



Florida Department of Environmental Protection

EAOR Training

January 2018
Division of Air Resource Management





Electronic Annual Operating Report (EAOR)

Welcome to the yearly EAOR Training.

- You are encouraged to ask questions by typing in your questions on your screen. We will answer as many questions as we can after each section and at the end of the webinar.
- PLEASE **mute** your phone if not asking a question.
- PLEASE **do not** put this call on hold.
- If you encounter problems with the audio or other technical problems during the webinar, please let us know via the questions message pane.



Electronic Annual Operating Report (EAOR)

Agenda

1:30 PM Opening Remarks

EAOR Website: Links and Downloads

2:00 PM EAOR Training: Easy Start Menu

EAOR Training: Static Data/Facility Form Sections A-D and Attachments

2:30 PM EAOR Training: EU Form Sections A-D

EAOR Training: EU Form Section E, Reports, Data Submission, Title V Fee Invoice and Electronic Signature

3:00 PM Questions



Electronic Annual Operating Report (EAOR)

- Purpose of Annual Operating Reports
- EAOR Process: Common Issues
- Resources Available



Purpose

Applications

- Annual trend reports
- Emissions trading
- SIP
- Modeling activities
- Compliance demonstrations
- Emissions fees

- For the SIP program, the air emission inventory is a fundamental building block in developing an air quality control and maintenance strategy, and depends on a comprehensive, accurate and current inventory of actual emissions.
- Regulatory agencies rely on emission inventories as indicators of air quality changes, and produce assessments which help guide efforts to cut air pollution (and in identifying those air toxics which are of greatest concern in terms of contribution to population risk), and for setting permitting requirements.



EAOR Process

- Annual AOR Letter
- EAOR Installation
- Completing / Revising EAOR
- Signing EAOR
- Title V Fees (Major sources only)



Annual AOR Letter

- AOR Letter sent in mid-December Includes:
- Changes since the previous year
- Pertinent due dates
- EAOR website and contact.

Tip: Please be sure we have the current Primary RO and e-mail address in our system (ARMS).



EAOR Changes

Changes in 2017 include:

- Removal of Requirements to report **summer season daily** process rates and emissions, including seasonal operational data (i.e. percent hrs operation by season, average and total summer season operation).
- “HAP Reporting Year” reporting changes for hazardous air pollutants (i.e. Individual HAPS & Total HAPS):
 - Expanded the reporting requirements to include **non-major** sources of HAPs during a HAP reporting year.
 - Revised the threshold for Total HAPS.
- Added thresholds for H₂S, PM₁₀ - Pri, PM_{2.5} - Pri.
- Addition of pollutants to accommodate new federal regulations.



Report Pollutants Subject to an Emission Limiting Standard or Threshold

Report Pollutants Subject to Emission Limiting Standards:

- For **any pollutant** that is subject to a numerical emission-limiting standard, either by rule or permit condition, report the pollutant, for each SCC, even if quantities are small. Pollutants subject to emission limiting standards should be 'marked' on the EAOR and our prefilled AOR form. This also includes any pollutant which is part of a facility-wide or multi-unit emissions cap.

*Marked: A 'marked' pollutant is one which has a numerical emissions limit or emissions cap in the permit and will have an * next to the pollutant in EAOR (for example *PM).



Report Pollutants Subject to an Emission Limiting Standard or Threshold Continued

Report Pollutants Subject to Reporting Thresholds:

- For pollutants as listed in the AOR form that are emitted from the unit but **not** subject to any numerical emission limiting standards, report for each pollutant, for each SCC, only if the pollutant was emitted from the emissions unit during the reporting year in an amount, by SCC, equal to or greater than the appropriate pollutant-specific **threshold** listed in the AOR form. Pollutants need not be reported for any SCC for which the emissions were less than the appropriate threshold.



EAOR Installation

- EAOR Website
 - EAOR software & installation instructions
 - Installation errors & links to resolutions:
 - Folder Permissions – read / write permissions
 - Crystal Reports error
 - EAOR program suddenly stops working

<https://floridadep.gov/air/permitting-compliance/content/annual-operating-report>

- Tip: Check the EAOR website for installation error resolutions.



Before Beginning EAOR Data Entry:

- In EAOR, first check to make sure you have downloaded the newest version of EAOR software.
- After importing your facility data, please review your prefilled facility data in EAOR before completing the report.
 - If there is an error in the prefilled data, for example, a pollutant has an emissions limit in the permit but is not 'marked' in EAOR (*), or an emissions unit is missing, then please call DARM before starting your EAOR data entry. This is to prevent you from possibly having to redo your entire EAOR data entry!
- If you are adding (or invalidating) an SCC in EAOR, and there is any question regarding which SCC to use, then please first check with the permitting office, and cc DARM.
- Remember the RICE – Emergency / Limited Use/Black Start Engines that have numerical emissions limits for any pollutant or meet the threshold are to be included in AORs as they have not been exempted from the AOR form instructions.



EAOR Easy Start Menu

File Edit EAOR Survey Window Electronic Signature Help



EAOR Easy Start Menu

Please follow the steps below to complete your AOR. Start by importing data from web or disk

1 or

2

3

4

5

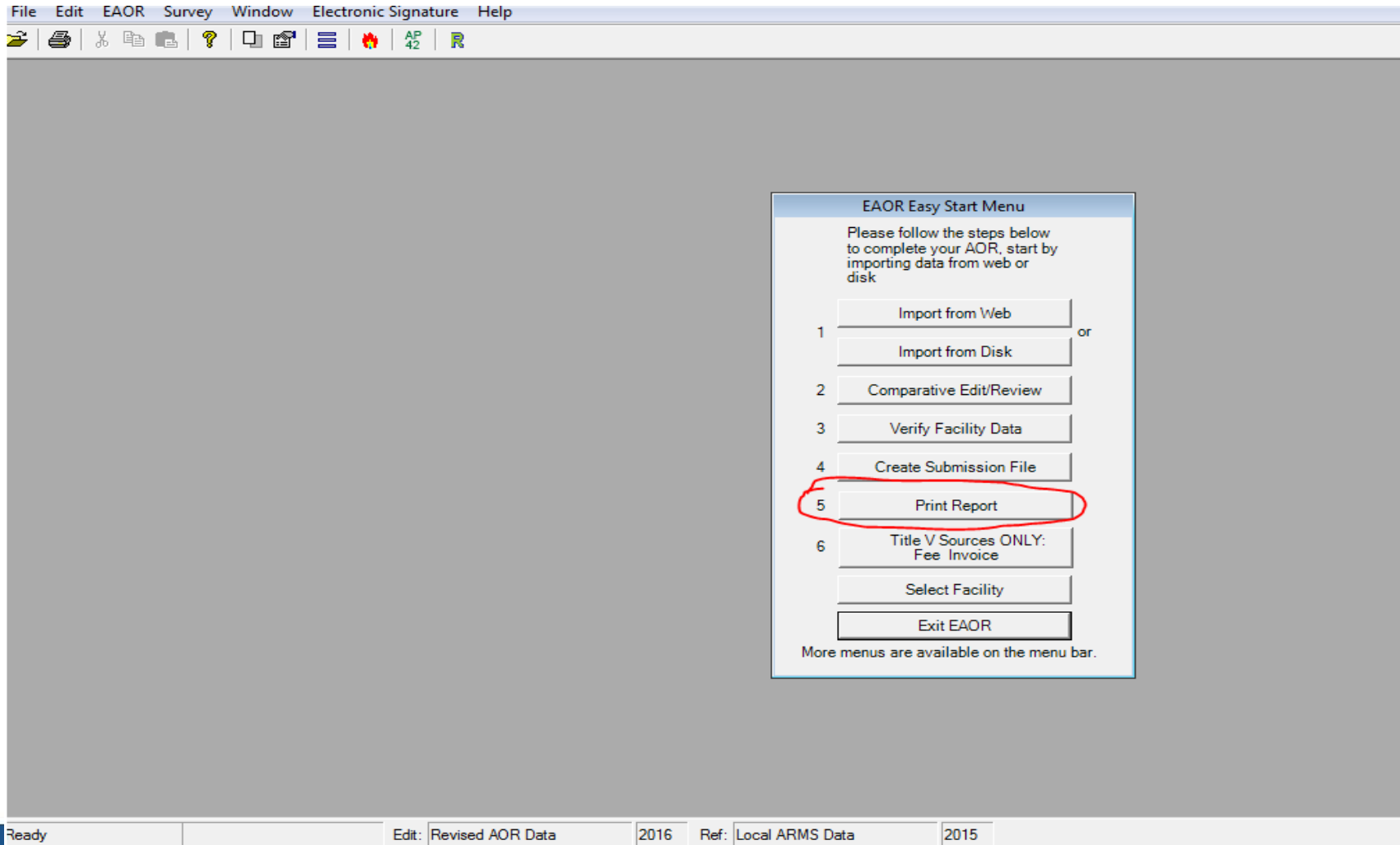
6

More menus are available on the menu bar.



EAOR Easy Start Menu – Print Report

- After importing your facility data, *first* review it, *then* begin editing:





Review: Emissions Report by EU

EAOR Beta - CONGLOBAL INDUSTRIES, INC. 0310333 - [Emission Report by EU]

File Edit EAOR Survey Window Electronic Signature Help

Main Report

EU ID	EU Description	Pollutant	2016	2015
			Actual (TPY)	Actual (TPY)
003	SHOT BLASTING BLDG.	*HAPS	0.840000	1.156000
		*VOC	3.488000	1.561000
004	Global Paint Booth	*PM	0.310000	0.292000
		PM10	0.310000	0.292000
		H046		
		H053	0.006000	0.010000
		H085	0.047000	0.045000
		H090		
		H123	0.038000	0.067000
		H132	0.002600	0.008300
		H169	0.006000	0.000600
005	Silica Blast Operation	H186	0.292000	0.255000
		*HAPS	0.490000	0.386700
		*VOC	0.693000	0.223000
005	Silica Blast Operation			
		PM	2.750000	1.051000

Current Page No.: 2 Total Page No.: 2 Zoom Factor:



Completing EAOR: Facility Form

Facility Information:

- Status (as of December 31st) – A, C, Inactive.
- Facility Owner/Comp. & Site Name – Owner.
- Facility History Information – Previous Owner /Company Name if changed during reporting year.

Owner/Contact Information:

Person who is authorized / responsible for signing **this AOR:**

- Non-Title V: Owner/Authorized Representative or
- Title V: Responsible Official



EAOR Facility Form– Status, Owner

EAOR Beta - CONGLOBAL INDUSTRIES, INC. 0310333 - [Facility Edit and Review]

File Edit EAOR Survey Window Electronic Signature Help

Go To Emissions Unit Form Save Exit

Revised AOR Data 2016 Local ARMS Data 2015

Section A and B Section B (Cont) Section B (Cont) and C Section D Section D (Cont) Section D (Cont 2) Attachments

A. REPORT INFORMATION

1. Year of Report: 2016

2. Number of Emissions Units in Report: 5

B. FACILITY INFORMATION

1. Facility ID: 0310333

2. Facility Status: ACTIVE

3. Date of Permanent Facility Shutdown:

4. Facility Owner/Company Name: CONGLOBAL INDUSTRIES, INC.

5. Site Name: CONGLOBAL INDUSTRIES, INC.

A. REPORT INFORMATION

1. Year of Report: 2015

2. Number of Emissions Units in Report: 5

B. FACILITY INFORMATION

1. Facility ID: 0310333

2. Facility Status: ACTIVE

3. Date of Permanent Facility Shutdown:

4. Facility Owner/Company Name: CONGLOBAL INDUSTRIES, INC.

5. Site Name: CONGLOBAL INDUSTRIES, INC.



EAOR Facility Form - History

EAOR Beta - CONGLOBAL INDUSTRIES, INC. 0310333 - [Facility Edit and Review]

File Edit EAOR Survey Window Electronic Signature Help

Go To Emissions Unit Form Save Exit

Revised AOR Data 2016 Local ARMS Data 2015

Section A and B Section B (Cont) Section B (Cont) and C Section D Section D (Cont) Section D (Cont 2) Attachments

B. FACILITY INFORMATION (Cont)

8. Facility SIC(s):

	SIC	Primary
▶	3479	☒
*		☐

9. Facility Comment:

MISC. COATING OF METAL PARTS, HAP > 10 T/YR & > HAPS > 25 T, Previous name Diversified Container Services

C. FACILITY HISTORY INFORMATION

1. Change in Facility Owner/Company Name During Year? ☐

Previous Name:

2. Date of Change:

B. FACILITY INFORMATION (Cont)

8. Facility SIC(s):

	SIC	Primary
▶	3479	☒

9. Facility Comment:

MISC. COATING OF METAL PARTS, HAP > 10 T/YR & > HAPS > 25 T, Previous name Diversified Container Services

C. FACILITY HISTORY INFORMATION

1. Change in Facility Owner/Company Name During Year? ☐

Previous Name:

2. Date of Change:



EAOR Facility Form: Owner Information

EAOR Beta - CONGLOBAL INDUSTRIES, INC. 0310333 - [Facility Edit and Review]

File Edit EAOR Survey Window Electronic Signature Help

Go To Emissions Unit Form Save Exit

Revised AOR Data 2016 Local ARMS Data 2015

Section A and B Section B (Cont) Section B (Cont) and C Section D Section D (Cont) Section D (Cont 2) Attachments

D. OWNER / CONTACT INFORMATION

1. Owner/Authorized Representative OR Title V Responsible Official:

First Name:

Middle Name:

Last Name:

Suffix:

Job Title:

Mailing Address

Organization/Firm

Street Address:

City:

State: Zip: -

Phone: Ext: Fax:

Email:

D. OWNER / CONTACT INFORMATION

1. Owner/Authorized Representative OR Title V Responsible Official:

First Name:

Middle Name:

Last Name:

Suffix:

Job Title:

Mailing Address

Organization/Firm

Street Address:

City:

State: Zip: -

Phone: - Ext: Fax: -

Email:



EAOR Facility Form: Attachments

- **Make sure supporting information is attached in EAOR**
 - Helps communicate the whole picture to us and saves time otherwise spent on follow-up questions to the facility (especially important when Emissions Calculation worksheet or Emissions Comment field does not contain the calculation formula.)
- **Other Attachments**
 - Signature Pages may be attached in EAOR (i.e. AOR pages 1& 2).
 - However, if e-signing, it is not necessary to attach the signature pages in EAOR.



Completing EAOR Continued

- **Make sure the correct SCCs are reported in EAOR:** If you are adding (or invalidating) an SCC in EAOR, and there is any question regarding which SCC to use, then please first check with the permitting office, and cc DARM.
- **Make sure the correct Emissions Method Codes** used to calculate emissions are reported:
 - Rule 62-210.370(2)(d)1.c., F.A.C., states “The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator **shall not** compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.”
 - [View Rule 62-210.370](#) for methods to be used when computing actual emissions.
- **Make sure to use the correct Emission Factor (EF) for the particular pollutant:**
 - For PM, PM₁₀, and PM_{2.5} emissions, EFs used were often for the wrong pollutant. For example, AP42/Webfire EF for PM was used to report PM₁₀.
 - Depending on the SCC and control equipment configuration, there may be emission factors for *primary PM, primary PM₁₀, primary PM_{2.5}, filterable PM, filterable PM₁₀, filterable PM_{2.5} and condensable PM (CPM).



Completing EAOR Continued

Make sure emission factors have the correct Units:

- For example, for an SCC for external combustion boilers burning oil, AP42/Webfire units for criteria pollutants are *Lbs per 1000 Gallons Oil*, and units for metals are *Lbs per Million Btus Heat Input*, however EAOR calculation worksheet 'Emission Factor' unit is *Lbs per 1000 Gallons Distillate Oil*.
- Provide the source of the emissions factor (EF) in EAOR.
 - For example, if emissions were calculated using an EF based on site specific data such as stack tests, then list the test dates, and EF units; or if the EF was established in a permit, then reference which permit.

Double check your emissions calculation formula:

- A minor omission could result in either underreporting emissions (and subject to additional Title V fee / penalties); or over reporting emissions (and overpaying fees).
- EAOR calculates Title V fees based on actual emissions, review and correct discrepancies in formula's, ensure the values used in the formula are correct:
 - Units; convert from lbs to tons
 - Emissions factor
 - Consider control efficiency
 - Process rate / Fuel usage
 - Average heat content
 - Total hours operated
- **CPM, PM2.5, and PM10** should typically be reported for combustion sources.
 - If the information is available and the reporting threshold of 5 tons/year was exceeded (or is a marked pollutant), then report the emissions.



EAOR: Examples of Data Quality Issues

- A change during the reporting year in the facility's tracking/reporting methodology resulted in underreporting of emissions (i.e. from AP42- to CEMS);
- Different emissions factors are used for reporting in different systems (TRI vs. AOR);
- Overestimating previous years emissions;
- Instances where the emissions factor or fuel usage/ process rate is off by an order of magnitude; or incorrect value was used in the formula in EAOR;
- Duplication of process rate / fuel usage: The exact same process rate was reported for different fuels burned, for example diesel and natural gas;



EAOR: Examples of Data Quality Issues

- Instances where materials or substances used in the previous year's processes were discontinued prior to the current reporting year, however were inadvertently reported anyway;
- Cases where emissions were normally calculated by applying a control efficiency, however were inadvertently reported without it;
- Emissions value reported was in pounds, conversion to tons was excluded from the formula;
- Cases where HAP VOCs are not included with the VOC emissions; and
- Formulas needing revision:
 - workbook setup to capture data for the AOR, such as fuel usage, not working;
 - Formula omits an important conversion factor (i.e. conversion of sulfur to SO₂);
 - Incorrectly uses a "percentage" (i.e. 10% ash) instead of a "number" (i.e. 0.1 ash fraction), resulting in emissions being over reported (for HAPS metals).



EAOR Calculation Worksheet

File Edit EAOR Window Help

Go To Facility Form Select EU 006 << First < Previous Next > Last >> Save Exit

DEP Revised AOR Data 2016 Local ARMS Data 2015

Select EU Section A Section A (Cont) and B Section C and D Section E

Select SCC SCC & Pollutants Horizontal View Delete Pollutant

(1) PROCESS/FUEL INFORMATION

Select SCC	Valid	SCC Unit	Annual Process or Fuel Usage Rate	Summer Season Process or Fuel
20100101		1000	33.81	

(2) EMISSIONS INFORMATION

Pollutant	SCC Code	Emission Factor	Calculation Worksheet	Emission Calculation
H114				See attach
H133				See attach
H148				
H162				See attach
HAPS				See attach
* NOX				Annual E
PB				Annual E
* PM				Annual E
* PM10				Annual E
PM2.5				Annual E
* SAM				Annual E
* SO2				Annual E
* VOC				Annual E

Calculations for SCC - 20100101, Pollutant - PM

B17 =B20*B7*B4/2000

	A	B	C	D	E
1	Average Annual Operation (Hours/Day)	5			
2	Average Annual Operation (Days/Week)	1			
3	Total Annual Operation (Hours/Year)	175			
4	Annual Process or Fuel Usage Rate (1000 Gallons Distillate Oil (Diesel) Burned)	33.81			
5	Fuel Average % Sulfur	0.0011			
6	Fuel Average % Ash				
7	Fuel Heat Content (mmBtu/1000 Gallons Distillate Oil (Diesel) Burned)	138.45			
8	Average Summer Season Operation (Hours/Day)	5			
9	Average Summer Season Operation (Days/Week)	1			
10	% Hours of Operation DJF	4			
11	% Hours of Operation MAM	12			
12	% Hours of Operation JJA	60			
13	% Hours of Operation SON	24			
14	Summer Season Daily Process or Fuel Usage Rate (1000 Gallons Distillate Oil (Diesel) Burned)	0			
15	Emission Factor (Lbs/1000 Gallons Distillate Oil (Diesel) Burned)				
16	Total Operation During Summer Season (Days/Season)	70			
17	Annual Emissions (Tons/Year)	0.010064			
18	Summer Season Daily Emission (Lbs/Day)				
19	Emission Comments	See attached calculations			
20	Emission Factor (lb / MMBTU)	0.0043			
21					
22					
23					

Show Calculation Show Comment Save Cancel Clear Sheet Import



Additional Data Review

Perform Edit Checks & Compare to ARMS:

- Missing AOR Report
- Missing Process Rates
- Missing Annual Emissions
- Missing Cap Emissions
- Missing data for SCC (if burning Coal, Oil, Gas) – lists SCC if the **sulfur content**, or **ash content**, or **heat content** is missing.



Edit Checks Continued

- Operating Schedule – if exceeds the permitted schedule.
- Excess Process Rate – if reported annual process rate larger than the permit limit.
- Excess Sulfur, Ash – if reported sulfur/ash content is larger than the permit limit.
- Excess Heat Input
- Excess Emissions – reported annual emission larger than the permit limit allowable: equivalent tons/year.
- Exceeded Emissions Cap – reported annual emission larger than emissions cap (fac wide or multi-unit cap).



Revising an EAOR

- If Title V, and revisions affect Title V fees or are very involved, should resubmit.
- Make the revisions in EAOR, and resubmit.
- Do not re-import your data file. This will overwrite and null out data values that you have already entered!

*** Contact me if you have questions or problems! ***



Signing the AOR

- For **Non-Title V Sources** – The Owner or Authorized Representative must sign.
- For **Title V Sources** - The Title V source Responsible Official must sign. If there is more than one Responsible Official at the Title V source, then it is not necessary that this person be the Primary Responsible Official.
- Whether the AOR is submitted electronically via the web or email, you may sign the AOR electronically or submit signature pages. *The AOR is not complete until it is signed.*
- Please note: In order to sign electronically, you will need a user account and PIN. You do not need to download the EAOR software to sign the AOR.
 - Information on how to sign electronically can be found on the EAOR website: <http://www.dep.state.fl.us/air/emission/eaor/default.htm>
 - [Click Here to Register a New Account](#) - Note the '**Help**' button on this screen.
 - [Download PIN Request Form \(requires login\)](#)
- If you forgot your PIN or registration password or need signing help:

DARM Application Support Desk

Email: DARM.HelpDesk@dep.state.fl.us

Phone: 850-717-9000 (Fax: 850-717-9001)



EAOR Benefits

- The completed report can be submitted by the Internet.
- The report is partially filled with the data from the Department database. This ensures the report is completed according to each facility's permit.
- The side-by-side view allows comparison of the current year data with the data from previous years.
- Data changes are highlighted to ease the review of the data.
- Help is available at one key stroke, including the definitions of each data field.
- Formulas to calculate emissions can be set up in the program and be re-used in future AORs.
- Edit checks are included to catch missing data.
- Supporting electronic documents can be attached.
- The data are reviewed and transferred into the Department database electronically, avoiding having to enter the new data and update the existing data manually.
- Reports can be saved as .PDF files. With this feature, you can send the completed AOR to someone else to review, without that person having to install the EAOR program.
- Automatically calculates Title V fees based on the AOR emissions reported.
- The report can be signed electronically.



EAOR: Potential Improvements

- Small screen size
 - Requires use of a scroll bar
- Data Verifications
- Emissions Comments
- Comparisons with permit limits /thresholds/EPSAP not available
- Improving display of Emissions Comparison reports – graphed trend chart showing multiple years.
- Including automated emissions calculator tools to determine which thresholds are exceeded and require reporting.
- EAOR is not web based
 - Limitations on operating systems



EAOR Website: Links and Downloads

- EAOR Website has information pertinent to EAOR:
<http://www.dep.state.fl.us/air/emission/eaor/default.htm>
- The AOR and Title V Fee are due by April 1.
 - Title V facilities must submit the AOR using EAOR software (or claim technical or financial hardship by submitting Division's pre-filled form).
 - Title V emissions fee checks must be postmarked no later than April 1.
 - Electronic banking transfer submissions must be received by DEP by April 1.
 - The Title V Emissions Fee website is here:
<https://floridadep.gov/air/permitting-compliance/content/title-v-fees>
- EAOR Software
 - EAOR software allows you to submit your Annual Operating Report to Florida DEP.
 - The latest version of EAOR is found on the EAOR website.
 - EAOR software requires: Windows XP or Windows 7.
 - Non-Title V facilities may submit their AOR using a pre-filled hardcopy. **Download a prefilled copy** at this link (however Title V must use EAOR as mentioned above):
<https://floridadep.gov/air/permitting-compliance/content/annual-operating-report>



EAOR: DEP Web Resources

EAOR Website

<http://www.dep.state.fl.us/air/emission/eaor/default.htm>

Title V Annual Emissions Fee On-line Information

<https://floridadep.gov/air/permitting-compliance/content/title-v-fees>

AOR Form (including instructions)

<http://www.dep.state.fl.us/air/rules/forms/aor.htm>

FDEP incoming FTP site:

<ftp://ftp.dep.state.fl.us/pub/incoming>

EAOR Helpdesk

eaor@dep.state.fl.us

New webpage: How to Find Air Documents Online

<https://floridadep.gov/air/air-director/content/how-find-air-documents-online>



EAOR Optional Assistance: CPM & Pollutant Emissions Calculators

The following emissions calculators are provided for your use, however their use to estimate emissions is optional:

➤ **What if I don't know my CPM (condensable particulate matter) emissions?**

CPM emissions must be reported if the emissions unit is subject to a numerical emission limit for CPM.

- o Otherwise, CPM should be reported if information is available to estimate emissions, and such emissions are equal to or greater than 5.0 tons per year per SCC. Do not add the pollutant CPM in EAOR if you do not have emissions data to report. A **Calculator to estimate CPM** emissions based on some available CPM emissions factor information from AP-42 is provided for you at this link: <http://www.dep.state.fl.us/air/emission/eaor/CPM-reporting.htm>

Below is a link to the **Annual Air Emissions Calculators** (based on WebFIRE Emissions Factors) for some SCC. If you would like additional SCCs added, please email them to Cindy.Phillips@dep.state.fl.us

- [Annual Air Emissions Calculators for some SCC](#)



EAOR – EPA Web Resources

EPA's WEBFIRE (contains EPA's recommended emissions factors)

<https://www.epa.gov/electronic-reporting-air-emissions/webfire>

EPA's Searchable SCC database (contains a list of most updated SCCs):

www.epa.gov/scc





Questions/Assistance Contacts

Dianne Spingler, AOR Coordinator

Dianne.Spingler@dep.state.fl.us

850-717-9100

Kathleen Carr

Contact Kathleen re: registering an account, forgot PIN or password.

Kathleen.Carr@dep.state.fl.us

850-717-9012

EAOR Helpdesk

eaor@dep.state.fl.us

850-717-9000

Other Assistance

Cindy Phillips, Senior Analyst

- Contact Cindy re: Emissions Calculator for SCCs,
- AOR form rule development.
- Cindy.Phillips@dep.state.fl.us
- 850-717-9098

Kris Lanh, Engineer

- Contact Kris with general AOR questions.
- Kris.Lanh@dep.state.fl.us
- 850-717-9094



Reporting PM, PM₁₀, and PM_{2.5}

When reporting PM, PM₁₀, and PM_{2.5} emissions make sure to use the correct emission factor for the pollutant.

Depending on the SCC and control equipment configuration, there may be emission factors for primary PM, primary PM₁₀, primary PM_{2.5}, filterable PM, filterable PM₁₀, filterable PM_{2.5} and condensable PM (CPM).

- PM filterable $\geq$ PM₁₀ filterable $\geq$ PM_{2.5} filterable
- PM₁₀ primary $\geq$ PM_{2.5} primary $\geq$ CPM

NOTE: 'Primary PM' is not reported. Rather, 'PM' determined by standard EPA Method 5 is filterable PM, which is reported.

The emission factors listed as primary include both the filterable and condensable components. For example, primary PM_{2.5} is the total of PM_{2.5} filterable plus condensable PM (CPM), and primary PM₁₀ is the total of PM₁₀ filterable plus CPM.

- PM_{2.5} primary = PM_{2.5} filterable + CPM
- PM₁₀ primary = PM₁₀ filterable + CPM

You should never add the emission factors for primary and filterable together, since primary already includes the filterable.

- If reported, report condensable PM₁₀ and condensable PM_{2.5} as CPM.
- PM₁₀ condensable = PM_{2.5} condensable = CPM