

WDEQ IMPACT Training

Instructions for creating an emissions inventory. This exercise will create an Emissions Inventory for the engine we added to the facility in the previous exercise.

Step 1: From the IMPACT Home Page select "Create an Emissions Inventory".

New Tasks
Select from the lists below to create a new task

Facility Management	Permitting
<input type="button" value="Make a Facility Inventory Change"/>	<input type="button" value="Create an NSR Permit Application"/>
<input type="button" value="Make a change to the Facility Contact(s)"/>	<input type="button" value="Create a Title V Permit Application"/>
Emissions Reporting	Compliance Reporting
<input type="button" value="Create an Emissions Inventory"/>	<input type="button" value="Create a Stack Test Report"/>
	<input type="button" value="Create a Compliance Report"/>

Step 2: Select your reporting year (2013), then click "create".

Create Another Emissions Inventory - Google Chrome

https://impactpub.stage.wyo.gov/_ADFv_.jsf?_afPfm=9&t=fred&_vir=/reports/cre

For reporting year :

This emissions inventory will be associated with the current facility inventory.

Important: To create an accurate emissions inventory with minimal errors, you must first update and reconcile all information within your facility inventory. All emissions inventories directly refer to information in your facility inventory. If you have not yet updated your facility inventory and ensured that the information contained within it is correct, do not proceed with creating an emissions inventory. Instead, review and correct your facility inventory information first.

For reporting year :

You are creating the first TV emissions inventory for the year 2013. This emissions inventory will be associated with the current facility inventory.

Important: To create an accurate emissions inventory with minimal errors, you must first update and reconcile all information within your facility inventory. All emissions inventories directly refer to information in your facility inventory. If you have not yet updated your facility inventory and ensured that the information contained within it is correct, do not proceed with creating an emissions inventory. Instead, review and correct your facility inventory information first.

Step 3: Click "Exclude/Include Emissions Units".

Step 4: Ensure that the "Detailed Emissions" box is checked for ENG001. For this exercise, if any other EUs are present, choose the "Did Not Operate" option. Click "Save" when finished. When completing Emission Inventories for your actual facilities, you will select the "Detailed Emissions" box for all sources that operated within the reporting year that are subject to reporting requirements.

Excluding & Including Emissions Units from Detailed Reporting

The **Detailed Emissions** column should be checked and process level emissions reporting is required unless the emission unit did not operate (had zero emissions) or emitted less than its reporting requirement. If either of these two conditions are true, click the appropriate reason in the last column to exclude the unit from the reporting requirements for this emissions inventory.

Caution: If the detailed emission reporting is specified for an emissions unit you are now choosing to exclude, any emissions information you have already entered for the unit will be lost.

		<input type="button" value="Mark All 'Detailed Emissions Reporting'"/>	<input type="button" value="Mark All 'Less Than Reporting Requirement'"/>	<input type="button" value="Mark All 'Did Not Operate'"/>
Emission Unit	Company Equipment ID	Detailed Emissions	Exclude Detailed Emissions Reporting	
ENG001	E1	<input checked="" type="checkbox"/>	<input type="radio"/> Less Than Reporting Requirement	<input type="radio"/> Did Not Operate
TNK001	TNK1	<input type="checkbox"/>	<input type="radio"/> Less Than Reporting Requirement	<input checked="" type="radio"/> Did Not Operate

Step 5: In the facility tree, select the **process** for ENG001.



Step 6: Click "Edit Material/Schedule/Seasons".

Step 7: Complete all fields in this section. The screen shot below indicates the data we will use for this unit for this exercise. Click "Save" when finished.

▼ **Material Information, Annual Average Operating Schedule & Throughput Percent**

Schedule/Material/Variables/Factors/Explanations contain Trade Secrets? No. Yes.

Maximum Hours Per Day:
 Maximum Days Per Week:
 Maximum Weeks Per Year:
 * Actual Hours Per Year:

* Winter (Jan-Feb, Dec)%:
 * Spring (Mar-May)%:
 * Summer (Jun-Aug)%:
 * Fall (Sep-Nov)%:

Variable Amount in Fuel Units & Meaning

The variables table is empty because there are no variables in the process.

Select Only One Material	Action	Throughput Units
<input type="button" value="select"/>	Fuel Input	6120 MILLION BTUS
<input type="button" value="select"/>	Natural Gas Burned	MILLION CUBIC FEET

▼ **Explanation**

To complete emissions reporting for this process, you have to provide values above for **Schedule**, **Season Percents** and **Material Throughput** in the units specified by **Units**. If there is a choice of more than one **Material**, you must select which is most appropriate, otherwise no action is needed on your part. The word pending appears each place a value is needed.

► **Explanation**

NOTE: To enter the fuel input, click "select" next to "Fuel". Only the "Fuel"/ "Input" OR the "Natural Gas Burned" can be entered.

Step 8: Click "Edit Emissions" at the bottom of the page.

Step 9: Enter criteria pollutant emissions by selecting the method from the dropdown menu, and then entering the hours uncontrolled and factors. The screen shot below indicates the data we will use for this unit for this exercise.

Criteria Air Pollutants/Other	Method Used	Hours Uncontrolled	Uncontrolled Emissions Factor (Lbs/Throughput Units)	Time-based Factor (LBS/Hour)	Emissions Reported			Units
					Fugitive Amount	Stack Amount	Total	
PM10 - (Includes Filterables + Condensibles) (PM<10 Microns)	Throughput-based factor ▼	<input type="text" value="0"/>	<input type="text" value="0.0194"/>					TONS ▼
PM2.5 - (Includes Filterables + Condensibles) (PM<2.5 Microns)	Throughput-based factor ▼	<input type="text" value="0"/>	<input type="text" value="0.0194"/>					TONS ▼
Formaldehyde	Time-based factor - Allowable ▼	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0.251"/>				TONS ▼
NOx - Nitrogen Oxides	Throughput-based factor ▼	<input type="text" value="0"/>	<input type="text" value="2.27"/>					TONS ▼
Pb - Lead	Emissions ▼				<input type="text" value="0"/>	<input type="text" value="0"/>		TONS ▼
SO2 - Sulfur Dioxide	Throughput-based factor ▼	<input type="text" value="0"/>	<input type="text" value="5.88E-04"/>					TONS ▼
VOC - Volatile Organic Compounds	Throughput-based factor ▼	<input type="text" value="0"/>	<input type="text" value="0.0296"/>					TONS ▼
Ammonia	Emissions ▼				<input type="text" value="0"/>	<input type="text" value="0"/>		TONS ▼

Step 10: Add a Hazardous Air Pollutant by clicking “Add Emission” in the bottom emissions table.

Hazardous Air Pollutants/Greenhouse Gases/Other	Method Used	Hours Uncontrolled	Uncontrolled Emissions Factor (Lbs/Throughput Units) (LB S/Hour)	Time-based Factor	Emissions
Select Pollutant					Fugitive Amount
<input type="button" value="Add Emission"/> <input type="button" value="Delete Selected Emission(s)"/> <input type="button" value="Printable view"/> <input type="button" value="Export to excel"/>					

Step 11: Choose a pollutant from the dropdown menu and enter emissions information (similar to criteria pollutants table). For this example, we will only add benzene (see emissions data in the screenshot below).

Hazardous Air Pollutants/Greenhouse Gases/Other	Method Used	Hours Uncontrolled	Uncontrolled Emission: Factor (Lbs/Throughput Units)
Select Pollutant			
<input type="checkbox"/> Benzene	Throughput-based factor	0	1.58E-03

Step 12: Add an explanation for emissions by clicking “add” in the explanation column. The emission factors in this example were taken from Table 3.2-3 of AP-42. Click “Save” after entering the explanation.

Total	Units	Explanation
	TONS ▼	<input type="button" value="add"/>
	TONS ▼	<input type="button" value="add"/>

Explanation/Justification for calculation

AP-42 Table 3.2-3



Step 13: Click "Save" at the bottom of the page to save the emissions data. Fugitive, stack, and total emissions should be automatically calculated for pollutants where throughput or time-based factors are used.

Criteria Air Pollutants/Other		Hours Uncontrolled	Uncontrolled Emissions Factor (Lbs/Throughput Units)	Time-based Factor (LBS/Hour)	Emissions Reported			Total Units	Explanation
Pollutant	Method Used				Fugitive Amount	Stack Amount	Total		
PM10 - (Includes Filterables + Condensibles) (PM<10 Microns)	Throughput-based factor	0	0.0194		0	0.059364	0.059364 TONS	AP-42 Table 3.2-3	
PM2.5 - (Includes Filterables + Condensibles) (PM<2.5 Microns)	Throughput-based factor	0	0.0194		0	0.059364	0.059364 TONS	AP-42 Table 3.2-3	
Formaldehyde	Time-based factor - Allowable	0	0	0.251	0	0.06275	0.06275 TONS	AP-42 Table 3.2-3	
NOx - Nitrogen Oxides	Throughput-based factor	0	2.27		0	0.69462	0.69462 TONS	AP-42 Table 3.2-3	
Pb - Lead	Emissions				0	0	0 TONS		
SO2 - Sulfur Dioxide	Throughput-based factor	0	5.88E-04		0	0.00179928	0.00179928 TONS	AP-42 Table 3.2-3	
VOC - Volatile Organic Compounds	Throughput-based factor	0	0.0296		0	0.090576	0.090576 TONS	AP-42 Table 3.2-3	
Ammonia	Emissions				0	0	0 TONS		

Printable view Export to excel

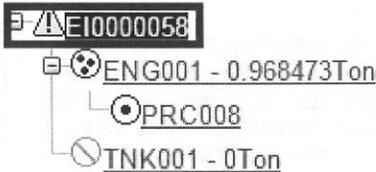
Following information was developed using Wyoming DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the Wyoming DEQ. You may modify these Wyoming DEQ-generated emissions to have more accurate information.

Hazardous Air Pollutants/Greenhouse Gases/Other		Hours Uncontrolled	Uncontrolled Emissions Factor (Lbs/Throughput Units)	Time-based Factor (LBS/Hour)	Emissions Reported			Total Units	Explanation
Pollutant	Method Used				Fugitive Amount	Stack Amount	Total		
Benzene	Throughput-based factor	0	0.00158		0	0.0048348	0.0048348 TONS	AP-42 Table 3.2-3	

Printable view Export to excel

**Note that a control efficiency of 90% (as was specified in the Facility Inventory for the Oxidation Catalyst control device) is automatically applied to the calculated NO_x emissions.

Step 10: Click on the EI in the Facility Tree



Then select "Validate".

Next, click in the Attachment ID column.

Exclude/Include Emissions Units (Validate)

Associate with Different Facility Inventory

Download/Print

Download/Print Trade Secret Version

Review and fix any errors.

Step 14: Click on "Submit" at the bottom of the page once validation is complete. You will be asked if you are authorized by law to sign the application.

Exclude/Include Emissions Units

Validate

Submit

Associate with Different Facility Inventory

Download/Print

Download/Print Trade Secret Version

I am authorized by law to electronically sign and attest to the accuracy of this submission.

Yes

No

Cancel

Step 15: Another pop-up box appears requiring that you attest to the accuracy of the inventory. You have the option to view what you are submitting. IMPACT compiles all of the information input into the inventory into a document. This can be saved for your records (can also save following submittal). When you are ready to submit, click "Yes" to proceed.

Are you sure you want to Submit the changes?

By completing and submitting this form, you are attesting to the following: For the period(s) checked, I affirm based on information and belief formed after reasonable inquiry, that all factual statements in this inventory are true, accurate and complete to the best of my knowledge, and that all judgments and estimates provided in this inventory have been made in good faith. I understand that the data provided in this document will be used by the Wyoming DEQ to calculate an emissions fee, which is required to be paid under W.S. 35-11-211 and Chapter 6, Section 3 of the Wyoming Air Quality Standards and Regulations, based on the tons of pollution emitted by the facility.

Yes

No

View What You are About to Submit

Step 16: Click "Submit" in the next pop-up window.

Submission may take several minutes depending on the amount of data being processed. If this submission requires an e-signature, a form will appear in this window allowing you to e-sign the submission. Upon successful e-signing, your submission will resume.

****Please click the submit button only once****

Submit

Cancel



Step 17: You will be asked to input your digital signature to complete the submittal.

[home] [sign out]

Apply Digital Signature

Your signature will be applied to the following documents:

- 1578894596-A0000523.zip

PIN:

Security Question: What is the color of your house?