput units before reporting emissions. Detail instructions are available by clicking on Help icon in the tool bar.


Step 2: Throughput
\begin{tabular}{|c|c|c|c|}
\hline & Annual Throughput & Criteria/Toxic Throughput & GHG Throughput \\
\hline Open & 22.65465000 mmscf & 22.65465000 mmscf & \(22,654,650.00 \mathrm{scf}\) \\
\hline
\end{tabular}

Step 3: Criteria Emissions (lbs) Use Default Emission Factors if available.
\begin{tabular}{|l|c|c|c|c|c|c|}
\hline & Pollutant & EF & \multicolumn{1}{c|}{ Unit } & EF Data Source & Emissions \\
\hline Open & VOC & \(5.50000000 \mathrm{e}+0\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(1.24600575 \mathrm{e}+2\) \\
\hline Open & NOx & \(1.00000000 \mathrm{e}+2\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(2.26546500 \mathrm{e}+3\) \\
\hline \hline Open & SOx & \(6.00000000 \mathrm{e}-1\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(1.35927900 \mathrm{e}+1\) \\
\hline Open & CO & \(8.40000000 \mathrm{e}+1\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(1.90299060 \mathrm{e}+3\) \\
\hline Open & PM & \(7.60000000 \mathrm{e}+0\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(1.72175340 \mathrm{e}+2\) \\
\hline
\end{tabular}

The button will then turn ORANGE and indicate "Return to Work in Progress," as shown in the next image. Note that the links on the left side of each section are now labeled "View" and are no longer "Open" for editing. User can unlock and return to update the data by clicking on the ORANGE button labeled "Return to Work in Progress."

\section*{Facility ID: 999001}
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions

\section*{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. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{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). You must select Fuel and throughput units before reporting emissions. Detail instructions are available by clicking on Help icon in the tool bar.


Step 2: Throughput
\begin{tabular}{|c|c|c|c|}
\hline & Annual Throughput & Criteria/Toxic Throughput & GHG Throughput \\
\hline View & 22.65465000 mmscf & 22.65465000 mmscf & \(22,654,650.00\) scf \\
\hline
\end{tabular}

Step 3: Criteria Emissions (lbs)
\begin{tabular}{|l|c|c|c|c|c|}
\hline & Pollutant & EF & \multicolumn{7}{|c|}{ Unit } & EF Data Source & Emissions \\
\hline\(\underline{\text { View }}\) & VOC & \(5.50000000 \mathrm{e}+0\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(1.24600575 \mathrm{e}+2\) \\
\hline\(\underline{\text { View }}\) & NOx & \(1.00000000 \mathrm{e}+2\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(2.26546500 \mathrm{e}+3\) \\
\hline\(\underline{\text { View }}\) & SOx & \(6.00000000 \mathrm{e}-1\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(1.35927900 \mathrm{e}+1\) \\
\hline\(\underline{\text { View }}\) & CO & \(8.40000000 \mathrm{e}+1\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(1.90299060 \mathrm{e}+3\) \\
\hline\(\underline{\text { View }}\) & PM & \(7.60000000 \mathrm{e}+0\) & \(\mathrm{lbs} / \mathrm{mmscf}\) & AQMD default & \(1.72175340 \mathrm{e}+2\) \\
\hline
\end{tabular}

The other ORANGE buttons on the top and bottom of the screen, "Back to Emission Source Process Reference" (above) will bring user back to the pop-up "Process Reference" screen for continuing with other processes.


\section*{P2 - Other Process Emissions Sample}

Clicking on P2 will open 'Other Processes" worksheet for the other process similar to the previous illustration.

Process Pop-Up window - After providing name and comments on the process, user selects the appropriate items from the drop-down lists to further classify the process. User can list more than one rule that are applicable to this process. Clicking on "Save" button will bring user back to worksheet.


Throughput Pop-Up window - User enters throughput data, selects proper unit, and comments on the throughput data. Again, clicking on "Save" button will bring user back to worksheet.

Facility ID: 999001
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



Step 2: Throughput


\section*{Other Process Emissions Process List Overview}

Emission Factor Pop-Up window - user adds a pollutant, enters the specific emission factor with optional comments, and cites the source of emission factor. User can indicate the overall control efficiency and whether the entered value is an after-control factor. By indicating that an emission factor is a "controlled factor," the user is stating that the efficiency of the control equipment is already incorporated in the emission factor. If using a "controlled factor," click the "Controlled EF value" checkbox and enter the control efficiency value (in percent [\%]) in the "Overall Control Efficiency" field.


Clicking on "Save" button will bring user back to the worksheet (below) where user can work on toxic air contaminants and GHG emissions by clicking the "Add New" button next to the applicable section.
\begin{tabular}{l} 
Facility ID: 999001 \\
1. Facility Information \\
2. Status Update \\
3. Combustion Fuels \\
4. Emission Sources (ES) \\
\begin{tabular}{|l} 
5. Report Process/Emissions \\
\hline Combustion \\
\(\quad\) External Combustion \\
\(\quad\) Internal Combustion \\
Use of organics \\
\(\quad\) Spray Coating/Spray \\
Booth \\
\(\quad\) Other Use of Organics \\
Storage Tanks \\
Fugitive Components \\
\hline Other Processes \\
\hline
\end{tabular} \\
\hline
\end{tabular}
Step 1: Process


Click here to delete this process.
Step 2: Throughput


Step 3: Criteria Emissions (lbs)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & Pollutant & EF & Unit & Controlled EF & EF Data Source & Overall CE & Emissions \\
\hline Open & PM & \(1.25000000 \mathrm{e}+0\) & lbs / tons & No & AP-42 & & \(1.25000000 \mathrm{e}+4\) \\
\hline \multicolumn{2}{|c|}{ Add New } & & & & & \\
\hline
\end{tabular}

Step 4: Toxic (TAC/ODC) Emissions (Ibs)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline TAC/ODC Group & CAS \# & EF & Unit & Controlled EF & EF Data Source & Overall CE & Emissions \\
\hline Add New & & & & & & & \\
\hline
\end{tabular}

Once finished, the following screen shows two processes with one marked as completed. User can add another process here, if needed, by using the Orange "Add Process" button. Clicking on "OK" button will bring user back to Emission Source overview screen.


\section*{Reporting Non-Routine Operations}

Emissions from non-routine operations such as "Upsets, Break-down, Spills, Start-up, Shut-down and Process Turn-around" can be tracked and reported by checking the appropriate box under "Other Information" in the "Facility Information" section, as shown in the image below.

Facility ID: 999001
1. Facility Information
- General Info
- AB2588 Info
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

Other Information
\begin{tabular}{l} 
NAICS \\
Proposed NAICS for Next \\
Year \\
SIC \\
Proposed SIC for Next Year \\
Brief Description of \\
Operation \\
Industry Type \\
Facility Operating Status \\
\(\square\) Check here to include GHG \\
\(\square\) Check here if your facility produces electricity \\
\(\square\) Check here to report fugitive emissions subject to Rule \(\underline{\text { 1173 }}\) and/or \(\underline{\text { 1176 }}\). \\
\(\square\) Check here for Small Business as defined in Rule 102. \\
\hline\(\square\) Check this box to report non-routine emissions such as Upsets, Break-down, Spills, Start-up, Shut-down, \\
and Turn-around.
\end{tabular}

The tool will create a checkbox on "Edit Emission Source" screen for each emission source to place a check mark if facility tracked non-routine operations for that emission source, as shown in the image below.

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission


If facility placed a checkmark to indicate that facility tracked the non-routine emissions for a particular source, the "Add Process Upset" command will appear next to "Add Process" orange button on the "Process References" screen, as shown in the image below.


Clicking on the "Add Process Upset" command next to orange button will open the following "Process Upsets, Shutdown/ Startup/ Turnaround and Spill" screen with an orange "Add New" button. The tool will create "Upset, Shutdown/ Startup/ Turnaround and Spill Event List Overview" section, below the Toxic emissions row, where user can add as many such events as needed using the "Add New" button, as shown in the image below.

"Add New" Pop-up window - Clicking on the orange "Add New" button on the screen above will pop up the following screen where user selects emission source and process for the non-routine operations. Process upset command in left menu is highlighted and facility has selected process P2 for reporting non-routine emissions.
```

AER Home Browse Facilities Access Facility Facility Home

```

Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021


\section*{AQMD web site Home I AER Web Site I Submit question/comment | Report a Bug}

Clicking on the selected process will save the selections as shown in the worksheet below.


Clicking on the orange "Save" button shown above will open the following screen for the facility to enter upset emissions associated with the selected process. Clicking on the "cancel" button will revert to the previous screen to highlight another Process, if selected process was wrong.


Process Upsets, Shutdown/ Startup/ Turnaround and Spill


Step 2: Throughput


Step 3: Criteria Emissions (lbs)
\begin{tabular}{|l|l|l|l|l|l|}
\hline Pollutant & EF & Unit & Controlled EF & EF Data Source & Overall CE
\end{tabular} Emissions

Step 4: Toxic (TAC/ODC) Emissions (lbs)
\begin{tabular}{|l|l|l|l|l|l|l|l|}
\hline TAC/ODC Group & CAS \# & EF & Unit & Controlled EF & EF Data Source & Overall CE & Emissions \\
\hline Add New & & & & & & & \\
\hline
\end{tabular}

Edit Event - Process Upset Pop-up window - Clicking on the "View" link of the "Step 1: Process" section in the image above, brings user to the pop-up screen shown below, where the selected Process information is displayed for information or read-only purposes. Facility cannot amend this screen. A Click on "OK" will take user back to the above screen.

\section*{Step 1: Process}



Edit Throughput Information - Process Upset Pop-Up window - Clicking on the "Open" link of the "Step 2: Throughput" section brings user to the pop-up screen below, where User provides more details for the non-routine events (one event at a time) including Operating Type Code, Event ID, Throughput, unit, event date, duration and comment. If the upset event is associated with a Variance, enter the Variance Case number.


Open Criteria Emission Information Pop-Up window - User must add a pollutant by clicking the "Add New" link of the "Step 3: Criteria Emissions" section. Next, enter the specific emission factor with comments, and cite the source of emission factor by selecting from the drop-down list, as shown below. User can indicate the overall control efficiency and whether the entered value is an aftercontrol factor. By indicating that an emission factor is a "controlled factor," the user is stating that the efficiency of the control equipment is already incorporated in the emission factor. If using a "controlled factor," enter the control efficiency value (in percent [\%]) in the "Overall Control Efficiency" field.


Save the selections as shown in the worksheet below. User can also report toxics emissions for the event or continue adding a new Upset/ Shutdown/ Startup/ Turnaround/ Spill event.

Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021
Facility ID: 999001
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

\section*{Process Upset}
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{Process Upsets, Shutdown/ Startup/ Turnaround and Spill}

This section contains emission data relative to the non-routine events such as equipment break-down, process upset, spill, start-up, shut-down, and process turn-around. Properly recording the event details would help in reporting emissions. Detailed instructions are available by clicking on Help icon in the tool bar.

Step 1: Process
Optional: Mark as Completed
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & AER Device ID & Permit Device ID & A/N & Process ID & Process Type & Rule \# & SCC \\
\hline View & ES32 & & & P1 & Internal Combustion & 1470 & \\
\hline
\end{tabular}

Step 2: Throughput
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Event & Start Date & End Date & Throughput & Duration \\
\hline Open & 11 & \(5 / 5 / 2021\) & \(5 / 5 / 2021\) & 10.00000000 gal & 1 hours \\
\hline
\end{tabular}

Step 3: Criteria Emissions (lbs)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & Pollutant & EF & Unit & Controlled EF & EF Data Source & Overall CE & Emissions \\
\hline Open & VOC & \(2.00000000 \mathrm{e}+0\) & \(\mathrm{lbs} /\) gal & No & Engineering Evaluation & & \(2.00000000 \mathrm{e}+1\) \\
\hline \hline Add New & & & & & \\
\hline
\end{tabular}

Step 4: Toxic (TAC/ODC) Emissions (lbs)
\begin{tabular}{|l|l|l|l|l|l|l|l|}
\hline TAC/ODC Group & CAS \# EF & Unit & Controlled EF & EF Data Source & Overall CE & Emissions \\
\hline Add New & & & & & & & \\
\hline
\end{tabular}

\section*{5. Report Process Emissions}

These worksheet pages arrange devices/process by the emission source category assigned on the Edit Emission Source page. These pages allow the user to compare the Device IDs, permitting IDs, Process IDs, status of each process (work in process or complete), fuel data, and emissions for each emission source category. New processes can be added using the Add New Process to ES button. Click on the blue Open and AER Device ID links allow the user to quickly assess the Process page, and Edit Emissions Source page, respectively.

\section*{6. Perform Data Validation}

User can validate the data any time by clicking on the "Data Validation" link on the left navigation menu, as shown below. The validation notes are categorized into tables ;
- Notes in the "Errors" table indicate an error that must be fixed.
- Notes in the "Device Specific Warnings" table indicate a warning for further review of data but will not prevent the user from submitting the report.
- Clicking on the hyperlinks in the second column (column labeled "ES/Process") will take the user to the data entry page containing the errors or anomalies.
\begin{tabular}{|c|c|c|c|}
\hline \multirow{26}{*}{\begin{tabular}{l}
Facility ID: 999001 \\
1. Facility Information \\
2. Status Update \\
3. Combustion Fuels \\
4. Emission Sources (ES) \\
5. Report Process/Emissions \\
6. Perform Data Validation \\
7. Review Summaries \\
8. Print Facility Report \\
9. Report Submission
\end{tabular}} & \multicolumn{3}{|l|}{Work In Progress • Facility ID: 999001 - SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021} \\
\hline & \multicolumn{3}{|l|}{Data Validation} \\
\hline & \multicolumn{3}{|l|}{\begin{tabular}{l}
Summary: This section presents errors and warnings found in the report. \\
Instruction: Correct all errors (red) before continuing to report submission. Review warnings to ensure emissions are correctly and accurately reported. All errors must be corrected before submission. If any of the warnings do not apply, please disregard them as the report can be submitted with warnings.
\end{tabular}} \\
\hline & & & Errors (i) \\
\hline & Rule & ES/Process & Description \\
\hline & V01 & Facility Info & Error: This field is mandatory, but is missing. (Facility Operating Status) \\
\hline & v01 & ES32 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & v01 & ES34 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & v02 & ES36 & Error: No emissions were reported for this Emission Source, report the emissions OR if this source does not have emissions: correct Emission Source Status Code. \\
\hline & v01 & ES36 P1 & Error: This field is mandatory, but is missing. (Rule) \\
\hline & V01 & ES36 P1 & Error: This field is mandatory, but is missing. (Throughput Type) \\
\hline & V01 & ES36 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & v01 & ES36 P1 & Error: This field is mandatory, but is missing. (Throughput Unit) \\
\hline & V25 & ES36 P1 & Error: At least one pollutant has to be reported. \\
\hline & V01 & ES37 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & v01 & ES37 P1 & Error: This field is mandatory, but is missing. (NOx Reclaim Comment) \\
\hline & v01 & ES39 & Error: This field is mandatory, but is missing. (Equipment) \\
\hline & vo2 & ES39 & Error: No emissions were reported for this Emission Source, report the emissions OR if this source does not have emissions: correct Emission Source Status Code. \\
\hline & v01 & ES40 P1 & Error: This field is mandatory, but is missing. (Throughput Type) \\
\hline & v01 & ES40 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & v01 & ES40 P1 & Error: This field is mandatory, but is missing. (Throughput Unit) \\
\hline & & & Device Specific Warnings (1) \\
\hline & Rule & ES/Process & Description \\
\hline & V12 & ES32 P1 & Warning: Toxic emissions for VOC toxics are reported but no VOC reported on criteria pollutant for the same emission source. If toxic Type is TAC and VOC (see Help) it has to be reported as Toxic and as criteria pollutant VOC. \\
\hline & V13 & ES32 P1 & Warning: Toxic emissions for PM toxics are reported but no PM reported on criteria pollutant for the same emission source. If toxic Type is TAC and PM (see Help) it has to be reported as Toxic and as criteria pollutant PM. \\
\hline & V12 & ES34 P1 & Warning: Toxic emissions for VOC toxics are reported but no VOC reported on criteria pollutant for the same emission source. If toxic Type is TAC and VOC (see Help) it has to be reported as Toxic and as criteria pollutant VOC. \\
\hline
\end{tabular}

\section*{7. Review Summaries}

All three types of emissions (Criteria, Toxics/TAC \& ODC) and applicable fees are summarized in this section as shown in the main bars located at the center of the screen and the navigation menu on the left side of the screen, as shown below. Clicking on one of the summary links will open a new summary page showing the total emissions for an individual pollutant type (i.e., Criteria Pollutants, Toxic Pollutants, or ODC) or the total fees due.


\section*{Criteria Pollutants Summary}

Emissions from both permitted and non-permitted sources are summarized in the following screen by major categories. Total criteria pollutant emissions are listed by equipment category and expressed in tons.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{5}{*}{\begin{tabular}{l}
Facility ID: 999001 \\
1. Facility Information \\
2. Status Update \\
3. Combustion Fuels \\
4. Emission Sources (ES) \\
5. Report Process/Emissions \\
6. Perform Data Validation \\
7. Review Summaries
\end{tabular}} & \multicolumn{9}{|l|}{Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021} \\
\hline & \multicolumn{9}{|l|}{Criteria Pollutants Summary} \\
\hline & \multicolumn{9}{|l|}{Permitted Emissions Summary} \\
\hline & & \begin{tabular}{l}
voc \\
(tons)
\end{tabular} & \[
\begin{aligned}
& \text { SPOG } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{aligned}
& \text { NOx } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{aligned}
& \text { NOX } \\
& \text { RECLAIM } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{gathered}
\text { SOx } \\
\text { (tons) }
\end{gathered}
\] & \[
\begin{aligned}
& \text { SOX } \\
& \text { RECLAIM } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{aligned}
& \text { co } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{gathered}
\text { PM } \\
\text { (tons) }
\end{gathered}
\] \\
\hline & External Combustion & & & & & & & & \\
\hline Criteria Pollutants & Internal Combustion & & & & & & & & \\
\hline \multirow[t]{18}{*}{\begin{tabular}{l}
Toxic (TAC/ODC) Pollutants Fees \\
8. Print Facility Report \\
9. Report Submission
\end{tabular}} & Spray Coating/ Spray Booth & & & & & & & & \\
\hline & Other Use of Organics & & & & & & & & \\
\hline & Storage Tanks & & & & & & & & \\
\hline & Fugitive Components & & & & & & & & \\
\hline & Other Process Emissions & & & & & & & & 6.25 \\
\hline & \begin{tabular}{l}
Shutdown/ Startup/ \\
Turnaround and Upsets
\end{tabular} & & & & & & & & \\
\hline & Total Permitted Emissions & 0.00 & 0.00 & 0.00 & 0.00 & 0.00 & 0.00 & 0.00 & 6.25 \\
\hline & \multicolumn{9}{|l|}{Non-Permitted Emissions Summary} \\
\hline & & \[
\begin{aligned}
& \text { Voc } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{aligned}
& \text { SPOG } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{aligned}
& \text { NOx } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{aligned}
& \text { NOX } \\
& \text { RECLAIM } \\
& \text { (tons) }
\end{aligned}
\] & \[
\begin{gathered}
\text { sox } \\
\text { (tons) }
\end{gathered}
\] & \[
\begin{gathered}
\text { SOX } \\
\text { RECLAIM } \\
\text { (tons) }
\end{gathered}
\] & \[
\begin{gathered}
\text { co } \\
\text { (tons) }
\end{gathered}
\] & \[
\begin{gathered}
\text { PM } \\
\text { (tons) }
\end{gathered}
\] \\
\hline & External Combustion & 0.06 & & & 1.13 & 0.01 & & 0.95 & 0.09 \\
\hline & Internal Combustion & 3.76 & & & \(\underline{130.28}\) & \(\underline{0.02}\) & & \(\underline{10.11}\) & 0.31 \\
\hline & Spray Coating/ Spray Booth & & & & & & & & \\
\hline & Other Use of Organics & & & & & & & & \\
\hline & Storage Tanks & & & & & & & & \\
\hline & Fugitive Components & & & & & & & & \\
\hline & Other Process Emissions & & & & & & & & \\
\hline & Shutdown/ Startup/ Turnaround and Upsets & 0.01 & & & & & & & \\
\hline & Total Non-Permitted Emissions & 3.83 & 0.00 & 0.00 & 131.41 & 0.03 & 0.00 & 11.06 & 0.40 \\
\hline \multicolumn{10}{|c|}{AQMD web site Home I AER Web Site I Submit question/comment I Report a Bug} \\
\hline
\end{tabular}

Note that NOx and SOx emissions are posted separately for sources/pollutants that are subject to RECLAIM requirements. All emission values are hyper-linked to detailed information relative to how data were entered, and emissions were calculated. If user clicks on an emission value in the table, the tool will display the processes that contributed to the final emissions value. By clicking on the link to a specific process, the user can verify for last time, the accuracy of the entered information.

\section*{AER Toxic Fee Summary}

There are five different toxic fees. The total toxic fee breakdown is shown in the image below:


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Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries Criteria Pollutants Toxic (TAC/ODC) Pollutants Fees
8. Print Facility Report
9. Report Submission

TAC/ODC Pollutants Summary

\section*{AER Toxic Fees Breakdown:}
\begin{tabular}{|l|l|l|}
\hline 1. & \begin{tabular}{l} 
Base Toxic Fee: \\
See Table 1
\end{tabular} & \(\$ 78.03\) - Show Facility Flat Fee Info \\
\hline 2. & \begin{tabular}{l} 
CPWE Emission Fees: \\
See Table 2
\end{tabular} & \(\$ 860.00\) \\
\hline 3. & \begin{tabular}{l} 
Ammonia \& Ozone Depleting Compounds (ODC) Fees: \\
See Table 3
\end{tabular} & \(\$ 53.44\) \\
\hline 4. & \begin{tabular}{l} 
Per Device Fees: \\
See Table 4
\end{tabular} & \(\$ 341.89\) - Show Devices Fee Summary \\
\hline & \multicolumn{1}{|c|}{\begin{tabular}{l} 
Total TAC Fees:
\end{tabular}} \\
\hline As part of AB2688 Reporting please see your Long List TAC Summary Table 5 \\
\hline
\end{tabular}

Table 1 - Facility Base Toxic Fee Show Table

Table 2 - Cancer-Potency Weighted Emission Fees Show Table

Table 3 - Ammonia \& Ozone Depleting Compounds (ODC) Fees Show Table

Table 4 - Flat Rate Device Fees Show Table

Table 5 - Long List TAC Summary (AB2588/CTR Reporting) Show Table

\section*{i. Facility Flat Fees}

According to RULE 301 (Amended July 1, 2021), the Base Toxics Fee is \(\$ 78.03\) for the year 2021. This fee is subject to change every year.

Facility ID: 999001
Facility Dashboard Reported Summaries
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries

Criteria Pollutants
Toxic (TAC/ODC) Pollutants
Fees
8. Print Facility Report
9. Report Submission

Table 1 - Facility Base Toxic Fee Hide Table
Facility Base Toxic Fee of \(\mathbf{\$ 7 8 . 0 3}\) is applied when:
- Facility is not exempt from TAC Fees
- Any of the TAC Pollutants aggregated Annual Emissions exceed Annual Threshold

Please see the table below for the list of all TAC Pollutant that exceed Pollutants Annual Threshold:
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { TAC } \\
& \text { Group }
\end{aligned}
\] & TAC / ODC & CAS \# & Annual Theshold & Annual Emissions (lbs) & \begin{tabular}{l}
Exceed \\
Threshold
\end{tabular} & Devices / Processes \\
\hline 2 & Benzene & 71432 & 2 & 29.20279846 & True & \(\underline{6}\) \\
\hline 4 & Butadiene [1,3] & 106990 & 0.1 & 17.89051316 & True & \(\underline{3}\) \\
\hline 6 & Carbon tetrachloride & 56235 & 1 & 2.34345384 & True & 1 \\
\hline 13 & Chromium, hexavalent (and compounds) & 18540299 & 0.0001 & 0.00038703 & True & \(\underline{2}\) \\
\hline 72 & Diesel exhaust particulates & 9901 & 0.1 & 129.65572 & True & \(\underline{2}\) \\
\hline 9 & Ethylene dibromide \{1,2-Dibromoethane\} & 106934 & 0.5 & 2.82874673 & True & 1 \\
\hline 12 & Formaldehyde & 50000 & 5 & 3,378.9801084 & True & \(\underline{5}\) \\
\hline 19 & Acenaphthylene [PAH, POM] & 208968 & 0.2 & 0.35311443 & True & 1 \\
\hline 19 & Fluorene [PAH, POM] & 86737 & 0.2 & 0.36205404 & True & 1 \\
\hline 19 & 2-Methyl naphthalene [PAH, POM] & 91576 & 0.2 & 2.11996369 & True & 1 \\
\hline 19 & Naphthalene [PAH, POM] & 91203 & 0.2 & 4.84555485 & True & \(\underline{6}\) \\
\hline 19 & Phenanthrene [PAH, POM] & 85018 & 0.2 & 0.66408501 & True & 1 \\
\hline 21 & Vinyl chloride & 75014 & 0.5 & 0.95142948 & True & 1 \\
\hline
\end{tabular}

\section*{ii. CPWE Emission Fees}

The Cancer-Potency Weighted Emission (CPWE) summary worksheet is shown in the image below. Total toxic emissions are listed by individual contaminant and expressed in pounds (lbs). The Cancer-Potency Weighted Emission Fee is changed to \(\$ 10.00\) per pound.
There are 66 toxic air contaminants (TACs) in TABLE IV of Rule 301 (Amended July 1, 2021) that are subject to emissions fees as shown in the screen below. Clicking on the "here" link will display detailed information of the Rule 301 (Amended July 1, 2021).

Facility ID: 999001
Facility Dashboard
Reported Summaries
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
|7. Review Summaries
Criteria Pollutants Toxic (TAC/ODC) Pollutants Fees
8. Print Facility Report
9. Report Submission

Table 2 - Cancer-Potency Weighted Emission Fees Hide Table
Cancer-Potency Weighted Emission (CPWE) Fees are calculated using formula:
CPWE Fee \(=\) TAC \(\times\) CPF \(\times\) MPF \(\times \$ 10.00\)
- TAC = Emissions (pounds) of a Table IV toxic air contaminant from here
- CPF = Cancer Potency Factor for the reported toxic air contaminant
- MPF = Multi-Pathway Factor for the reported toxic air contaminant
- CPWE Fee (per pound) = Cancer-Potency Weighted Emission Fee is \(\$ 10.00\) per lb
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline TAC Group & TAC / ODC & CAS \# & \begin{tabular}{l}
Annual \\
Theshold
\end{tabular} & Annual Emissions (lbs) & \multicolumn{2}{|l|}{Emissions Subject to CPWE Fee (lbs)} & \begin{tabular}{l}
Cancer \\
Potency Factor
\end{tabular} & \begin{tabular}{l}
Multi- \\
Pathway \\
Factor
\end{tabular} & Emission (lbs) \\
\hline 14 & Arsenic and Compounds (inorganic) & 7440382 & 0.01 & 0.00619251 & & 0 & 12 & 9.71 & 0 \\
\hline 1 & Asbestos & 1332214 & 0.0001 & & & & & & \\
\hline 2 & Benzene & 71432 & 2 & 29.20279846 & 28.48175785 & 0 & 0.1 & 1 & 30 \\
\hline 3 & Beryllium & 7440417 & 0.001 & & & & & & \\
\hline 4 & Butadiene [1,3] & 106990 & 0.1 & 17.89051316 & 17.0491056 & 0 & 0.6 & 1 & 10 O \\
\hline 5 & Cadmium & 7440439 & 0.01 & 0.00580548 & 0 & 0 & 15 & 1 & 0 \\
\hline 6 & Carbon tetrachloride & 56235 & 1 & 2.34345384 & 2.34345384 & & 0.15 & 1 & 0 \\
\hline 13 & Chromium, hexavalent (and compounds) & 18540299 & 0.0001 & 0.00038703 & 0 & 0 & 510 & 1.6 & 0 \\
\hline
\end{tabular}

The table scrolls left and right. Clicking on the blue number of devices/processes under the Devices/Processes column (furthest column to the right) for an individual TAC will display detailed information for each device/process that contributes to the total amount of TAC reported for the facility.


Diesel particulate matter (DPM) emissions are a surrogate for individual TACs emissions reported for diesel-fueled internal combustion engines. Fees are not generated for the non-DPM TAC emissions from diesel fueled internal combustion engines. The last column "Accounted in DPM" notifies the user which TAC emissions are included under the surrogate DPM emissions (see image above).

\section*{Ammonia \& Ozone Depleting Compounds (ODC) Fees}

Ammonia \&ODC emissions are calculated and summarized as below. Clicking on the blue number of devices/processes under the Devices/Processes column (furthest column to the right) for ammonia or an individual ODC will display detailed information for each device/process that contributes to the total amount of ammonia or an individual TAC emissions reported for the facility.

Table 3 - Ammonia \& Ozone Depleting Compounds (ODC) Fees Hide Table
Please see the South Coast AQMD Rule 301 for details on how this fees are calculated.
\begin{tabular}{|l|l|l|l|l|l|l|l|l|}
\hline \begin{tabular}{c} 
TAC \\
Group
\end{tabular} & \multicolumn{1}{|c|}{ TAC / ODC } & CAS \# & \multicolumn{1}{|c|}{\begin{tabular}{c} 
Annual \\
Theshold
\end{tabular}} & \begin{tabular}{c} 
Annual \\
Emissions (lbs)
\end{tabular} & \begin{tabular}{c} 
Emissions \\
Subject to \\
Fee (lbs)
\end{tabular} & \begin{tabular}{c} 
Emmision \\
Fee \\
(lb/year)
\end{tabular} & \begin{tabular}{c} 
Fee \\
Due
\end{tabular} & \begin{tabular}{c} 
Devices / \\
Processes
\end{tabular} \\
\hline 32 & Ammonia & 7664417 & 200.000000000 & \(2,139.848708\) & 1,941 & 50.04 & \(\$ 77.64\) & 5 \\
\hline 22 & \begin{tabular}{l} 
Fluorocarbons \\
(chlorinated)
\end{tabular} & 1104 & 1.0000000000 & & & 50.45 & & \\
\hline 22 & \begin{tabular}{l} 
Trichlorotrifluoroethane \\
\{CFC-113\}
\end{tabular} & 76131 & 1.0000000000 & & & 50.45 & & \\
\hline 22 & \begin{tabular}{l} 
Dichlorofluoromethane \\
\{Freon 12\}
\end{tabular} & 75718 & 1.0000000000 & & & 50.45 & & \\
\hline 22 & \begin{tabular}{l} 
Trichlorofluoromethane \\
\{Freon 11\}
\end{tabular} & 75694 & 1.0000000000 & & & \(\$ 0.45\) & & \\
\hline 23 & \begin{tabular}{l} 
Methyl chloroform \(\{1,1,1-\) \\
Trichloroethane\}
\end{tabular} & 71556 & 1.0000000000 & & & 50.06 & & \\
\hline
\end{tabular}

\section*{iii. Flat rate Device Fees}

The flat rate device fee calculations are calculated and summarized as below. Clicking the "ES Code" under the column AER ID will display the detailed information of the equipment. Clicking on the blue number of TACs under the TACs column (furthest column to the right) will display detailed information for each TAC that contributes to the total amount of TAC emissions reported for that device. The device fee for emissions reported for calendar year 2021 is \(\$ 341.89\).

\section*{Table 4 - Flat Rate Device Fees Hide Table}

Each AER Device with emissions exceeding annual threshold for any TAC emmitant will be changed \(\$ 341.89\).
\begin{tabular}{|c|c|c|c|}
\hline AER ID & Equipment Code/Description & Fees Applied & TACs \\
\hline ES32 & 11c. Stationary I.C. Engines, 4 Stroke-Lean Burn & True & \(\underline{22}\) \\
\hline ES33 & 11c. Stationary I.C. Engines, 4 Stroke-Lean Burn & True & 34 \\
\hline ES39 & 11c. Stationary I.C. Engines, 4 Stroke-Lean Burn & True & \(\underline{22}\) \\
\hline ES34 & 22. Storage tank and Dispensing & False & \(\underline{3}\) \\
\hline ES35 & 1a. Boiler <10 MMBTU/HR & False & 10 \\
\hline ES40 & 5b. Heater 10-100 MMBTU/HR & False & 10 \\
\hline \multicolumn{2}{|r|}{Number of TAC Devices:} & \multicolumn{2}{|c|}{6} \\
\hline \multicolumn{2}{|r|}{Number of Devices Subject to Fees:} & \multicolumn{2}{|c|}{3} \\
\hline \multicolumn{2}{|r|}{Number of Devices Triggered Fees:} & \multicolumn{2}{|c|}{\$1,025.67} \\
\hline
\end{tabular}

\section*{iv. The Long List TAC Summary (AB2588 and AB617 Reporting)}

The long list TAC Summary emissions calculations are estimated and summarized as below. Clicking the "ES Code" under the column AER ID will display the detailed information of the equipment. Clicking on the blue number of TACs under the TACs column (furthest column to the right) will display detailed information for each TAC that contributes to the total amount of TAC emissions reported for that device.

Table 5 - Long List TAC Summary (AB2588 Reporting) Hide Table
Information about this list and why users are seeing this.
\begin{tabular}{|l|l|l|l|l|}
\hline TAC Group & \multicolumn{1}{|c|}{ TAC / ODC } & CAS \# & Annual Emissions (lbs) & Devices / Processes \\
\hline 29 & Acetaldehyde & 75070 & 81.43000 & \\
\hline 30 & Acrolein & 107028 & 6.09000 & \(\underline{3}\) \\
\hline 31 & Acrylonitrile & 107131 & & \(\underline{3}\) \\
\hline 33 & Carbonyl sulfide & 463581 & & \\
\hline 34 & Chlorine & 7782505 & & \\
\hline 35 & Chloroform & 67663 & & \\
\hline 36 & Copper & 7440508 & 0.41000 & \\
\hline 37 & Crystalline silica & 7631869 & & \\
\hline 38 & Di(2-ethylhexyl) phthalate \{DEHP\} & 117817 & & \\
\hline 27 & 1,2-Dichloropropane \{Propylene dichloride \} & 78875 & & \\
\hline 28 & 1,3-Dichloropropene & 542756 & & \\
\hline 39 & Dimethyl phthalate & 131113 & & \\
\hline 40 & Ethyl benzene & 100414 & 7.99000 & \\
\hline & & & & \\
\hline
\end{tabular}

\section*{Greenhouse Gas}

As an option, greenhouse gas emissions are calculated and summarized as shown below. Total GHG emissions are listed by equipment category and expressed in tons.

\begin{tabular}{|c|c|c|c|c|c|}
\hline & \[
\begin{gathered}
\mathrm{CO2} \\
\text { (excluding biogenic) } \\
\text { [metric ton] }
\end{gathered}
\] & [metric ton] & \[
\begin{gathered}
\mathrm{N} 2 \mathrm{O} \\
\text { [metric ton] }
\end{gathered}
\] & \begin{tabular}{l}
CO2e \\
(excluding biogenic) [metric ton]
\end{tabular} & CO2b (biogenic) [metric ton] \\
\hline External Combustion & 5,000.0 & 100.00 & 0.200 & 7,162.0 & \\
\hline Internal Combustion & & & & & \\
\hline Spray Coating/ Spray Booth & & & & & \\
\hline Other Use of Organics & & & & & \\
\hline Storage Tanks & & & & & \\
\hline Fugitive Components & & & & & \\
\hline Other Process Emissions & & & & & \\
\hline Shutdown/Startup/Turnaround and Upsets & & & & & \\
\hline Total Emissions & 5,000.0 & 100.00 & 0.200 & 7,162.0 & 0.0 \\
\hline
\end{tabular}

\section*{Total Emissions and Fees}

\section*{Prior to Reporting Year 2019}

Total criteria pollutant emissions are summed up and rounded to the whole ton for fee calculation purposes. Fees for TAC/ODC are included in row \#2. User is reminded to enter installments paid for both criteria and TAC/ODC (if any) if not already populated by the reporting tool. Reporting the postmark date is required for the late filers in order to calculate the late submittal surcharge (if applicable). After entering the required information, click the "Save" button to complete the data entry.

\section*{Reporting Year 2019 and After}

Total criteria pollutant emissions are summed up and rounded to the whole ton for fee calculation purposes. Sum and breakdown of TAC/ODC/Ammonia fees are included in row \#2. The installment paid for both criteria and TAC/ODC/Ammonia (if any) by the facility from South Coast AQMD accounting database is also shown here. Reporting the postmark date is required for the late filers in order to calculate the late submittal surcharge (if applicable). After entering the required information, click the "Save" button to complete the data entry.

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries

Criteria Pollutants
Toxic (TAC/ODC) Pollutants

\section*{Fees}
8. Print Facility Report
9. Report Submission

\section*{Total Emissions and Fees}
\begin{tabular}{|l|r|r|r|r|r|r|}
\hline & \begin{tabular}{c} 
Total Permitted \\
Emissions (tons)
\end{tabular} & \begin{tabular}{c} 
Total Non- \\
Permitted \\
Emissions (tons)
\end{tabular} & \begin{tabular}{c} 
Total RECLAIM \\
Emissions (tons)
\end{tabular} & \begin{tabular}{c} 
Total \\
Emissions \\
(tons)
\end{tabular} & \begin{tabular}{c} 
Total Emissions \\
Subject to Fees \\
(tons)
\end{tabular} & \begin{tabular}{c} 
Emission Fees \\
Due
\end{tabular} \\
\hline \begin{tabular}{l} 
Organic \\
Gasses
\end{tabular} & 0.00 & 3.83 & 0.00 & 3.83 & 0 & \(\$ 0.00\) \\
\hline \begin{tabular}{l} 
Specific \\
Organics
\end{tabular} & 0.00 & 0.00 & 0.00 & 0.00 & 0 & \(\$ 0.00\) \\
\hline \begin{tabular}{l} 
Nitrogen \\
Oxides
\end{tabular} & 0.00 & 0.00 & 131.41 & 131.41 & 131 & \(\$ 89,106.14\) \\
\hline Sulfur Oxides & 0.00 & 0.03 & 0.00 & 0.03 & 0 & \(\$ 0.00\) \\
\hline \begin{tabular}{l} 
Carbon \\
Monoxide
\end{tabular} & 0.00 & 11.06 & 0.00 & 11.06 & 0 & \(\$ 0.00\) \\
\hline \begin{tabular}{l} 
Particulate \\
Matter
\end{tabular} & 6.25 & 0.40 & 0.00 & 6.65 & & \(\mathbf{7}\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline 1. & \multicolumn{2}{|l|}{Total emission fees for all criteria pollutants} & \$ 91,085.26 \\
\hline \multirow[t]{7}{*}{2.} & \multicolumn{2}{|l|}{Toxic air contaminants/ ozone depleter fees} & \$ 1,333.36 \\
\hline & \multicolumn{2}{|l|}{TAC Fees Breakdown} & \\
\hline & Facility Flat Fee: & \$ 78.03 & \\
\hline & CPWE Emission Fees: & \$ 860.00 & \\
\hline & Ammonia \& Depleting Compounds (ODC) Fees: & \$ 53.44 & \\
\hline & Per Device Fees (total devices with fees 1): & \$ 341.89 & \\
\hline & Total Facility TAC Fees : & \$ 1,333.36 & \\
\hline 3. & \multicolumn{2}{|l|}{Total fees due} & \$ 92,418.62 \\
\hline 4. & \multicolumn{2}{|l|}{Installments Paid For 2021 (if any): All Criteria Pollutants} & \$ 10,000.00 \\
\hline 5. & \multicolumn{2}{|l|}{Installments Paid For 2021 (if any): Toxic Air Contaminants/Ozone Depleters} & \$ 1,000.00 \\
\hline 6. & \multicolumn{2}{|l|}{Balance Due (Line 3 - Line 4 - Line 5)} & \$ 81,418.62 \\
\hline \multirow[t]{3}{*}{7.} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{Late Payment Surcharge (enter the postmark date to calculate the late payment surcharge)}} & Report Deadline 3/17/2022 \\
\hline & & & Postmark Date (MM/DD/YYYY) \\
\hline & & & Late Payment Surcharge \(\$ 0.00\) \\
\hline 8. & \multicolumn{2}{|l|}{\begin{tabular}{l}
Amount Due (Line 6 + Line 7) \\
Please write AER Facility ID\#(s) and 2021 AER on the check
\end{tabular}} & \$ 81,418.62 \\
\hline \multicolumn{3}{|c|}{Save} & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \multirow{26}{*}{\begin{tabular}{l}
Facility ID: 999001 \\
1. Facility Information \\
2. Status Update \\
3. Combustion Fuels \\
4. Emission Sources (ES) \\
5. Report Process/Emissions \\
6. Perform Data Validation \\
7. Review Summaries \\
8. Print Facility Report \\
9. Report Submission
\end{tabular}} & \multicolumn{3}{|l|}{Work In Progress • Facility ID: 999001 • SOUTH COAST AIR QUALITY MGT DIST(SCAQMD) • Reporting period: 2021} \\
\hline & \multicolumn{3}{|l|}{Data Validation} \\
\hline & \multicolumn{3}{|l|}{\begin{tabular}{l}
Summary: This section presents errors and warnings found in the report. \\
Instruction: Correct all errors (red) before continuing to report submission. Review warnings to ensure emissions are correctly and accurately reported. All errors must be corrected before submission. If any of the warnings do not apply, please disregard them as the report can be submitted with warnings.
\end{tabular}} \\
\hline & & & Errors (i) \\
\hline & Rule & ES/Process & Description \\
\hline & V01 & Facility Info & Error: This field is mandatory, but is missing. (Facility Operating Status) \\
\hline & V01 & ES32 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & V01 & ES34 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & V02 & ES36 & Error: No emissions were reported for this Emission Source, report the emissions OR if this source does not have emissions: correct Emission Source Status Code. \\
\hline & V01 & ES36 P1 & Error: This field is mandatory, but is missing. (Rule) \\
\hline & V01 & ES36 P1 & Error: This field is mandatory, but is missing. (Throughput Type) \\
\hline & V01 & ES36 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & V01 & ES36 P1 & Error: This field is mandatory, but is missing. (Throughput Unit) \\
\hline & V25 & ES36 P1 & Error: At least one pollutant has to be reported. \\
\hline & V01 & ES37 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & V01 & ES37 P1 & Error: This field is mandatory, but is missing. (NOx Reclaim Comment) \\
\hline & V01 & ES39 & Error: This field is mandatory, but is missing. (Equipment) \\
\hline & V02 & ES39 & Error: No emissions were reported for this Emission Source, report the emissions OR if this source does not have emissions: correct Emission Source Status Code. \\
\hline & V01 & ES40 P1 & Error: This field is mandatory, but is missing. (Throughput Type) \\
\hline & V01 & ES40 P1 & Error: This field is mandatory, but is missing. (Throughput Value) \\
\hline & V01 & ES40 P1 & Error: This field is mandatory, but is missing. (Throughput Unit) \\
\hline & & & Device Specific Warnings \\
\hline & Rule & ES/Process & Description \\
\hline & V12 & ES32 P1 & Warning: Toxic emissions for VOC toxics are reported but no VOC reported on criteria pollutant for the same emission source. If toxic Type is TAC and VOC (see Help) it has to be reported as Toxic and as criteria pollutant VOC. \\
\hline & V13 & ES32 P1 & Warning: Toxic emissions for PM toxics are reported but no PM reported on criteria pollutant for the same emission source. If toxic Type is TAC and PM (see Help) it has to be reported as Toxic and as criteria pollutant PM. \\
\hline & V12 & ES34 P1 & Warning: Toxic emissions for VOC toxics are reported but no VOC reported on criteria pollutant for the same emission source. If toxic Type is TAC and VOC (see Help) it has to be reported as Toxic and as criteria pollutant VOC. \\
\hline
\end{tabular}

\section*{7. Print Facility Report}

The print facility report page allows users to print either the full AER PDF Report or sections of that report. To print the full AER PDF Report, the user should check the Print Full AER PDF Report (all listed below) check box. This will select all the individual sections. To print only sections of the AER, the user should check boxes of the desired sections. At the end of either process, the user should click on the Print Selected Pages button. A PDF version of the AER report or selected pages will appear in a pop-up box.

At the bottom of this page is the Print Excel Report section. The Download Report button generates a report that includes a record for all pollutants (criteria pollutants, TAC, ammonia, and ODC emissions) emitted by each process.

The Download TAC Report button download generates a report that includes:
- A facility information tab (FacilityInfo);
- A TAC Emissions tab, which includes a record for all TAC emissions, ammonia emissions, and ODC emissions emitted by each process;
- Summary tabs for each TAC, ammonia, and ODC emissions fee (CPWE Emission Fee, Ammonia and ODC Fees, and TAC Per Device Fees); and
- A summary tab of all TAC, ammonia, and ODC fees (TAC FEES).

\section*{8. Report Submission}

Click on the "Report Submission" link on the left Navigation menu for data submission. The screen (below) will appear flagging any errors and warnings with suggestions for user to take necessary actions in three separate items: Data Validation for Errors and Warnings, AER Emission Summary Review. Click on hyperlinks to correct any errors (Red) and warnings (Orange), when needed. Note that the non-corrected warnings in "Orange" will not stop report submission. However, verify that the reported data with that warning is correctly entered.
\begin{tabular}{llllll} 
AER Home & Browse Facilities & Access Facility & Facility Home & 目 (2)
\end{tabular}

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{Report Submission Process}

Summary: This section, the facility is able to pay their associated emissions fees, if any, and electronically submit their AER report.
Instruction: Electronically sign and submit the report. Pay any associated fees by following the instructions under Payment Option 1 or Payment Option 2.

Here are steps required to officially Sign and Submit your facility AER Report to South Coast AQMD.
1. Please Review All Validation Warnings and Errors:

Errors: 16
This report did not pass the validation. Please revisit Data Validation for listing of errors in red. Fix all errors before submitting the report.

Warnings: 5
The quality of data in this report encountered the warnings in orange. You may continue to submit this report but please make sure the data are correctly entered. View Data Validation for a review.
2. Please review the your AER Emissions Summary before generating your report.
3. Generate your AER Submission Report.
4. Review and accept the correctness of your AER Submission Report.
. Pay any applicable Fees.
. Accept and Acknowledge the accuracy and validity of your AER Report Submission.

\section*{AER Report Status}
\begin{tabular}{ll} 
Report Status: & Work In Progress \\
Changed Date/Time: & 11/23/2021 2:15:30 PM \\
Changed By: & Huy Le (hle1@aqmd.gov)
\end{tabular}

Show More AER Report History

\footnotetext{
AQMD web site Home | AER Web Site | Submit question/comment | Report a Bug
}

Facility ID: 999001
Facility Dashboard
Reported Summaries
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{Data Validation}

\begin{tabular}{|l|l|l|}
\hline & & \multicolumn{1}{c|}{ General Report Warnings } \\
\hline Rule & ES/Process & \\
\hline V34 & & \begin{tabular}{l} 
Fuel: Distillate Fuel Oil No. 2 (Diesel) - Ammonia emission factor of \(2.9 \mathrm{lbs} / 1000\) gallons \\
automatically populated by the reporting tool corresponds to equipment with Selective Non \\
Catalytic Reduction (SNCR), for equipment with Selective Catalytic Reduction(SCR) substitute listed \\
value by 1.4 lbs / 1000 gallons, and for equipment without SNCR or SCR by \(0.8 \mathrm{lbs} / 1000\) gallons.
\end{tabular} \\
\hline V34 & & \begin{tabular}{l} 
Fuel: Natural Gas - Ammonia emission factor of 18 lbs/mmscf automatically populated by the \\
reporting tool corresponds to equipment with Selective Non Catalytic Reduction (SNCR), for \\
equipment with Selective Catalytic Reduction (SCR) substitute listed value by \(9.1 \mathrm{lbs} /\) mmscf, and \\
for equipment without SNCR or SCR by 3.2 lbs/mmscf.
\end{tabular} \\
\hline V102 & & Please make sure you are not reporting methylene chloride emissions as part of VOC emissions. \\
\hline
\end{tabular}

After correcting all errors in red, the "Report Submission" button is enabled as shown in screen below for user to submit the data electronically. The number of errors will be zero and the number of warnings will be displaced in orange font. Also, there will be an additional warning in orange if the report was submitted after the facility report deadline. Click the link "AER Emissions Summary" to review the AER Emissions Summary before generating the report.

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{Report Submission Process}

Summary: This section, the facility is able to pay their associated emissions fees, if any, and electronically submit their AER report.
Instruction: Electronically sign and submit the report. Pay any associated fees by following the instructions under Payment Option 1 or Payment Option 2.

Here are steps required to officially Sign and Submit your facility AER Report to South Coast AQMD.
1. Please Review All Validation Warnings and Errors:

Errors: 0
- Warnings: 0
2. Please review the your AER Emissions Summary before generating your report.
3. Generate your AER Submission Report.
4. Review and accept the correctness of your AER Submission Report.
5. Pay any applicable Fees.
6. Accept and Acknowledge the accuracy and validity of your AER Report Submission.
```

Generate AER Submission Report

```

\section*{AER Report Status}
\begin{tabular}{ll|}
\hline Report Status: & Work In Progress \\
Changed Date/Time: & 11/23/2021 2:15:30 PM \\
Changed By: & Huy Le (hle1@aqmd.gov) \\
\hline
\end{tabular}

Show More AER Report History

Once user clicks on the "Generate AER Submission Report" button, the tool will ask user to confirm the action as shown below.

Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

Report Submission Process
Summary: This section, the facility is able to pay their associated emissions fees, if any, and electronically submit their AER report.
Instruction: Electronically sign and submit the report. Pay any associated fees by following the instructions under Payment Option 1 or Payment Option 2.

Here are steps required to officially Sign and Submit your facility AER Report to South Coast AQMD.
1. Please Review All Validation Warnings and Errors:


Generate AER Submission Report

AFR Rannit Static
With final confirmation of "Yes", the tool will give user three generated AER Report Files to review. The user must check the box under each file, confirming that the reports have been reviewed and verified correct. If not, the user can click the link "Cancel Generated Report \& Modify Report Data" to modify the report data.

\section*{Facility ID: 999125}
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

STEP: 1. Review Generated Report and Accept Its Accuracy

\section*{AER Report Files}

D20211216-T092751-ReportID[3629]-AER Report - FacilityID[999125] ReportingYear[2019].pdf
\(\square\) I have read and accepted this document.*
D20211216-T092758-ReportID[3629]-AER Report - FacilityID[999125] ReportingYear[2019].xlsx \(\square\) I have read and accepted this document.*

D20211216-T092804-ReportID[3629]-AER TAC Report - FacilityID[999125] ReportingYear[2019].xlsx
\(\square\) I have read and accepted this document.*
- The reports in the links above are not considered FINAL until the "Certify \& Submit AER Report" button in Step 2 below is clicked, and the submittal verification page appears.

The user must read South Coast AQMD Certification Statement, then click the box next to "I acknowledge that I have read the South Coast AQMD Certification statement." The user is also required to click on the box next to "I agree on the responsibility for this AER Report Submission in accordance with Certification Statement." Once all the boxes are checked, the user will be able to click the orange button "Certify \& Submit AER Report" to submit the report.

Facility ID: 999125
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

STEP: 2. Officially Certify \& Submit AER Report to South Coast AQMD
Here are the steps to Certify and Submit AER Report.

\section*{South Coast AQMD Certification Statement}

I acknowledge that by certifying and submitting this agreement, I have read, understand, and accept the terms and conditions of the electronic certification agreement.

I acknowledge that the South Coast \(A Q M D\) reserves the right to audit the reported emissions. All records and calculations used in completing this summary are recommended to be retained for a minimum of five years.

I certify that I have been authorized by an officer of the permit holder as an individual who has knowledge and responsibility for emissions data to submit and certify the accuracy of the data presented in the emissions report on behalf of the permit holder, based on best available knowledge.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this emissions report, and believe that the information is true, accurate and complete.

I understand and agree that both I and the facility I am representing will be held as legally bound, obligated, or responsible by my electronic certification,I acknowledge that I have read the South Coast AQMD Certification Statement.*I agree on the responsibility for this AER Report Submission in accordance with Certification Statement.*
- The AER report is not considered FINAL until the "Certify \& Submit AER Report" button below is clicked, and the submittal verification page appears.

The user must enter their AER webtool password and the Facility PIN before clicking the orange button "Certify \& Submit AER Report".

Facility ID: 999125
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{Contact Information}
\begin{tabular}{|llll|}
\hline Name: & John Smith & Phone: & (123) 456 -1234 \\
Title: & js@aer.com & Fax: & \\
E-mail: & & & \\
\hline
\end{tabular} \begin{tabular}{lll|}
\hline Preparer Information & & (123) 456-1234 \\
\hline Name: & John Smith & Phone: \\
Title: & js@aer.com & \\
E-mail: & & \\
\hline
\end{tabular}
\begin{tabular}{|lll|}
\hline Authorized Person Information & \\
\begin{tabular}{|llll|}
\hline Name: & John Smith & Phone: & (123) 456-1234 \\
Title: & & Fax: & \\
E-mail: & js@aer.com & & \\
\hline
\end{tabular} & & \\
\hline
\end{tabular}

\section*{Identity Verification}

Please Re-Enter Your Password:
Please Re-Enter Facility Pin: \(\square\) \begin{tabular}{l}
\(*\) \\
\(\cdot\) \\
\hline \(\mathbf{0}\)
\end{tabular}

Once user clicks on this button, the tool will ask user one more time to confirm the action as shown.
Facility ID: 999001
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission


\section*{AER Report Status}

The user can also click the link "Show More AER Report History" to show the report status as shown in the following image.

\section*{AER Report Status}
```

Report Status: Ready For Review
Generation Date/Time:
Generated By:

```
```

12/16/2021 4:08:26 PM

```
12/16/2021 4:08:26 PM
test 2014(testaer2014@gmail.com)
```

test 2014(testaer2014@gmail.com)

```

\section*{Show More AER Report History}

After confirming that the user wants to certify and submit the AER report, the AER webtool will display to user the AER emission fee as shown in the following images. There are two payment options; Payment Option 1 is pay via South Coast AQMD Online Payment Portal, and Payment Option 2 is pay via check. The user can choose either one to pay the fee. At the end of the process, the user will be provided an option to print or generate a pdf version of the receipt.

Facility Dashboard Reported Summaries
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

Facility Dashboard
Reported Summaries
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{AER emissions fee of \(\$ 6,728.17\) is due.}

Please note that payment needs to be received by South Coast AQMD before the report deadline \(3 / 17 / 2022\), or you will be subject to late fees.

\section*{Important:}
- Please note that online payments made to South Coast AQMD may take up to 24 hours to show up in our system. If you have already made a payment please wait and check your Report Payment Status in 24 hours.
- Please note that your AER Fees Payment has to be processed or postmarked before the deadline or you will be subject to late fees.

\section*{Payment Option 1 - Pay via South Coast AQMD Online Payment Portal}
```

Go to South Coast AQMDD Payment Portal

```

\section*{Payment Option 2 - Pay via Check}

\section*{Print AER Payment Voucher and instructions}
2. The AER Payment Voucher and check are first received and processed by Bank of America for check deposits, return receipts for certified mails will be stamped by Bank of America rather than AQMD. Please mail the required AER Payment Voucher and check to the following address:
```

South Coast Air Quality Management District
Annual Emission Reporting Program
File No. }5449
Los Angeles, CA 90074-4493

```

NOTE: For any overnight delivery, example FedEx, please use the following address:

Bank of America Lockbox Services
Lockbox LAC-054493
2706 Media Center Drive
Los Angeles, CA. 90065

If you wish to use a messenger (or hand deliver), the package should be delivered to the cashier's booth at AQMD Headquarters at the address listed below in Diamond Bar on or before 5:00 p.m. \(3 / 17 / 2022\) Please note that AQMD is closed on Mondays.

South Coast Air Quality Management District ATTN: Cash Management
Annual Emission Reporting Program
21865 Copley Drive
Diamond Bar, CA 91765-4178
A Please Note: To avoid late payment surcharges, all mails must be postmarked by the Post Office on or before 3/17/2022.

\section*{Option 1:}

If Option 1 is selected, the user will be granted access to the South Coast AQMD Online Payment system. The user will be required to enter credit card information and accept the conditions for online payment.

\section*{SCAQMD Online Payment}

\section*{AQumD}

\section*{Online Invoice Payment >>> Payment Method}

Please select the payment method you would like to use and click "Next" to proceed with Checkout.
Please note: For credit card payments, a convenience fee will be added at the time of payment.
The convenience fee is not retained by SCAQMD.

Select a Payment Method:
- Credit card (convenience fee will be charged)

O-Check / Checking or savings account (no charge)

\section*{Next >>>}

5 AOMD

\section*{SCAQMD Online Payment}

\section*{Online Invoice Payment}
>>>
Confirmation
Please review the list of Invoice(s) you have selected for payment.
Click the "Checkout" button below to pay
\begin{tabular}{llr} 
Invoice Number & Invoice Type & Invoice Balance \\
\hline 2220616 & Emissions & \(\$ 1597.07\) \\
\hline & Invoice(s) Total: & \(\$ 1597.07\) \\
\cline { 2 - 3 } & Payment Method: & Credit Card
\end{tabular}

\section*{SCAQMD Online Payment}

\section*{Payment Details}

Complete the information below and click "Continue."


\section*{SCAQMD Online Payment}

\section*{Terms of Payment}

\section*{TERMS OF PAYMENT}
please read these teams of payment carefully.
IT CONTAINS VERY IMPORTANT INFORMATION ABOUT YOUR RIGHTS AND QBLIGATIONS, AS WELL AS LIMITATIONS ANO EXCLUSIONS THAT MAY ADPLY TO YOL.
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I I agree that I have read fully and accept the above terms and conditions

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\section*{SCAQMD Online Payment}

ACMD

\section*{Payment Confirmation}

Click "Process Payment" to proceed.

Facility ID : 999001
Facility Name: \(\quad A B C\)
\begin{tabular}{llr} 
Invoice Amount & Invoice Type & Amount Due \\
\hline 2220616 & Emissions & \(\$ 1,597.07\) \\
\hline & & Payment Amount: \\
\hline
\end{tabular}

\section*{Card Information}

Card Number *5454
Expiration Date
\(1 / 21\)
Payment Type


Billing Information
\begin{tabular}{ll} 
*Name & Jane Doe \\
Country & US \\
*Address & 123 Main \\
*City & Anywhere \\
*State & CA \\
*Zip & 90000 \\
Phone & \\
*Email & jd@ABC.com
\end{tabular}


\section*{Option 2:}

If Option 2 is chosen, by clicking on the link "Print AER Payment Voucher and instructions," the AER Reporting Tool will generate a pdf version of the AER Payment Voucher. The user will need to include the AER Payment Voucher with the check to one of the three addresses provided on the "AER Submittal Confirmation" page included with the pdf version of the AER Payment Voucher. To avoid late payment surcharges, the AER Payment Voucher and check for the 2020 emissions reporting year must be postmarked by the Post Office on or before March 17, 2021.


\section*{Exporting Data to Excel}

Once any amount of emission data is entered, users can access export to Excel. Click on "Excel Reports" as seen in the following screenshot. The following screen pops up.

Facility ID: 999001
Facility Dashboard Reported Summaries
1. Facility Information
2. Status Update
3. Combustion Fuels
4. Emission Sources (ES)
5. Report Process/Emissions
6. Perform Data Validation
7. Review Summaries
8. Print Facility Report
9. Report Submission

\section*{Facility Report}
```

Summary: This section provides pdf/excel prints of their AER report.
Instruction: South Coast AQMD advise facility to download a copy of their AER for their
own records.

```
\(\square\) Print Full AER PDF Report (all listed below)
Print Individual PDF Sections
General
\(\square\) Signature Sheet
\(\square\) Status Update
\(\square\) Confirmation

\section*{Worksheets Overview}
\(\square\) External Combustion Process List Overview
\(\square\) Internal Combustion Process List Overview
\(\square\) Storage Tanks Process List Overview
\(\square\) other Processes Process List Overview
\(\square\) Upsets, Shutdown/ Startup/ Turnaround and Spill Process List Overview

\section*{Summaries}
\(\square\) Criteria Pollutants Summaries
\(\square\) Toxic Pollutants Summaries
\(\square\) Total Emissions and Fees

\section*{Print Selected Pages}

Print Excel Reports

\section*{Download Report}

Download TAC Report

Download Report: After clicking on this button, an Excel file will be created. The Excel report contains all the text and numerical data the user has entered on the data entry screens and is a convenient recordkeeping alternative to printing copies of the individual data entry screens.

Save these Excel files on your computer's hard drive by clicking the "Save As" option in Excel and select a location to store the files on your hard drive.

\section*{FACTORS}

\section*{Common Conversion Factors}
```

    1 therm \(=100,000 \mathrm{Btu}\)
    1 therm \(=0.0000973 \mathrm{mmscf}\) based on default HHV for natural gas ( \(1,028 \mathrm{Btu} / \mathrm{scf}\) ).
    1 pound \(=454\) grams
    1 gallon \(=3.785\) liters
    \(1 \mathrm{lb} / \mathrm{gal}=120\) grams/liter
    VOC (lbs/gal) = Weight Fraction (lbs/lb) x Density (lbs/ gal)
    Density \(=\) Specific Gravity x \(8.34 \mathrm{lbs} / \mathrm{gal}\)
    1 boiler MW (megawatt) \(=10.5 \times 10^{6} \mathrm{Btu} / \mathrm{hr}=8 \times 10^{3}\) steam \(/ \mathrm{hr}\)
    1 boiler HP (horsepower) \(=45 \times 10^{3} \mathrm{Btu} / \mathrm{hr}\)
    \({ }^{\circ} \mathrm{R}=\left({ }^{\circ} \mathrm{F}+460\right)\)
    1 gallon \(=7.48\) cubic foot
    \(1 \mathrm{Mgal}=1,000\) gallon
    1 MMscf \(=1,000,000 \mathrm{scf}\)
    1 atmosphere \(=14.7 \mathrm{psi}=760 \mathrm{~mm} \mathrm{Hg}=29.92 \mathrm{in} . \mathrm{Hg}=1,013.2 \mathrm{mbars}\)
    ```

\section*{REFERENCES}

\section*{List of TACs and ODCs for Form TACS}

Table 1 provides the complete list of toxic air contaminants and ozone depleters from Form TACS including TAC Code, TAC group name, CAS\#, and the name of each specific substance classified under each TAC group. The last column "Type of TAC/ODC" identifies each of the listed components as VOC or PM.

Table 1 lists the family name and the individual species within the family for the following toxic air contaminants (TACs):
- Chlorinated dioxins and dibenzofurans (TAC code \#7)
- Fluorocarbons (chlorinated and brominated) (TAC code \#22)
- PAHs (TAC code \#19)

It is important when reporting emissions for these families of compounds that emissions are not double counted thus adversely affecting the facility's emissions and/or fees. Emissions reported for the overall family and each of the species within the family are summed for the purpose of calculating total facility emissions and/or assigning fees and prioritizing facility risks. Therefore, it is important that you either report emissions by individual species or overall emissions for the toxic family. It is always preferable to report emissions by individual species if that information is available. Table 2 considers each toxic family and several other toxics such as, arsenic (CAS \#7440382), asbestos (CAS \#1332214), hexavalent chromium (CAS \#18540299), lead (CAS \#7439921), and nickel (CAS \#7440020), and provides recommendations for emissions reporting. All TAC emissions must be reported on Form TAC as well as on Form TACS. It is important that the directions provided in Table 2 be read carefully before calculating TAC emissions.

Table 1: Ammonia \& Ozone Depleting Compounds (ODC)
\begin{tabular}{|c|l|r|l|l|}
\hline \begin{tabular}{c} 
TAC \\
Code
\end{tabular} & Group & CAS No. & Substance & \begin{tabular}{l} 
Type of \\
TAC/ODC
\end{tabular} \\
\hline 32 & Ammonia & 7664417 & Ammonia & Only TAC \\
\hline \multirow{3}{*}{22} & \begin{tabular}{l} 
Chlorofluorocarbons \\
(CFCs)
\end{tabular} & 1104 & Fluorocarbons (chlorinated) & TAC, ODC \\
\cline { 3 - 5 } & & 75718 & Dichlorodifluoromethan (Freon 12) & TAC, ODC \\
\cline { 3 - 5 } & 76131 & \begin{tabular}{l} 
Trichlorofluoromethane (Freon 11) \\
Trichlorotrifluoroethane (Freon - \\
113)
\end{tabular} & TAC, ODC \\
\hline 23 & \(1,1,1\) TAC, ODC \\
\hline
\end{tabular}

Table 2: Form TACS Toxic Air Contaminants and Ozone Depleters
\begin{tabular}{|c|c|c|c|c|}
\hline TAC Code & Group & CAS No. & Substance & Type of TAC/ODC \\
\hline 1 & Asbestos & 1332214 & Asbestos & TAC and PM \\
\hline 2 & Benzene & 71432 & Benzene & TAC and VOC \\
\hline 3 & Beryllium & 7440417 & Beryllium & TAC and PM \\
\hline 4 & 1,3-Butadiene & 106990 & 1,3-Butadiene & TAC and VOC \\
\hline 5 & Cadmium & 7440439 & Cadmium & TAC and PM \\
\hline 6 & Carbon tetrachloride & 56235 & Carbon tetrachloride & TAC and VOC \\
\hline \multirow{13}{*}{7} & \multirow{13}{*}{Chlorinated dioxins and dibenzofurans} & 1080 & Dibenzofurans (Polychlorinated dibenzofurans) \(\{\mathrm{PCDFs}\}[\mathrm{POM}]\) & TAC and VOC \\
\hline & & 1086 & Chlorinated dioxins, without individual isomers reported & TAC and VOC \\
\hline & & 1746016 & 2,3,7,8-Tetrachlorodibenzo-p-dioxin \{TCDD \(\}\) [POM] & TAC and VOC \\
\hline & & 3268879 & \[
\begin{aligned}
& \text { 1,2,3,4,5,6,7,8-Octachlorodibenzo-p- } \\
& \text { dioxin [POM] }
\end{aligned}
\] & TAC and VOC \\
\hline & & 19408743 & \[
\begin{aligned}
& \text { 1,2,3,7,8,9-Hexachlorodibenzo-p- } \\
& \text { dioxin [POM] } \\
& \hline
\end{aligned}
\] & TAC and VOC \\
\hline & & 35822469 & 1,2,3,4,6,7,8-Heptachlorodibenzo-pdioxin [POM] & TAC and VOC \\
\hline & & 39001020 & \begin{tabular}{l}
1,2,3,4,5,6,7,8- \\
Octachlorodibenzofuran [POM]
\end{tabular} & TAC and VOC \\
\hline & & 39227286 & 1,2,3,4,7,8-Hexachlorodibenzo-pdioxin [POM] & TAC and VOC \\
\hline & & 40321764 & 1,2,3,7,8-Pentachlorodibenzo-pdioxin [POM] & TAC and VOC \\
\hline & & 51207319 & 2,3,7,8-Tetrachlorodibenzofuran
[POM] & TAC and VOC \\
\hline & & 55673897 & \begin{tabular}{l}
\[
1,2,3,4,7,8,9-
\] \\
Heptachlorodibenzofuran [POM]
\end{tabular} & TAC and VOC \\
\hline & & 57117314 & 2,3,4,7,8-Pentachlorodibenzofuran [POM] & TAC and VOC \\
\hline & & 57117416 & 1,2,3,7,8-Pentachlorodibenzofuran
[POM] & TAC and VOC \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline TAC Code & Group & CAS No. & Substance & Type of TAC/ODC \\
\hline \multirow[t]{6}{*}{} & \multirow[t]{6}{*}{} & 57117449 & 1,2,3,6,7,8-Hexachlorodibenzofuran [POM] & TAC and VOC \\
\hline & & 57653857 & 1,2,3,6,7,8-Hexachlorodibenzo-pdioxin [POM] & TAC and VOC \\
\hline & & 60851345 & 2,3,4,6,7,8-Hexachlorodibenzofuran [POM] & TAC and VOC \\
\hline & & 67562394 & \begin{tabular}{l}
\[
1,2,3,4,6,7,8-
\] \\
Heptachlorodibenzofuran [POM]
\end{tabular} & TAC and VOC \\
\hline & & 70648269 & 1,2,3,4,7,8-Hexachlorodibenzofuran [POM] & TAC and VOC \\
\hline & & 72918219 & 1,2,3,7,8,9-Hexachlorodibenzofuran [POM] & TAC and VOC \\
\hline 8 & 1,4-Dioxane & 123911 & 1,4-Dioxane & TAC and VOC \\
\hline 9 & Ethylene dibromide & 106934 & Ethylene dibromide \{1,2Dibromoethane\} & TAC and VOC \\
\hline 10 & Ethylene dichloride & 107062 & Ethylene dichloride \{1,2Dichloroethane & TAC and VOC \\
\hline 11 & Ethylene oxide & 75218 & Ethylene oxide & TAC and VOC \\
\hline 12 & Formaldehyde & 50000 & Formaldehyde & TAC and VOC \\
\hline 13 & Hexavalent chromium & 18540299 & Chromium, hexavalent (and compounds) & TAC and PM \\
\hline 14 & Inorganic arsenic & 7440382 & Arsenic & TAC and PM \\
\hline 15 & Lead & 7439921 & Lead compounds (inorganic) & TAC and PM \\
\hline 16 & Methylene chloride & 75092 & Methylene chloride \{Dichloromethane\} & Only TAC \\
\hline 17 & Nickel & 7440020 & Nickel & TAC and PM \\
\hline 18 & Perchloroethylene & 127184 & Perchloroethylene \{Tetrachloroethene\} & Only TAC \\
\hline \multirow{9}{*}{19} & \multirow{9}{*}{Polynuclear aromatic hydrocarbons (PAHs)} & 1151 & PAHs, total, w/o individ. components reported [PAH, POM] & TAC and VOC \\
\hline & & 50328 & Benzo[a]pyrene [PAH, POM] & TAC and VOC \\
\hline & & 53703 & Dibenz[a,h]anthracene [PAH, POM] & TAC and
VOC \\
\hline & & 56553 & Benz[a]anthracene [PAH, POM] & TAC and VOC \\
\hline & & 91203 & Naphthalene [PAH, POM] & TAC and VOC \\
\hline & & 189559 & Dibenzo[a,i]pyrene [PAH, POM] & TAC and VOC \\
\hline & & 189640 & Dibenzo[a,h]pyrene [PAH, POM] & TAC and VOC \\
\hline & & 191300 & Dibenzo[a,1]pyrene [PAH, POM] & TAC and VOC \\
\hline & & 192654 & Dibenzo[a, e]pyrene [PAH, POM] & TAC and VOC \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline \[
\begin{array}{|l|}
\hline \text { TAC } \\
\text { Code } \\
\hline
\end{array}
\] & Group & CAS No. & Substance & Type of TAC/ODC \\
\hline \multirow[t]{5}{*}{} & \multirow[t]{5}{*}{} & 193395 & Indeno[1,2,3-cd]pyrene [PAH, POM] & TAC and VOC \\
\hline & & 205823 & Benzo[j]fluoranthene [PAH, POM] & TAC and VOC \\
\hline & & 205992 & Benzo[b]fluoranthene [PAH, POM] & TAC and VOC \\
\hline & & 207089 & Benzo[k]fluoranthene [PAH, POM] & TAC and VOC \\
\hline & & 218019 & Chrysene [PAH, POM] & TAC and VOC \\
\hline 20 & Trichloroethylene & 79016 & Trichloroethylene & TAC and VOC \\
\hline 21 & Vinyl chloride & 75014 & Vinyl chloride & TAC and VOC \\
\hline \multirow{12}{*}{61} & \multirow{12}{*}{POMS and PAH derivatives} & 56495 & 3-Methylcholanthrene \(\{\mathrm{PAH}\}[\mathrm{POM}]\) & TAC and VOC \\
\hline & & 194592 & \begin{tabular}{l}
2,3,7,8-Tetrachlorodibenzo-p-dioxin \\
\{TCDD [POM]
\end{tabular} & TAC and VOC \\
\hline & & 224420 & Dibenz[a,j]acridiene [POM] & TAC and VOC \\
\hline & & 226368 & Dibenz[a,h]acridiene [POM] & TAC and VOC \\
\hline & & 602879 & 5-Nitroacenaphthene [POM] & TAC and VOC \\
\hline & & 607578 & 2-Nitrofluorene [PAH-Derivative, POM] & TAC and VOC \\
\hline & & 3697243 & 5-Methylchrysene [PAH-Derivative, POM] & TAC and VOC \\
\hline & & 5522430 & 1-Nitropyrene [PAH-Derivative, POM] & TAC and VOC \\
\hline & & 7496028 & 6-Nitrochrysene [PAH-Derivative, POM] & TAC and VOC \\
\hline & & 42397648 & 1,6-Dinitropyrene [PAH-Derivative, POM] & TAC and VOC \\
\hline & & 42397659 & 1,8-Dinitropyrene [PAH-Derivative, POM] & TAC and VOC \\
\hline & & 57835924 & 4-Nitropyrene [POM] & TAC and VOC \\
\hline 72 & Diesel Exhaust Particulates & 9901 & Diesel Exhaust Particulates & TAC and PM \\
\hline
\end{tabular}

Table 3. Special Instructions for Reporting Select Toxic Air Contaminants
\(\left.\begin{array}{|c|l|l|}\hline \begin{array}{l}\text { TAC } \\ \text { code }\end{array} & \text { Substance } & \text { Reporting recommendations } \\ \hline 14 & \begin{array}{l}\text { Arsenic and } \\ \text { compounds }\end{array} & \begin{array}{l}\text { Be sure to consider the inorganic arsenic weight fraction in } \\ \text { inorganic arsenic containing materials such as arsine when } \\ \text { calculating the inorganic arsenic emissions. The arsenic weight } \\ \text { fraction for arsine (CAS\# 7784421) is 0.9612. }\end{array} \\ \hline 1 & \text { Asbestos } & \begin{array}{l}\text { Be sure to consider the asbestos weight fraction in mineral fibers } \\ \text { such as erionite, talc, etc. when calculating the asbestos } \\ \text { emissions. }\end{array} \\ \hline 5 & \text { Cadmium } & \begin{array}{l}\text { Be sure to consider the cadmium weight fraction in cadmium } \\ \text { containing materials such as cadmium oxide when calculating } \\ \text { the cadmium emissions. The cadmium weight fraction for }\end{array} \\ \text { cadmium oxide is as follows: } \\ \text { Cadmium Oxide (CAS \# 1306190) -- 0.8754. }\end{array}\right\}\)
\begin{tabular}{|c|c|c|}
\hline TAC code & Substance & Reporting recommendations \\
\hline & & emissions. Emissions from individual species with the same TAC code are added together to calculate the family total emissions. \\
\hline 15 & Lead compounds (inorganic) & \begin{tabular}{l}
Be sure to consider the lead weight fraction in lead containing materials such as lead oxide, lead acetate, lead phosphate, lead subacetate, and lead chromate, when calculating the lead emissions. The lead weight fractions for these materials are as follows: \\
lead oxide (CAS\# 1314-41-6) --0.9066; \\
lead acetate (CAS\# 301042) -- 0.637; \\
lead phosphate (CAS\# 7446277) -- 0.7659; lead subacetate \\
(CAS\# 1335326) -- 0.7696; \\
and lead chromate (CAS\# 7758976) -- 0.6411.
\end{tabular} \\
\hline 50 & Mercury and mercury compounds & Report emissions for each individual mercury compound on form TAC. Do not double count the same emissions. Emissions from individual species with the same TAC code are added together to calculate the family total emissions. \\
\hline 17 & Nickel & \begin{tabular}{l}
Be sure to consider the nickel weight fraction in nickel containing materials such as nickel acetate, nickel carbonate, nickel carbonyl, nickel hydroxide, nickelocene, nickel oxide, nickel subsulfide and refinery dust when calculating the nickel emissions. The nickel weight fractions for these materials are as follows: \\
nickel acetate (CAS\# 373024) -- 0.3321; \\
nickel carbonate (CAS\# 3333673) -- 0.4945; \\
nickel carbonyl (CAS\# 13463393) -- 0.3438; \\
nickel hydroxide (CAS\# 12054487) -- 0.6332; \\
nickelocene (CAS\# 1271289) -- 0.4937; \\
nickel oxide (CAS\# 1313991) -- 0.7859; \\
nickel chloride (CAS\# 7718549) - 0.453; \\
nickel sulfate (CAS \# 7786814) - 0.379; \\
nickel subsulfide (CAS\# 12035722) -- 0.2443 .
\end{tabular} \\
\hline 19 & PAHs & Report emissions as either a family total or by individual species on Form TAC. Do not double count the same emissions. Emissions from individual species with the same TAC code are added together on Form TACS or TACSO to calculate the family total emissions. \\
\hline 60 & Phosphorous compounds & Report emissions for each individual phosphorous compound on form TAC. Do not double count the same emissions. Emissions from individual species with the same TAC code are added together to calculate the family total emissions. \\
\hline 61 & POMs and PAHderivatives & Report emissions by individual species whenever that information is available. Only report emissions as a group total if the individual species emissions are unknown. Do not double count the same emissions. Emissions from individual species with the same TAC code are added together to calculate the family total emissions. \\
\hline 64 & Selenium and compounds & Report emissions for each individual selenium compound on form TAC. Do not double count the same emissions. Emissions from individual species with the same TAC code are added together to calculate the family total emissions. \\
\hline 67 & Sulfuric acid and oleum & Report emissions for each individual sulfur compound on form TAC. Do not double count the same emissions. Emissions from \\
\hline
\end{tabular}
\begin{tabular}{|c|l|l|}
\hline \begin{tabular}{c} 
TAC \\
code
\end{tabular} & Substance & Reporting recommendations \\
\hline 70 & Xylenes & \begin{tabular}{l} 
individual species with the same TAC code are added together to \\
calculate the family total emissions.
\end{tabular} \\
\hline & \begin{tabular}{l} 
Report emissions by individual species whenever that information is \\
available. Only report emissions as a group total if the individual \\
species emissions are unknown. Do not double count the same \\
emissions. Emissions from individual species with the same TAC \\
code are added together to calculate the family total emissions.
\end{tabular} \\
\hline
\end{tabular}```


[^0]:    Show More AER Report History

