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Maricopa.gov/AQ

Reporting Emissions from Woodworking

Emissions Inventory Help Sheet

Maricopa County Air Quality Department

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What to Report

Facilities with woodworking equipment must report emissions of particulate matter (PM) primary and PM₁₀ primary. Woodworking facilities that conduct surface coating or staining operations must also report volatile organic compound (VOC) and PM emissions from surface coating and solvent use (see Surface Coating and Solvent Cleaning Help Sheet at maricopa.gov/5628).

PM primary refers to all the particulate matter emissions (filterable and condensable) from an emissions process. PM₁₀ primary refers to all PM primary that measures less than 10 microns in diameter. PM₁₀ primary is a subset of PM primary.

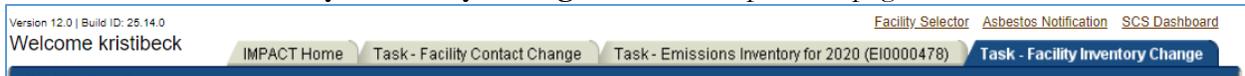
How to Report

This help sheet shows emissions inventory preparers how to accurately report emissions from woodworking operations in the AQD Online Portal. First, preparers will use the “Task-Facility Inventory Change” tab to structure the emission units, processes, control equipment, and release points. Then, preparers will use the “Task-Emissions Inventory” tab to enter the operating schedule, throughput, and emissions factors for each process.

Task – Facility Inventory Change

Step 1

Click on the **Task-Facility Inventory Change** tab at the top of the page.



Step 2

Emission Units

There should be one woodworking (WWE) emission unit to represent all of the woodworking equipment at the facility.

If the WWE emission unit is not in the facility inventory tree, click on the **Facility ID** at the top of the facility inventory tree on the left side of the page. Click **Create Emission Unit** at the bottom of the page.

Complete the required Emission Unit Information and click **Save**. The following screenshot shows an example of a wood working emission unit. When creating an emission unit, you must provide accurate information to describe the equipment at your facility.

Emissions Unit Information

AQD ID:

* Emission Unit Type: Woodworking Equipment [Help me select the Emission Unit Type](#)

AQD Description:

* Company Equipment ID: WW

* Company Equipment Description: Saws, routers, sanders, planers, presses

* Operating Status: Operating

* Quantity: 26
Enter a value greater than 1 only in the scenario where you have multiple "identical" emission units that have the same emissions process and whose air flow follows the same path.

* Initial Construction Commencement Date: 3/24/2000

* Initial Operation Commencement Date: 3/24/2000

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

▼ Emission Unit Type Specific Information

* Equipment Type: Other

* Power Rating (hp) greater than 5: Yes

▼ Permitted Emissions

This table is populated by AQD staff based on established/permitted emission limits. It is shown here for informational purposes only.

Pollutant	Potential Emissions		Allowable Emissions		Comments
	Lbs/Hour	Tons/Year	Lbs/Hour	Tons/Year	
<div style="display: flex; justify-content: center; gap: 10px;"> <input type="button" value="Printable view"/> <input type="button" value="Export to excel"/> </div>					

The **initial construction commencement date** is the date when construction or installation of the emission unit began.

The **initial operation commencement date** is the date when the facility began operating the emission unit.

Step 3

Emissions Processes

The WWE emission unit will have one emissions process for each type of wood waste handling process at the facility. Use the following source classification code(s) (SCC) depending on the type of wood waste handling processes:

- 30788801 for baghouses or cyclones that are vented outdoors
- 30703001 for wood waste that is discharged into a bin located or vented outdoors
- 30703002 for loadout (wood waste that is emptied from the bin into another container or haul truck). If your sawdust bin is covered and the covered waste container is hauled away, there are no loadout emissions.

If the WWE emission unit does not have the applicable emissions process attached, click on the **Emission Unit ID (WWE001)** in the facility inventory tree on the left side of the screen. Click **Create Emissions Process** at the bottom of the screen.

Emissions Unit Information

AQD ID: WWE001

Emission Unit Type: Woodworking Equipment [Help me select the Emission Unit Type](#)

AQD Description:

Company Equipment ID: WW

Company Equipment Description: Routers, Sanders, Saws, Presses, Planers

Operating Status: Operating

Quantity: 36
Enter a value greater than 1 only in the scenario where you have multiple "identical" emission units that have the same emissions process and whose air flow follows the same path.

Initial Construction Commencement Date: 3/24/2000

Initial Operation Commencement Date: 3/24/2000

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

Emission Unit Type Specific Information

Equipment Type: Sander

Power Rating (hp) greater than 5: Yes

Permitted Emissions

This table is populated by AQD staff based on established/permitted emission limits. It is shown here for informational purposes

Pollutant	Potential Emissions		Allowable Emissions	
	Lbs/Hour	Tons/Year	Lbs/Hour	Tons/Year

Printable view Export to excel

Edit Create Cloned Emissions Unit

Create Emissions Process

Enter the Company Process Description and the applicable Source Classification Code (see page 5 for a list of source classification codes). Click **Save**.

Process Information

Process ID:

Process Name:

Company Process Description:

* Source Classification Code (SCC):

Enter as 1-22-333-44 or 12233344

Control Equipment

If wood waste is vented to a baghouse and/or cyclone, each control equipment must be associated with the emissions process it controls. If there are multiple controls on an emissions process, they must be associated with the emissions process so that the air flow in the facility inventory is the same as the air flow at the facility. Each control equipment must have the design control efficiency, operating control efficiency, and capture efficiency listed for PM primary and PM₁₀ primary. Refer to the manufacturer’s specification sheet to determine design and operational control efficiency for control equipment. Capture efficiency is 100%.

If the control equipment is not in the facility inventory tree, click on the **Facility ID** at the top of the facility inventory tree on the left side of the page. Click **Create Control Equipment** at the bottom of the page.

Expand Facility Tree

- ⊖ F038071
- ⊕ FUG001
- ⊕ FUG002
- ⊕ FUG003
- ⊕ INC001
- ⊕ INC002
- ⊕ INC003
- ⊕ INC004

Facility Information

Facility ID: F038071

Facility Name: Facility Creation Request Test 1

Facility Description:

Facility Class: Minor

Facility Type: Other (Miscellaneous)

Associated Monitor Group ID:

Operating Status: Operating AFS:

Number of Employees:

Department:

Complete the Control Equipment Information and click **Save**.

Control Equipment Information

AQD ID:

* Control Equipment Type:

AQD Description:

* Company Control Equipment ID:

* Company Control Equipment Description:

* Operating Status:

Initial Installation Date:

Manufacturer Name: Model Name and Number:

Control Equipment Type Specific Information

Filter/Baghouse Type:

Pressure Type: positive negative

Fabric Cleaning Mechanism:

Operating Pressure Drop Range (inches of water):

Lime Injection/fabric Coating Agent: Yes No

Lime Injection/Fabric Coating Agent Type:

Lime Injection/Fabric Coating Feed Rate - specify units:

Bag Leak Detection System: Yes No

Inlet Gas Temp (F):

Number of Bags:

Sec. Outlet Gas Temp (F):

Inlet Gas Flow Rate (dscfm):

Outlet Gas Flow Rate (dscfm):

Pollutants Controlled

Explanation

*You must specify at least one pollutant in the Pollutants Controlled table

Select All | Select None

Select	Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
<input type="checkbox"/>	PM Primary (includes filterables > 10 microns + condensibles)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	PM10 Primary (includes filterables + condensibles)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Add Pollutant | Delete Selected Pollutants | Printable view | Export to excel

To associate the control equipment, click on the emissions process it controls (**PRC006**), click **Associate Existing Control Equipment**.

Collapse Facility Tree

- [-] F038071
 - [+] CTW001
 - [-] PRC005
 - [+] FUG001
 - [-] PRC002
 - [+] FUG002
 - [-] PRC003
 - [+] FUG003
 - [-] PRC004
 - [+] INC001
 - [+] INC002
 - [-] PRC001
 - [+] INC003
 - [+] INC004
 - [+] WVE001
 - [-] **PRC006**
 - [+] Disassociated CEs
 - [+] BAG001
 - [+] FDS001

Process Information

Process ID: PRC006

Process Name:

Company Process Description: Wood waste vented to baghouse

Source Classification Code (SCC): 3-07-888-01

SCC Level 1 Description: 3:Industrial Processes

SCC Level 2 Description: 07:Pulp and Paper and Wood Products

SCC Level 3 Description: 888:Fugitive Emissions

SCC Level 4 Description: 01:Specify in Comments Field

[SCC reference information](#)

Select the **Control Equipment ID** and click **Save**.

Step 4

Release points

Release points are required for stack emissions at any facility that emits more than 10 tons of any pollutant annually.

To add a release point to an uncontrolled process, click on the **Emissions Process ID (PRC006)** in the facility inventory tree on the left side of the screen click **Create Emissions Process** at the bottom of the screen.

To add a release point to a controlled process, click on the **Control Equipment ID (BAG001)** in the facility inventory tree on the left side of the screen click **Create and Associate Release Point** at the bottom of the screen.

Manufacturer Name: _____ Model Name and Number: _____

Control Equipment Type Specific Information

Filter/Baghouse Type :
 Pressure Type :
 Fabric Cleaning Mechanism :
 Operating Pressure Drop Range (inches of water) :
 Lime Injection/fabric Coating Agent :
 Lime Injection/Fabric Coating Agent Type :
 Lime Injection/Fabric Coating Feed Rate - specify units :
 Bag Leak Detection System :
 Inlet Gas Temp (F) :
 Number of Bags :
 Sec. Outlet Gas Temp (F) :
 Inlet Gas Flow Rate (dscfm) :
 Outlet Gas Flow Rate (dscfm) :

Pollutants Controlled

Explanation

*You must specify at least one pollutant in the Pollutants Controlled table

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)
PM Primary (includes filterables > 10 microns + condensibles)	90	90	98
PM10 Primary (includes filterables + condensibles)	90	90	98

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Edit Delete Create Cloned Control Equipment

Create And Associate Subsequent Control Equipment **Create And Associate Release Point**

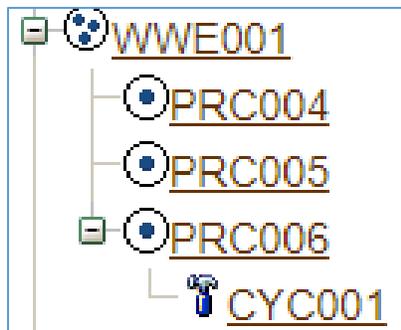
Associate Existing Subsequent Control Equipment Associate Existing Release Point

Disassociate Subsequent Control Equipment Disassociate Release Point

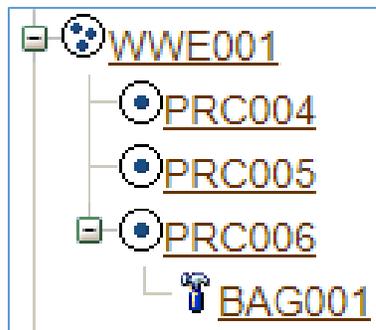
Complete the Release Point Information, click **Save**.

Examples

This facility has woodworking equipment that is vented to a bin that is vented outdoors (PRC004). This facility transfers wood waste from the bin to another container for disposal (PRC005). This facility also has woodworking equipment that is vented to a cyclone (PRC006/CYC001).



This facility also has woodworking equipment that is vented to a bin that is vented outdoors (PRC004). This facility transfers wood waste from the bin to another container for disposal (PRC005). This facility also has woodworking equipment that is vented to a cyclone (PRC006/BAG001).



Step 5

Validate Facility Inventory Changes

Once you have finished adding emissions units, processes and control devices, you must validate the “Task – Facility Inventory Change.” Click on the **Facility ID** at the top of the Facility Inventory Tree. Click **Validate** at the bottom of the Facility Information screen.

Facility Information

Facility ID: F006332
 Facility Name: AQ Production Validation
 Facility Description: Record created for validation of production environment.
 Facility Class: Minor
 Facility Type: Other (Unknown)
 Associated Monitor Group ID:
 Operating Status: Operating AFS:
 Number of Employees:
 Department:

▶ Annual Administrative Fee
 ▶ Location
 ▶ NAICS

Buttons: Edit, **Validate**, Submit, Download/Print Detail, Print Facility Tree
 Buttons: Create Emissions Unit, Create Control Equipment, Create Release Point

If there are errors that need to be corrected, a pop-up window will appear. Click on the error message to be directed to the screen that contains the error that must be corrected. Correct all errors and repeat Step 5 to validate the facility inventory changes.



Task – Emissions Inventory for Reporting Year

Step 1

Click on the **Task-Emissions Inventory** tab at the top of the page.



Step 2

Click on the process attached to the WWE emission unit (**PRC006**) in the emissions inventory tree on the left side of the screen, click **Edit Material/Schedule/Seasons** in the middle of the screen.

1. Click the triangle next to the Process ID at the top of the page to see the SCC and the Company Process Description.
2. In the Material Information Section, enter the **maximum number of hours per day**, **maximum number of days per week**, and the **maximum number of weeks per year** the emissions process operated.
3. Enter the **actual hours** of operation for the emissions process.

- Click **select** for the option with ‘Tons’ as the throughput units. Enter **throughput** (total amount) of wood waste produced.
- Click **Save**.

Process & Emissions Detail

▼ PRC006: Source Classification Code (SCC) is 3-07-888-01

SCC Level 1: 3: Industrial Processes
 SCC Level 2: 07: Pulp and Paper and Wood Products
 SCC Level 3: 888: Fugitive Emissions
 SCC Level 4: 01: Specify in Comments Field

Process Name:
 Company Process Description: Wood waste vented to baghouse

▼ Material Information, Annual Average Operating Schedule & Throughput Percent

Maximum Hours Per Day:	24	* Winter (Jan-Feb, Dec)%:	25
Maximum Days Per Week:	7	* Spring (Mar-May)%:	25
Maximum Weeks Per Year:	52	* Summer (Jun-Aug)%:	25
* Actual Hours:		* Fall (Sep-Nov)%:	25

Select Only One Material Action Throughput Confidential Units

select	Material Processed	<input type="checkbox"/>	1000 BOARD FEET
select	Product Produced	<input type="checkbox"/>	TONS

Variable Amount in Material Units & Meaning
 The variables table is empty because there are no variables in the process.

Caution: Changing the material will re-initialize the Process Emissions data.

▼ 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.

Save Reset Schedule/Seasons Cancel

Step 3

Click **Edit Emissions** at the bottom of the screen.

▼ Process Emissions

Criteria Air Pollutants/Other	Method Used	Hours Uncontrolled	Uncontrolled Emissions Factor (Lbs/Throughput Units)	Time-based Factor (LBS/Hour)	Emissions Reported			
					Fugitive Amount	Stack Amount	Total	Units Ex
Pollutant								
PM Primary (includes filterables > 10 microns + condensibles)	Throughput-based factor	0	pending					TONS
PM10 Primary (includes filterables + condensibles)	Throughput-based factor	0	pending					TONS
PM2.5 Primary (includes filterables + condensibles)	Throughput-based factor	0	pending					TONS
CO - Carbon Monoxide	Throughput-based factor	0	pending					TONS
NOx - Nitrogen Oxides	Throughput-based factor	0	pending					TONS
SO2 - Sulfur Dioxide	Throughput-based factor	0	pending					TONS
VOC - Volatile Organic Compounds	Throughput-based factor	0	pending					TONS
Ammonia	Throughput-based factor	0	pending					TONS

Printable view Export to excel

The following information was developed using (Arizona) DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the (Arizona) DEQ. You may modify these (Arizona) DEQ calculations if you have more accurate information.

Hazardous Air Pollutants/Greenhouse Gases/Other	Method Used	Hours Uncontrolled	Uncontrolled Emissions Factor (Lbs/Throughput Units)	Time-based Factor (LBS/Hour)	Emissions Reported			
					Fugitive Amount	Stack Amount	Total	Units Ex
Pollutant								

Printable view Export to excel

Edit Emissions

Reporting Criteria Air Pollutant Emissions

1. Enter the **Hours Uncontrolled** for each pollutant. If emissions of a pollutant are not controlled, then hours uncontrolled should be equal to actual hours. If emissions of a pollutant were controlled continuously throughout the reporting year, enter zero “0” for hours uncontrolled.
2. Enter **Uncontrolled Emissions Factors** for each pollutant. For pollutants not associated with the woodworking process (PM_{2.5} primary, carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds, and ammonia) enter zero “0” as the emissions factor.

Process Type	Uncontrolled Emissions Factors		Emissions Factor (EF) Units
	PM Primary	PM ₁₀ Primary	
Baghouse or Cyclone operations	100	100	lb/ton total wood waste hauled away
Wood waste storage bin vent	1.0	0.58	lb/ton total wood waste hauled away
Wood waste storage bin loadout	2.0	1.2	lb/ton total wood waste hauled away

Process Emissions

Criteria Air Pollutants/Other	Method Used	Uncontrolled Emissions Factor		Time-based Factor (LBS/Hour)	Emissions Reported			Units	Explanation
		Hours Uncontrolled	(Lbs/Throughput Units)		Fugitive Amount	Stack Amount	Total		
PM Primary (includes filterables > 10 microns + condensibles)	Throughput-based factor	2000	100		1.37034	0		TONS	add
PM10 Primary (includes filterables + condensibles)	Throughput-based factor	2000	100		1.37034	0		TONS	add
PM2.5 Primary (includes filterables + condensibles)	Throughput-based factor	0	0		0	0		TONS	add
CO - Carbon Monoxide	Throughput-based factor	0	0		0	0		TONS	add
NOx - Nitrogen Oxides	Throughput-based factor	0	0		0	0		TONS	add
SO2 - Sulfur Dioxide	Throughput-based factor	0	0		0	0		TONS	add
VOC - Volatile Organic Compounds	Throughput-based factor	0	0		0	0		TONS	add
Ammonia	Throughput-based factor	0	0		0	0		TONS	add

Printable view Export to excel

The following information was developed using (Arizona) DEQ-generated pollutant emission calculations. The values may be provided to USEPA by the (Arizona) DEQ. You may modify these (Arizona) DEQ-generated emission calculations if you have more accurate information.

Hazardous Air Pollutants/Greenhouse Gases/Other	Method Used	Uncontrolled Emissions Factor		Time-based Factor (LBS/Hour)	Emissions Reported			Units	Explanation
		Hours Uncontrolled	(Lbs/Throughput Units)		Fugitive Amount	Stack Amount	Total		
Select Pollutant									

Add Emission Delete Selected Emission(s) Printable view Export to excel

Save Cancel

Step 4

Click **Save** at the bottom of the screen. The AQD Online Portal will calculate emissions based on the throughput, the emissions factors provided, and the control efficiency specified for control equipment associated with the emissions process.

Step 5

Refer to other process specific help sheets or the emissions inventory instructions to report emissions from other types of processes at the facility. When emissions have been reported for each process, refer to Task 5 on page 26 of the Emissions Inventory Instructions to validate and submit the emissions inventory. The process specific help sheets and the Emissions Inventory Instructions are available at maricopa.gov/5628.

Example

Emissions from a woodworking operation that vents sawdust to a cyclone

Process & Emissions Detail

▶ PRC006: Source Classification Code (SCC) is 3-07-888-01

▼ Material Information, Annual Average Operating Schedule & Throughput Percent

Maximum Hours Per Day: 24	Winter (Jan-Feb, Dec)%: 25
Maximum Days Per Week: 7	Spring (Mar-May)%: 25
Maximum Weeks Per Year: 52	Summer (Jun-Aug)%: 25
Actual Hours: 2,080.00	Fall (Sep-Nov)%: 25

Select Only One Material	Action	Throughput	Confidential	Units
Material	Processed		<input type="checkbox"/>	1000 BOARD FEET
selected	Product Produced	250	<input type="checkbox"/>	TONS

Variable Amount in Product Units & Meaning

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

▶ Explanation

▶ Explanation

[Edit Material/Schedule/Seasons](#)

▼ Process Emissions

Criteria Air Pollutants/Other	Method Used	Hours Uncontrolled	Uncontrolled Emissions Factor (Lbs/Throughput Units)	Time-based Factor (LBS/Hour)	Emissions Reported			Explanation
					Fugitive Amount	Stack Amount	Total	
PM Primary (includes filterables > 10 microns + condensibles)	Throughput-based factor Uncontrolled factor input by user.	0	100		2.5	0	2.5 TONS	
PM10 Primary (includes filterables + condensibles)	Throughput-based factor Uncontrolled factor input by user.	0	100		2.5	0	2.5 TONS	
PM2.5 Primary (includes filterables + condensibles)	Throughput-based factor Uncontrolled factor input by user.	0	0		0	0	0 TONS	
CO - Carbon Monoxide	Throughput-based factor Uncontrolled factor input by user.	0	0		0	0	0 TONS	
NOx - Nitrogen Oxides	Throughput-based factor Uncontrolled factor input by user.	0	0		0	0	0 TONS	
SO2 - Sulfur Dioxide	Throughput-based factor Uncontrolled factor input by user.	0	0		0	0	0 TONS	
VOC - Volatile Organic Compounds	Throughput-based factor Uncontrolled factor input by user.	0	0		0	0	0 TONS	
Ammonia	Throughput-based factor Uncontrolled factor input by user.	0	0		0	0	0 TONS	

[Printable view](#) [Export to excel](#)

Questions

If you have questions or are experiencing issues with the AQD Online Portal, please contact 602-506-6790 or EmissionsInventory@maricopa.gov. Please provide a brief explanation of the question or problem you are encountering and include a screenshot if contacting us via email. If you are encountering errors or malfunctions in the portal, include the following information in your message: the date and time when the error occurred, the browser you were using when the error occurred, and the type of device you were using when the error occurred (i.e., computer, tablet, phone, etc.).

Additional Resources

How to create a Shared CROMERR Services (SCS) electronic signature to access the AQD Online Portal: maricopa.gov/DocumentCenter/View/56270

Emissions inventory instructions and other process specific help sheets: maricopa.gov/5628

Instructions for permit applications, compliance reports, asbestos notifications, performance test protocols, and other documents that can be submitted through the AQD Online portal:
maricopa.gov/1820