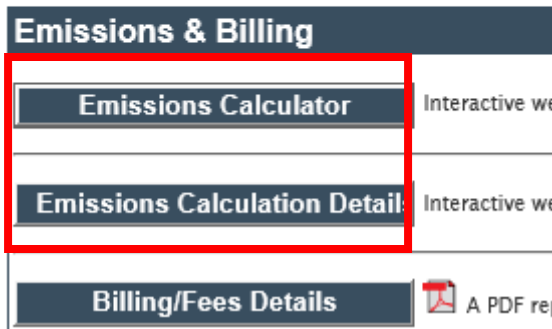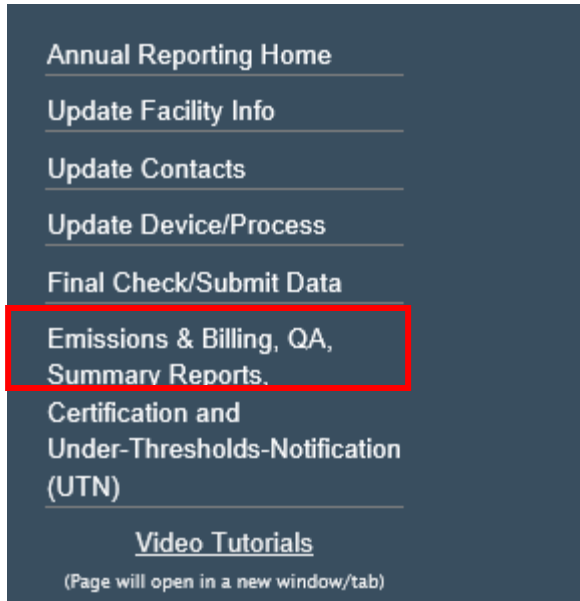# Air Emissions Inventory (EI) – Calculating Emissions

July 2021

Summary

- General

- Using the Emissions Calculator page to run the emissions calculator

- Using the Emissions Calculation Details page to run the emissions calculator

- Help

General

- After the required device and process data have been entered in the Air Reporting System (ARS), emissions can be calculated. The emissions calculator can be run from either:
    - ✓ The Emissions Calculator page; or
    - ✓ Emissions Calculator Details page

- The results will display as either emissions or emission calculation details that can be filtered by device, process and pollutant.
- By default, only pollutants above reporting thresholds display on EI summary reports.

Using the Emissions Calculator (EC) page to run the emissions calculator

1. In the blue column on the left, click *Emissions & Billing, QA, Summary Reports, Certification and Under-Thresholds-Notification (UTN)*.

FID: 555555550   **Air Emissions Reporting**   FID: 555555

Facility - 555555550 : AIR Test FACILITY #1   DNR Contact : Steven Bogost, (608) 264-8843   Steven.Bogost@wisconsin.gov   Back to Switchboard

Left navigation menu:
- Annual Reporting Home
- Update Facility Info
- Update Contacts
- Update Device/Process
- Final Check/Submit Data
- Emissions & Billing, QA, Summary Reports, Certification and Under-Thresholds-Notification (UTN)

Air Reporting System (ARS) Home for the 2020 Air Emissions Inventory (EI)

Air Emissions Inventory (EI) Reporting Calendar

- March 1, 2021 - EIs or Under-Thresholds-Notifications (UTNs) are due.
- April 1, 2021 - Facilities notified through email that EIs or UTNs are overdue.
- By May 31 2021 environmental fee statements are emailed to facilities or mailed if no email address is available.
- June 30, 2021 - Environmental fees payments and certifications are due.

EI Reporting Basic Steps

1. Review, revise and save the facility info including completion the Environmental Management System (EMS) questionnaire.
2. Review contacts info. If changes are needed, only people previously associated with the facility can be assigned

Using the EC page to run the EC

2. On the ARS Summary Data page on the Emissions & Billing tab, click *Emissions Calculator*.

Using the EC page to run the EC

3. On the Emissions Calculator page:
   a. Click *Calculate* once.
   b. Click *Refresh Screen* until the calculations are 100% complete.

Using the EC page to run the EC

4. When the EC completes its calculations, the facility/source level emissions data are displayed including:

a. MASS FLOW (i.e., the emissions generated)

b. RELEASE (i.e., the emissions released to the environment after controls)

c. SHOW column indicating which pollutants are displayed on an EI summary report regardless of emissions quantity

d. PRIOR column indicating if a pollutant was reported in the previous EI

Emissions Calculator

Calculator Status			
CALC_DONE: Emissions calculation succeeded.	**Calculate**	Refresh Screen	Calc is 100% complete

Current Emissions (2020)

Level: SRC | Device: [ALL] | Process: [ALL] | Pollutant: [ALL] | ◉ LB ○ TON Apply Filter

#a **#b** **#c** **#d**

FACILITY	DEVICE	PROCESS	POLLUTANT	MASS FLOW	RELEASE	UNIT	TYPE	SHOW	PRIOR
555555550			CO	28,880.47816	28,880.47816	LB		☑	✓
555555550			NOX	112,957.57129	112,957.57129	LB		☑	✓
555555550			PM	10,968.55696	10,968.55696	LB		☑	
555555550			PM10	13,578.28061	13,578.28061	LB		☑	
555555550			ROG	2,369.41799	2,369.41799	LB		☐	✓
555555550			SO2	6,779.89193	6,779.89193	LB		☐	
555555550			1,3,5 TRIGLY	1,975,510,204.1017	1,975,510,204.1017	LB		☑	✓
555555550			ACETALDEHYDE	.00054	.00054	LB		☐	
555555550			ACETIC ACID	15.00000	15.00000	LB		☐	
555555550			ACETONE	.00204	.00204	LB		☑	
555555550			ACROLEIN	.04289	.04289	LB		☑	✓
555555550			ADIPIC ACID	98.00000	98.00000	LB		☐	✓

Using the EC page to run the EC

5. When the EC completes its calculations, the facility/source level emissions data are displayed including (cont.):

   e. Level, device, process and pollutant filters and unit radio buttons
   f. Apply Filter button (i.e., used to run query after filters and units are selected)
   g. Check box to show the same pollutants as the prior year
   h. Emissions from previous EI years

Using the Emissions Calculator Details (ECD) page to run the emissions calculator

1. In the blue column on the left, click *Emissions & Billing, QA, Summary Reports, Certification and Under-Thresholds-Notification (UTN).*

Using the ECD page to run the EC

2. On the ARS Summary Data page on the Emissions & Billing tab, click *Emissions Calculation Details*.

Using the ECD page to run the EC

3. On the Emissions Calculator Details page:
   a. Click *Calculate* once.
   b. Click *Refresh Screen* until the calculations are 100% complete.

Emissions Calculator Details

Calculator Status
CALC_DONE: Emissions calculation succeeded.
#a Calculate   Refresh Screen **#b** Calc is 100% complete

Calculator Details

Filters: DEVICE -- PROCESS [ALL]   Pollutant [ALL]

LEVEL TYPE	DEVICE	PROCESS	POLLUTANT	MESSAGE
SRC	***	***	1,3,5 TRIGIY	******************************** 1,3,5 TRIGIY ********************************
PRO	1102	01	1,3,5 TRIGIY	---------- Begin 1102-01 1,3,5 TRIGIY ----------
PRO	1102	01	1,3,5 TRIGIY	TPUT = 10 GAL ; Emis Factor = 3 MCF

Using the ECD page to run the EC

4. When the EC completes its calculations, emissions calculations at all levels are displayed (i.e., facility/source, device and process) including throughputs, emission factors, reported emissions and control efficiencies.

Emissions Calculator Details

Calculator Status
CALC_DONE: Emissions calculation succeeded.
Calculate Refresh Screen   Calc is 100% complete

Calculator Details

Filters: DEVICE -- PROCESS [ALL]   Pollutant [ALL]

LEVEL TYPE	DEVICE	PROCESS	POLLUTANT	MESSAGE
SRC	***	***	1,3,5 TRIGIY	********************************** 1,3,5 TRIGIY **********************************
PRO	1102	01	1,3,5 TRIGIY	---------- Begin 1102-01 1,3,5 TRIGIY ----------
PRO	1102	01	1,3,5 TRIGIY	TPUT = 10 GAL; Emis Factor = 3 MCF
PRO	1102	01	1,3,5 TRIGIY	After unit standardization, emissions coming out of 1102-01 = .00401 LBs
PRO	1102	01	1,3,5 TRIGIY	Initial emissions = .00401
PRO	1102	01	1,3,5 TRIGIY	---->.00401 LBs is released as fugitive (No Streams)
PRO	1102	01	1,3,5 TRIGIY	--------- Total PRO 1102-01 LBs release: .00401 (0 from STACK; .00401 as FUG)

Using the ECD page to run the EC

5. The results may be filtered by device, process and pollutant using the dropdown lists.

Emissions Calculator Details

Calculator Status

CALC_DONE: Emissions calculation succeeded.

Calculate   Refresh Screen   Calc is 100% complete

Calculator Details

Filters:
DEVICE -- PROCESS   Pollutant
[ALL]   ▾   [ALL]   ▾

LEVEL TYPE	DEVICE	PROCESS	POLLUTANT	MESSAGE
SRC	***	***	1,3,5 TRIGIY	********************************** 1,3,5 TRIGIY **********************************
PRO	1102	01	1,3,5 TRIGIY	---------- Begin 1102-01 1,3,5 TRIGIY ----------
PRO	1102	01	1,3,5 TRIGIY	TPUT = 10 GAL; Emis Factor = 3 MCF
PRO	1102	01	1,3,5 TRIGIY	After unit standardization, emissions coming out of 1102-01 = .00401 LBs
PRO	1102	01	1,3,5 TRIGIY	Initial emissions = .00401
PRO	1102	01	1,3,5 TRIGIY	----->.00401 LBs is released as fugitive (No Streams)
PRO	1102	01	1,3,5 TRIGIY	--------- Total PRO 1102-01 LBs release: .00401 (0 from STACK; .00401 as FUG)

For EI and Air Reporting Switchboard Help

- Contact the facility-assigned compliance engineer. On the DNR's website, find the compliance engineer's contact information by using the AIR PERMIT SEARCH tool to locate the facility and select the DNR Air Contacts tab.

| General Facility Information | Facility Contacts | DNR Air Contacts | Permits and Permit Applications | Emission Inventory Reports | Industrial Monitoring Data |

  - OR -

- Email: DNRAMEmissionsInventory@wisconsin.gov