

INSTRUCTIONS

FOR REPORTING 2018

ANNUAL AIR POLLUTION EMISSIONS

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Copies of this document, related forms and other reference materials are available online at our web site: https://www.maricopa.gov/2648/Emissions-Inventory-Instructions-Help-Sh

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WHAT'S NEW FOR 2018?

Miscellaneous:

• Emissions fees for Title V facilities: In accordance with Maricopa County Air Pollution Control Rule 280 (Fees), the 2018 annual emission fee for Title V sources is \$44.60/ton. NOTE: Only emissions from Title V sources (those whose air quality permit numbers have a "V" prefix) are subject to this annual emissions fee.

I. INTRODUCTION

An annual emissions inventory is a document submitted by a business that: (1) lists all processes emitting reportable air pollutants and (2) provides details about each of those processes. Submitting the emissions inventory report is required as a condition of your Maricopa County Air Quality Permit. A separate emissions report is required for each business location with its own air quality permit.

Follow these steps to complete your 2018 Maricopa County emissions inventory:

STEP 1: Determine which forms are needed for your business. There are eight different forms available, but not all are required for every type of business. For most permitted sources, the packet you received from us contains the necessary preprinted forms based on your site's most recent emissions inventory.

- 1. Business Form: Contains general contact information about the permitted site. This form is required for all businesses.
- 2. Stack Form: Only required if your business location annually emits over 10 tons of a single pollutant (CO, VOC, NO_x, PM₁₀, or SO_x). A "stack" is defined as a stack, pipe, vent or opening through which a significant percentage of emissions (from one or more processes) are released into the atmosphere. See the "Stack Form Instructions" on page 9 for specific requirements.
- Control Device Form: Required only if there is one or more emission control devices used at the 3. business location.
- General Process Form and 4.
- Either or both will be required for all businesses. **Evaporative Process Form:** 5.
- Off-Site Recycling/Disposal Form: Required if you want to claim off-site recycling or disposal. 6.
- Emission Factor Calculations: Required as attachment for each process for which you calculated your 7. own emission factors.
- Data Certification Form or Data Certification/Fee Calculation Form: Only those major sources with 8. a Title V permit are required to pay annual emissions fees, and thus need to use the Data Certification/Fee Calculation Form. All other sources use the Data Certification Form.

STEP 2: Complete the applicable forms. Verify all preprinted information, and make corrections where necessary. When making corrections, strike out the preprinted data and write in corrections beside it. Please make all changes readily noticeable. Detailed information on how to complete the most common forms is included in this document. The packet you received also contains information about other resources (workshops, one-on-one assistance, etc.) available to help you in completing the necessary forms.

STEP 3: Make a copy of your completed emissions inventory report. Make sure to KEEP COPIES of all forms submitted and copies of all records and calculations used in completing the forms. Air pollution control regulations require that you keep all documentation for at least FIVE YEARS at the location where pollution is being emitted.

STEP 4: Make sure the Data Certification Form (or Data Certification/Fee Calculation Form for Title V sources) is signed by a company representative. Include your air quality permit number on all correspondence and applicable checks submitted with your report. Return the original, signed copy of your annual emission report, with payment for any applicable emission fees to:

> Maricopa County Air Quality Department Emissions Inventory Unit 3800 North Central Avenue, Suite 1400 Phoenix, AZ 85012

II. REPORTING REQUIREMENTS

POLLUTANTS TO BE REPORTED:

Your emissions inventory must include your business's emissions of the following air pollutants:

CO = Carbon monoxide

 NO_x = Nitrogen oxides

 PM_{10} = Particulate matter less than 10 microns

 $SO_x = Sulfur oxides$

VOC = Volatile organic compounds *

HAP&NON = Hazardous Air Pollutant (HAP) that is also NOT a volatile organic compound (VOC)**

NH_x = Ammonia and ammonium compounds

Pb = Lead

- * A *volatile organic compound (VOC)* is defined as any compound of carbon that participates in atmospheric photochemical reactions. This definition *excludes*: carbon monoxide, carbon dioxide, acetone, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, as well as certain other organic compounds. (See Maricopa County Air Pollution Control Rule 100, Sections 200.129 and 200.80 for a full definition.)
- ** *HAP&NON:* Usage of certain materials that are: (1) a Hazardous Air Pollutant (HAP) **and** (2) **not** also a VOC (that is, not also an ozone precursor) should also be reported if:
- (a) your site is subject to a Federal MACT (Maximum Achievable Control Technology) standard or
- (b) your air quality permit contains specific quantitative limits for HAP emissions.

The most common materials categorized as "HAP&NON" include:

- methylene chloride (dichloromethane)
- perchloroethylene
- 111-trichloroethane (111-TCA or methyl chloroform)
- hydrochloric acid
- hydrofluoric acid

NOTE: HAPs that are also considered volatile organic compounds are reported as <u>VOC</u>.

EMISSION CALCULATION METHOD HIERARCHY:

When preparing emission information for your report, the most accurate method for calculating **actual** emissions must be used. The hierarchy listed below outlines the preferred methods for calculating emission estimates (taken from County Rule 280, Section 304.1).

- (1) Whenever available, emissions estimates should be calculated from continuous emissions monitors certified under 40 CFR Part 75, Subpart C, or data quality assured pursuant to Appendix F of 40 CFR, Part 60.
- (2) When sufficient data obtained using the methods described in paragraph 1 is not available, emissions estimates should be calculated from source performance tests conducted pursuant to Rule 270 in Maricopa County's Air Pollution Control Rules and Regulations.
- (3) When sufficient data obtained using the methods described in paragraphs 1 or 2 is not available, emissions estimates should be calculated from material balance using engineering knowledge of the process.
- (4) When sufficient data obtained using the methods described in paragraphs 1 through 3 is not available, emissions estimates shall be calculated using emissions factors from EPA Publication No. AP-42 "Compilation of Air Pollutant Emission Factors," Volume I: Stationary Point and Area Sources.
- (5) When sufficient data obtained using the methods described in paragraphs 1 through 4 is not available, emissions estimates should be calculated by equivalent methods supported by back-up documentation that will substantiate the chosen method.

REPORTING FORMS:

- Some preprinted information on your report may be different from last year's version. Please review the enclosed forms carefully, and <u>VERIFY THOROUGHLY</u> that the information you provide on all reporting forms match the information presented on the preprinted forms from MCAQD.
- Many of our reporting forms have changed in past years. If you develop your own forms, or a computerized reproduction of our forms, the forms used *must* conform to the current information requirements and FORMAT as supplied on our preprinted forms for 2018. "Homemade" reporting forms that vary significantly from the preprinted forms sent to you will *not* be accepted.

NON-OPERATIONAL FACILITIES:

• Any facility that has been issued an air quality permit, but that did NOT operate at any time during 2018, must still respond in writing to this request for annual emissions information, as a condition of its air quality permit. Please provide ALL information requested on both the "Business Form" and the "Data Certification Form", and submit these forms, along with a letter certifying that there were no operations at the facility during calendar year 2018, by the due date shown on the Business Form.

III. CONFIDENTIALITY OF DATA SUBMITTED

Information submitted in your annual emissions reports must be made available to the public unless it meets certain criteria described in Arizona Revised Statutes and Maricopa County Rules. Applicable excerpts concerning confidentiality of data are reproduced below.

A.R.S. § 49-487 D. ...the following information shall be available to the public:...

2. The chemical constituents, concentrations and amounts of any emission of any air contaminant. ...

MARICOPA COUNTY AIR POLLUTION CONTROL RULES AND REGULATIONS, Rule 100:

§ 200.126 TRADE SECRETS - Information to which all of the following apply:

- A person has taken reasonable measures to protect from disclosure and the person intends to continue to take such measures.
- b. The information is not, and has not been, reasonably obtainable without the person's consent by other persons, other than governmental bodies, by use of legitimate means, other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding.
- c. No statute, including ARS §49-487, specifically requires disclosure of the information to the public.
- d. The person has satisfactorily shown that disclosure of the information is likely to cause substantial harm to the business's competitive position.

§ 402 CONFIDENTIALITY OF INFORMATION:

402.2 Any records, reports or information obtained from any person under these rules shall be available to the public ... unless a person:

- a. Precisely identifies the information in the permit(s), records, or reports which is considered confidential.
- b. Provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets as defined in Section 200.107 of this rule.

For emissions inventory information to be deemed confidential, the following steps must be followed:

- Specific data which you request be held confidential must be identified by marking an "X" in the corresponding gray confidentiality box(es) on the relevant report forms.
- Provide a written explanation which gives factual information satisfactorily describing why releasing this information could cause substantial harm to the business's competitive position.
- Use the gray-shaded boxes on the reporting forms to indicate which data are to be held confidential. Do NOT stamp "Confidential", highlight data, or otherwise mark the page.

NOTE: No data can be held confidential without proper justification. We will reply in writing to all requests for confidentiality, detailing which individual data elements for each process have been deemed confidential.

IV. HELPFUL HINTS AND INFORMATION

Be sure to verify all preprinted information on forms. If any information is incorrect or blank, please provide correct information. Making a change on the Business Form will **NOT** transfer the permit ownership or location. You must contact the Department's Engineering & Permitting Division at (602) 506-6702 to accomplish this.

<u>WHAT IS A PROCESS</u>? A *process* is a business activity at your location that emits one or more of the pollutants listed on page 3, and has only *one* material type as input and *one* operating schedule. For each applicable process at your business, you must assign a unique Process ID number to differentiate each process.

PROCESSES AND MATERIALS THAT DO **NOT** HAVE TO BE REPORTED:

- Welding.
- Acetone usage.
- Fuel use for forklifts or other vehicles. (Note: Fuel use in *non-vehicle* engines *is* reportable.)
- Soil remediation activities. (Note: Other periodic reporting requirements may exist; consult your permit.)
- Storage emissions from fuels or organic chemicals in any tank with a capacity of 250 gallons or less.
- Storage emissions of diesel and Jet A fuel in underground tanks of any size.
- Storage emissions of diesel and Jet A fuel in aboveground tanks, with throughput < 4,000,000 gal/yr.
- Routine pesticide usage, housekeeping cleaners, and routine maintenance painting at your facility.

Please group all similar equipment and materials together before applying the following limitations:

• Materials with usage of less than 15 gallons or 100 pounds per year.

GROUPING MATERIALS AND/OR EQUIPMENT UNDER ONE PROCESS ID:

You can group together under one process ID:

- All internal combustion engines *less than 600 hp* if they burn the same fuel and have similar operating schedules.
- All external combustion equipment (boilers, heaters) with a capacity of *less than 10,000,000 Btu* per hour if they burn the same fuel and have similar operating schedules.
- All similar evaporative materials with similar emission factors that have similar operating schedules and process descriptions. For example, group low-VOC red paint, green paint and white paint together as one material: "Paint: Low-VOC." Do *not* group dissimilar materials together, such as thinners and paints. Attach documentation (see example, p. 20) showing how the grouped emission factor was determined.
- All underground tanks with the same fuel and same type of vapor recovery system.

ASSIGNING IDENTIFICATION NUMBERS (IDs):

Unique IDs are required for the following report elements: Stacks, Control Devices and Processes. For processes, that means a process ID number may be used only once on each General Process form and for each material reported on the Evaporative Process Forms.

These numbers are usually assigned by the person who prepares the original report. If you are adding a new item to a preprinted report, assign a number not already in use. Once an ID number is assigned, continue using the same number for that item each year. If that item is no longer reportable, mark it with 'DELETE' and return the preprinted form with a brief explanation. Do not use that ID number again.

INDUSTRY-SPECIFIC INSTRUCTIONS: Additional help sheets, detailed examples, and special instructions are available for a number of specific processes or industries listed below. To get copies of any of these documents, please call (602) 506-6790, or visit our web site at: https://www.maricopa.gov/2648/Emissions-Inventory-Instructions-Help-Sh

Bakeries

Natural Gas Boilers/Heaters

• Using EPA's TANKS 4.09d Program

• Concrete Batch Plants

• Polyester Resin

• Vehicle Refinishing

• Fuel Storage and Handling

• Printing Plants

• Vehicle Travel on Unpaved Roads

• Incinerators and Crematories

• Roofing Asphalt

Woodworking

• Lg. Aboveground Storage Tanks • Sand and Gravel Plants

COMMONLY USED CONVERSION FACTORS:

1 gram/liter	= 0.00834 lbs/gal	1 foot	=	0.0001894 mile
1 liter	= 0.2642 gallon (US)	1 square foot	=	0.000022957 acre
1 therm	= 0.0000952 MMCF	1 pound	=	0.0005 ton
NOTE:	MM = 1,000,000	Example: $MMCF = 1,000,00$	00 cu	ıbic feet
	M = 1,000	Example: $MGAL = 1,000 \text{ ga}$	allon	.S

ADDITIONAL RESOURCES AND ASSISTANCE:

The Maricopa County Emissions Inventory web site at: https://www.maricopa.gov/2651/Other-Inventory-Resources contains additional reference materials, such as:

- blank copies of most emissions reporting forms.
- an updated list of emission factors for a large number of industrial processes, including SCC codes.
- a list of Tier Codes for industrial processes.
- detailed help sheets for a number of specific industries or processes.

To receive any of the above materials by fax or mail, or for additional information or assistance in how to calculate and report your emissions, please call us at (602) 506-6790 or email at EmissionsInventory@maricopa.gov.

V. INSTRUCTIONS AND EXAMPLES FOR COMPLETING EMISSIONS REPORTING FORMS

Business Form Instructions

Verify all preprinted information, and make corrections where necessary. When making corrections, strike out the preprinted data and write in corrections beside it. Please make all changes readily noticeable.

NOTE: Making a change on the Business Form will **NOT** transfer the permit ownership or location. You must contact the Department's Engineering & Permitting Division at (602) 506-6702 to accomplish this.

Data fields:

- 6 <u>Number of employees</u>: This should be the annual average number of full-time equivalent (FTE) employee positions *at this business location*.
- 9 NAICS Code: This 5- or 6-digit North American Industrial Classification System (NAICS) code has been introduced to replace the 4-digit Standard Industrial Classification (SIC) codes. Please list the primary and secondary NAICS codes for your business, if known. (Consult our website, at: https://www.maricopa.gov/2651/Other-Inventory-Resources, for a link to a full list of NAICS codes.)
- 10 <u>Preparer of the Inventory</u> (primary contact for technical questions concerning this report): This should be the person who knows the most about the data in the report. If this person has an e-mail address used for business purposes, please provide it.
- 11 Who should receive the Annual Emissions Inventory Form next year?: This should be a person who is directly employed with the business. This person should not be a consultant for the business.

Stack Form Instructions

A "stack" is defined as a **stationary** stack, pipe, vent or opening through which a significant percentage of emissions (from one or more processes) are released into the atmosphere (with or without a control device).

NOTE: Stack information is required only if your business location annually emits over 10 tons of any one individual pollutant. If so, you must complete a Stack Form for:

- each stack connected to a control device.
- any stack that discharges annually more than 5 tons of combined pollutant emissions (such as a paint booth exhaust).

EXAMPLE Stack Form Information:

1	2	3	4	5a (OR 5b	6a O	R 6b	& 6c	7						
Stack	Stack Type	Stack	Exit Gas	Velocity	Flow Rate	Diameter	Length / Width		Length / Width		Length / Width		er Length / W		Stack Name/Description. Include lat/long
ID	Code*	Height**	Temperature	feet/sec	acfm	inside inch	inside	inch	coordinates of stack (in decimal degrees)						
1	W	<i>30</i> ft	90 °F		20,000	36			paint booth Lat: N33.5277						
1	W	<i>30</i> It	<i>90</i> 1		20,000	30			Long: W112.2626						
2	V	14 ft	200 °F		19,186	40			thermal oxidizer, Bldg. 2						
			200 F						Lat:N33.5259 Long:W112.2613						

* Stack Type Codes:

V = Vertical unobstructed

 $\mathbf{H} = \text{Horizontal unobstructed}$

 $\mathbf{D} = \text{Downward unobstructed}$

G = Gooseneck

 $\mathbf{W} = \text{Obstructed vertical (e.g. weather cap)}$

Data fields:

- 1 <u>Stack ID</u>: (See "<u>Assigning Identification Numbers</u>" on page 6.) A number (up to three digits, numeric only) which identifies a specific stack. It is suggested you start with 1, then 2, etc.
- 4 Exit Gas Temperature: Should represent average operating conditions, in degrees Fahrenheit. **DO NOT** report "ambient".
- 5a Exit Gas Velocity: **OR** 5b Gas Flow Rate:
 Provide **EITHER** the exit velocity (in feet per second) **OR** the flow rate of gas (in actual cubic feet per minute) exiting the stack during normal operations. Preprinted information provides both.
- 6a <u>Inside Stack Diameter</u>: For round stacks, provide Inside Stack *Diameter* in inches. *OR*
- 6b & 6c Inside Stack Length and Width: For square or rectangular stacks, provide inside *Length and inside Width* in inches.
- 7 <u>Stack Name/Description and Lat/Long Coordinates</u>: Provide a brief text description of the stack along with the latitude and longitude coordinates of the stack (in decimal degrees).

^{**} Stack height is calculated relative to the surrounding terrain. For instance, the stack height of a 10-foot stack on top of a 20-foot tall building is 30 feet.

Control Device Form Instructions

EXAMPLE Control Device Form Information

1	2	3	4	5	6
Control ID	Installation/ Reconstruction* Date	Size or Rated Capacity**	Control Type Code	Control Device Name/Description	Stack ID
1	05/09/98	<i>25,000.0</i> cfm	021	Thermal oxidizer	2
4	03/10/97	cfm	217	Watering with water trucks	

Data fields:

- 1 <u>Control ID</u>: (See "<u>Assigning Identification Numbers</u>" on page 6.) A unique number (up to three digits) that you assign to identify a specific control device.
- Installation/Reconstruction Date: The completion date (given in mm/dd/yy format) of installation or the most recent reconstruction of the identified control device. This is not a date on which routine repair or maintenance was done. "Reconstruction" means any component of the control device was replaced and the cost (fixed capital) of the new component(s) was more than half of what it would have cost to purchase or construct a new control device.
- 3 <u>Size or Rated Capacity</u>: Report the air or water flow rate in *cubic feet per minute*. Some devices (e.g., water trucks for dust control) will not include a value in this field.
- 4 <u>Control Type Code</u>: A 3-digit code designating the type of control device. A complete list of all EPA control device codes can be found on the Web at: https://www.maricopa.gov/2648/Emissions-Inventory-Instructions-Help-Sh or call (602) 506-6790 for assistance.
- 6 <u>Stack ID</u>: Not all businesses require a Stack ID. This is required if the Stack Form is used for your site (see page 9) *and* the control device is vented through that identified stack. This is the ID number shown in column 1 of the Stack Form. The Stack ID can be entered on this form after the Stack Form has been filled out.

General Process Form Instructions

The General Process Form is used to record data on all emissions-producing processes <u>except</u> evaporative processes. A "*general process*" is normally characterized by the burning or handling of a material. One form reports all the pollutants for one process. For example, several pollutants are produced by burning fuel, and PM₁₀ is emitted by processing rock products, processing materials such as wood or cotton, and driving on unpaved areas.

Data fields: (See sample forms on pages 13 and 14.)

- 1 <u>Process ID</u>: A number (up to three digits) that is preprinted or you assign. (See "<u>Assigning Identification Numbers</u>" on page 6.) This Process ID number is unique and <u>cannot</u> be used for any other process at this location.
- 2 <u>Process Type/Description</u>: Brief details on the type of activity that is occurring.
- 3 <u>Stack ID(s)</u>: The stack ID number(s) shown in column 1 of the Stack Form that identify the stack(s) which vent pollution created by this process. Not all businesses are required to report stacks. This is only required if the Stack Form is required for your site (see page 9) *and* the process has a stack.
- 4 <u>Process Tier Code</u> and If these codes are not preprinted on your form, please consult the section "Other Resources" on our web site, or call (602) 506-6790.
- 6 <u>Seasonal Throughput Percent</u>: Enter the percent of total annual operating time that occurred per season, rounded to the nearest percent. For example, "Dec-Feb <u>30%</u>" means 30% of total annual activity occurred in January, February and December 2018. The total for all four seasons must equal 100%.
- 7 Normal Operating Schedule and 8 Typical Hours of Operation: These reflect the normal daily, weekly, and annual operating parameters of *this process* during 2018.
- 9 <u>Emissions Based on</u>: Provide the *name* of the material used, fuel used, product produced, or whatever was measured for the purpose of calculating emissions, such as "natural gas", "hours of operation," "vehicle miles traveled," or "acres."
- 10 <u>Used, Produced or Existing</u>: Indicate whether calculated emissions are based on a material type or fuel *used* (an input, such as "paint" or "natural gas"), or an *output* (such as "sawdust produced" or "finished product"). Use "Existing" if the parameter reported on line 9 is not directly used or produced in the process (such as "vehicle miles traveled" or "acres").
- 11 <u>Annual Amount</u>: The annual amount (a number) of material that was used, fuel combusted, product produced, hours of operation, vehicle miles traveled, or acres.
- 12 <u>Fuel Sulfur Content (in percent)</u>: For processes that involve the combustion of oil or diesel fuels, report the sulfur content of the fuel as a decimal value. Example: <u>0.05</u> % (= 500 ppm)
- 13 <u>Unit of Measure</u>: Units of the material used, fuel used or product produced shown on line 9. For example: gallons, pounds, tons, therms, acres, vehicle miles traveled, units produced.
- 14 <u>Unit Conversion Factor</u>: You must provide this if you use an emission factor with an emission factor unit (see item 17 below) that is *not* the same as the unit of measure (from line 13). This is the standard number you would multiply your amount (line 11) by to convert it to the units of the emission factor. See page 7 for a list of commonly used conversion factors.

General Process Form Instructions (continued)

- 15 Pollutant: See page 3 for a list of pollutants that need to be reported.
- 16 Emission Factor (EF): The number to be multiplied by the annual amount (line 11) to determine how much of the pollutant was emitted. If you calculate your own emission factor or change the preprinted emission factor, you must provide details of your calculations in an attachment.
- 17 <u>Emission Factor (EF) Units</u>: Enter the appropriate Emission Factor Units in pounds (lb) per unit; e.g., lb/ton, lb/MMCF, lb/gal.
- 18 <u>Controlled Emission Factor (EF)? YES or NO</u>: Indicate "YES" if: 1) you have your own emission factor from testing **and** included the control device efficiency within the factor, or 2) the emission factor used is clearly identified as a controlled emission factor. A "YES" response requires the use of Formula A (see #25 below). Indicate "NO" if: 1) there is no emission control device, or 2) the emission factor represents emission rates **before** controls. A "NO" response requires the use of Formula B (see #25 below).
- 19 <u>Calculation Method</u>: Enter the number code (listed at the bottom of the General Process Form) which best describes the method you used to obtain this emission factor. Code 5, "AP-42/FIRE Method or Emission Factor" means that the factor comes from EPA documents or software. *NOTE:* If you have continuous emissions monitors (CEMs) data or conducted a source test that was required and approved by the County for a specific process or piece of equipment, you *must* use the emission data from the CEMs or test results. Report "1" in this column for CEMs data or "4" for performance test data.
- 20 through 24: Leave blank if there is no control device.
 - 20 <u>Capture % Efficiency</u>: The percent of the pollutant that is captured and sent to the primary control device in this process. Be sure to list capture efficiency separately for *each* pollutant affected.
 - 21 <u>Primary Control Device ID</u>: If this pollutant is being controlled in this process, enter the Control Device ID number which represents the first control device affecting the pollutant.
 - 22 <u>Secondary Control Device ID</u>: If this pollutant is being controlled sequentially by 2 devices, enter the Control Device ID number which represents the second control device; otherwise leave this field blank.
 - 23 <u>Control Device(s)</u> % <u>Efficiency</u>: Enter the total control efficiency of the control device(s). Be sure to list control device efficiency separately for *each* pollutant affected. If you report control device efficiency, you must *also* show capture efficiency in column 20.
 - 24 <u>Efficiency Reference Code</u>: Enter the code (1 through 6) that best describes how you determined the *control device efficiency*. A list of possible codes is included at the bottom of the form.
- 25 <u>Estimated Actual Emissions (in pounds/year)</u>: You may round the calculated emissions values to the nearest pound. Calculate as follows:
 - A. Emissions with no controls or controls are reflected in the emission factor: Column $25 = \text{line } 11 \times \text{line } 14 \times \text{column } 16$
 - B. <u>Emissions after control</u>:

 Column 25 = line 11 × line 14 × column 16 × (1 [column 20 × column 23])

 Use the decimal equivalent for columns 20 and 23. Example: 96.123% = 0.96123

General Process Form 2018

EXAMPLE: Internal Combustion

Permit number(s) V9999	Permit	number((s) V999	199
------------------------	--------	---------	-----------------	-----

3- Stack ID(s) (only if required on Stack Form)					
4- Process TIER Code:		FUEL CO	MB. OTHER: COMMERC	IAL/INST OIL	
5- SCC Code <u>20200401</u> (8 digi	t number)	INDUSTR	PIAL: LG. BORE ENGINE.	DIESEL	
6- Seasonal Throughput Percent:	Dec-Feb <u>25</u> %	Mar-May <u>25</u> %	Jun-Aug <u>25</u> % Sep-Nov _	<u>25 </u> %	
7- Normal Operating Schedule:	Hours/Day <u>24</u>	Days/Week <u>7</u>	Hours/Year <u>300</u>	Weeks/Year <u>52</u>	
8- Typical Hours of Operation: (military tin	<i>ne)</i> Start <u>00:00</u>	End <u>23:59</u>			
9- Emissions based on (name of material or oth	oer parameter, e.g. "rock", "dies	el", "vehicle miles traveled") _	HORSEPOWER HOURS		
10- X Used (input) or	Produced (output)	or Evi	sting (e.g. VMT, acres)		

	Emission	Factor (EF) In	formation			Contro				
15	15 16 17 18		19	20	21	22	23	24	25	
Pollutant	Emission Factor (EF) (number)	Emission Factor Unit (lb per)	Controlled EF? Yes or No	Calculation Method Code*	Capture % Efficiency	Primary Control Device ID	Secondary Control Device ID	Control Device(s) % Efficiency	Efficiency Reference Code**	Estimated Actual Emissions
СО	0.0055	HP-HR	N	8						1,106 lbs
NOx	0.024	HP-HR	N	8						4,842 lbs
PM-10	0.0007	HP-HR	N	8						141 lbs
SOx	0.0000121	HP-HR	N	8						2 lbs
VOC 0.000705		HP-HR	N	8						142 lbs

* Calculation Method Codes:

1 = Continuous Emissions Monitoring Measurements

14- Unit Conversion Factor (if needed to convert Unit of Measure to correlate with emission factor units)

- **2** = Best Guess / Engineering Judgment
- **3** = Material Balance
- **4** = Source Test Measurements (Stack Test)
- **5** = AP-42 / FIRE Method or Emission Factor

- **7** = Manufacturer Specifications
- **8** = Site-Specific Emission Factor
- 9 = Vendor Emission Factor
- **10** = Trade Group Emission Factor

** Control Efficiency Reference Codes:

- 1 = Tested efficiency / EPA reference method
- 2 = Tested efficiency / other source test method
- **3** = Design value from manufacturer
- **4** = Best guess / engineering estimate
- **5** = Calculated based on material balance
- 5 Calculated based on material balance
- **6** = Estimated, based on a published value

6 = State or Local Agency Emission Factor

General Process Form 2018

EXAMPLE: Unpaved Road Travel

Permit	number(s	V 99999
I CIIIII	mumber (3	·

1- Process ID	<u>28</u>	to mark data req						formation to l	oe deemed con	fidential.
3- Stack ID(s) 4- Process TIE	(only if required on S R Code:	UNPAVED RO itack Form) 799 (8 digit number)			MISCELLAN	NEOUS: FUC		- VST		
7- Normal Op 8- Typical Hou 9- Emissions b 10- Used (erating Schedule: ars of Operation: assed on (name of m input) sount: (a number	Hours (military time) Sta vaterial or other parameter or Pr 7,500 tons, gallons, million cu	/Day <u>8</u> rt <u>0700</u> rer, e.g. "rock", "di roduced (output	Days/W End iesel", "vehicle mile or Fuel Sulfur Co	Veek <u>5</u>	Hours/Y EHICLE MI VMT, acres)	Cear <u>2080</u> **LES TRAV	Weeks/Year _	7)	
14- Unit Conve		Factor (EF) Info	ormation	e with emission fac	ctor units)		l Device Info	ormation	24	25
Pollutant	Emission Factor (EF) (number)	Emission Factor Unit (lb per)	18 Controlled EF? Yes or No	Calculation Method Code*	Capture % Efficiency	Primary Control Device ID	Secondary Control Device ID	Control Device(s) % Efficiency	Efficiency Reference Code**	Estimated Actual Emissions
PM-10	3.2	VMT	N	6	100	4		90	6	2400

NOTE: Emissions in col. 25 are calculated as follows: (line $11 \times \text{col.} 16$) × $(1 - [\text{col.} 20 \times \text{col.} 23])$

* Calculation Method Codes:

- 1 = Continuous Emissions Monitoring Measurements
- **2** = Best Guess / Engineering Judgment
- **3** = Material Balance
- **4** = Source Test Measurements (Stack Test)
- **5** = AP-42 / FIRE Method or Emission Factor

- **6** = State or Local Agency Emission Factor
- 7 = Manufacturer Specifications
- **8** = Site-Specific Emission Factor
- **9** = Vendor Emission Factor
- **10** = Trade Group Emission Factor

14

** Control Efficiency Reference Codes

- 1 = Tested efficiency / EPA reference method
- **2** = Tested efficiency / other source test method

lbs lbs

- **3** = Design value from manufacturer
- **4** = Best guess / engineering estimate
- **5** = Calculated based on material balance
- **6** = Estimated, based on a published value

Evaporative Process Form Instructions

The Evaporative Process Form is used to report all emissions produced by evaporation. Examples include: cleaning with solvents, painting and other coatings, printing, using resin, evaporation of fuels from storage tanks, ammonia use, etc. All other processes should be shown on the General Process Form.

One Evaporative Process Form may be used to report numerous materials, with each material given a separate process ID number, as long as the information on lines 1–5 apply to all items on that form. Use a separate form for each group of materials that has a different Process Type/Description (shown on line 1), different Tier Code (line 2) or different operating schedule (lines 3, 4, or 5).

Data fields: (See sample forms on pages 17 and 18.)

- 1 Process Type/Description: Brief details of the activity in which the listed materials were used.
- 2 Process Tier Code: If this 6-digit code is not preprinted on your form, please refer to the Tier Code list at: https://www.maricopa.gov/2648/Emissions-Inventory-Instructions-Help-Sh or call (602) 506-6790.
- 3 <u>Seasonal Throughput Percent</u>: Enter the percent of total annual operating time that occurred per season (rounded to the nearest percent). For example, "Dec-Feb <u>30%</u>" means 30% of the total annual activity occurred during January, February and December 2018. The total for all four seasons must equal 100%.
- 4 Normal Operating Schedule and These represent the usual number of hours, time of day and weeks
- 5 Typical Hours of Operation: per year when *this process* occurred during the calendar year.
- 6 <u>Process ID</u>: A number (up to three digits) that represents this specific material (process). Each process on one form must have the same tier code and operating schedule as that shown in the top portion of the form. This Process ID number are unique and can *not* be used for any other process at this business location. See page 6 of these instructions for more explanation of ID numbers and for exclusions and guidance on grouping materials.
- 7 <u>Stack ID(s)</u>: The stack ID number(s) shown in column 1 of the Stack Form that identify the stack(s) which vent pollution created by this process. Not all businesses are required to report stacks. This is only required if the Stack Form is required for your site (see page 9) *and* the process has a stack.
- 8 Material Type: Provide the information on the type of the material used in this process. Give the chemical name for pure chemicals or a name that reflects its use (paint, ink, etc.), rather than just a brand name or code number. Examples of materials include: paint, thinner, degreasing solvent (plus its common name), ink, fountain solution, ammonia, alcohol, ETO (ethylene oxide), gasoline (in a storage tank).
- 9 <u>Annual Material Usage/Input</u>: Amount of this material used during the year. In most cases, the amount purchased is suitable. Write in "lbs" or "gal" (pounds or gallons).
- 10 <u>Pollutant</u>: The only pollutants reported on this form are VOC, HAP&NON and NH_x (see definitions on page 3). When one process (or material) has more than one of these pollutants, list each pollutant on a separate line, using the same process ID number.

Evaporative Process Form (continued)

- 11 Emission Factor (EF): An emission factor is a number used to calculate the pounds of pollutant emitted based on the quantity of material used in a process. Emission factors can be obtained from your supplier (usually provided on a Material Safety Data Sheet or environmental data sheet), and must correspond with the material units reported in column 9. If the material unit is "gal," then the emission factor must be in pounds of pollutant per gallon. If the material unit is "lb," then the emission factor must be in pounds of pollutant per pound of material.
 - Verify (and correct, where necessary) all preprinted emission factors, as the composition of materials used may have changed since your last report. A "lb/gal" emission factor is almost always less than 8 and never greater than 14. A "lb/lb" emission factor is never larger than 1.0.
- 12 <u>Pounds of pollutant sent off-site</u>: Required only if you wish to take credit for reduced emissions because waste of this material is sent off-site for recycling or disposal. Only waste generated during the report year may be claimed. The Off-Site Recycling/Disposal Form *must* be completed if you wish to claim a credit. The number of pounds reported in column 12 *must* equal the number of pounds reported on the Off-Site Recycling/Disposal Form(s) for the same Process ID number.
- 13 and 14: Leave these fields blank if there is no control device present.
 - 13 <u>Capture % Efficiency</u>: The percent of the pollutant from this process that is captured and sent to the control device.
 - 14 <u>Control ID</u>: If this pollutant is being controlled in this process, enter the Control Device ID number from column 1 of the Control Device Form.

Control % Efficiency: Enter the percent of this pollutant that is controlled by this control device.

<u>Code</u>: Select the Control Efficiency Reference Code from the list at the bottom of the form.

15 <u>Estimated Emissions (lbs/yr)</u>: Estimated pounds of the pollutant emitted during the year, after off-site recycling/disposal and controls if applicable. **Credit will not be given for off-site recycling/disposal unless it is shown on the Off-Site Recycling/Disposal Form.** Round to the nearest pound. If the answer is 0, give a decimal answer to the first significant digit. Column 15 is calculated as follows:

```
<u>Process without off-site recycling/disposal or control device:</u>
```

Column 15 = $column 9 \times column 11$

Process with off-site recycling/disposal:

Column 15 = $(column 9 \times column 11) - column 12$

Process with control device:

Column 15 = (column 9 \times column 11) \times (1 – [column 13 \times column 14])

Process with **both** off-site recycling/disposal and control device:

Column 15 = ([column $9 \times \text{column } 11] - \text{column } 12) \times (1 - [\text{column } 13 \times \text{column } 14])$

Use the decimal equivalent for columns 13 and 14. Example: 96.123% = 0.96123

EXAMPLE: Coating and Painting

Evaporative Process Form 2018

Permit number(s) **V99999**

Place an X in any gray cell to mark data requested to be held confidential. See page 5 for requirements for information to be deemed confidential.

1- Process Type/Description: <u>Coating metal parts</u>

2- Process TIER Code: 080415 SOLVENT USE: SURFACE COATING - MISC METAL PARTS

3- Seasonal Throughput Percent: Dec-Feb <u>25</u> % Mar-May <u>25</u> % Jun-Aug <u>25</u> % Sep-Nov <u>25</u> %

4- Normal Operating Schedule: Hours/Day <u>8</u> Days/Week <u>5</u> Hours/Year <u>2080</u> Weeks/Year <u>52</u>

5- Typical Hours of Operation (military time) Start _0800 End _1700

6	7	8	9		10		11		12	13		14		15
Process ID	Stack ID(s)	Material Type	Annual Usage Input	lb or gal	VOC, HAP&NON or NHx	Emission Factor		EF Units (lbs per)	Pounds of pollutant* sent off site	Capture Efficiency %	Control ID	Control Efficiency %	Control Efficiency Code**	Estimated Emissions (lbs/yr)
800	1	<i>Lacquer</i> 6455-06	95	gl	VOC	4.7		gal		%		%		447
801	1	lacq thinner	120	gl	VOC	7.1		gal		%		%		852
802	1	Paint red 4039-03	940	gl	VOC	4.2		gal		%		%		3,948
803	1	Toro-Red Paint	707	gl	VOC	7.0		gal		%		%		4,949
803	1	Toro-Red Paint	707	gl	HAP&NON	0.5		gal		%		%		354
804	1	powder paint 8730-11	20,200	<i>lb</i>	VOC	0.001		1b		%		%		20

Note: Do NOT change preprinted Process ID numbers. See page 6 of these instructions for information on how to delete materials that are no longer used, or to assign Process ID numbers for new materials.

* If you have off-site recycling/disposal of any of the materials listed above, you must complete an Off-site Recycling/Disposal Form to receive credit for reduced emissions.

NOTE: Emissions in col. 15 are calculated as follows: ([col. $9 \times \text{col.} 11$] – col. $12) \times (1 - [\text{col.} 13 \times \text{col.} 14])$

** Control Efficiency Reference Codes

1 = Tested efficiency / EPA reference method 2 = Tested efficie

2 = Tested efficiency / other source test method

3 = Design value from manufacturer

4 = Best guess / engineering estimate 5 = Calculated based on material balance

6 = Estimated, based on a published value.

EXAMPLE: Cleaning solvent (with recycling)

Evaporative Process Form 2018

Permit number(s) **V99999**

Place an X in any gray cell to mark data requested to be held confidential. See page 5 for requirements for information to be deemed confidential.

1- Process Type/Description: CLEANING METAL PARTS

2- Process TIER Code: 080103 SOLVENT USE: DEGREASING - COLD CLEANING

3- Seasonal Throughput Percent: Dec-Feb <u>25</u> % Mar-May <u>25</u> % Jun-Aug <u>25</u> % Sep-Nov <u>25</u> %

4- Normal Operating Schedule: Hours/Day <u>8</u> Days/Week <u>5</u> Hours/Year <u>2080</u> Weeks/Year <u>5</u>

5- Typical Hours of Operation (military time) Start 1300 End 1700

6	7	8	9		10		11	12	13		14		15
Process ID	Stack ID(s)	Material Type	Annual Usage Input	lb or	VOC, HAP&NON	Emission Factor	EF Units	Pounds of pollutant*	Capture Efficiency	Control ID	Control Efficiency	Control Efficiency	Estimated Emissions
	(0)			gal	or NHx	- 44400	(lbs per)	sent off site	%		%	Code**	(lbs/yr)
3	2	SANITIZER	716	1b	VOC	1.0	<i>lb</i>		<i>95</i> %	1	<i>80</i> %	3	172
6		GUN CLEANER	180	gl	VOC	7.2	gl	569	%		%		727
7		XYZ STRIPPER	1300	gl	VOC	3.3	gl	1,884	%		%		2,406
8		CLEANING SOLVENTS	358	gl	VOC	6.4	gl	1,006	%		%		1,285
9		MEGASOLVE	2258	gl	VOC	6.8	gl	6,741 •	%		%		8,613
									%		%		

Note: Do NOT change preprinted Process ID numbers. See page 6 of these instructions for information on how to delete materials that are no longer used, or to assign Process ID numbers for new materials.

NOTE: This example shows the case where 2,400 of the original 4,096 gallons of materials #6 through 9 were captured for off-site recycling, and the pollutant content of the waste material was estimated to be 75% of the original. The pounds of pollutant sent off-site shown in column 12 is calculated on the example Off-Site Recycling/Disposal Form on the next page.

^{*} If you have off-site recycling/disposal of any of the materials listed above, you must complete an Off-site Recycling/Disposal Form to receive credit for reduced emissions.

EXAMPLE

Off-Site Recycling/Disposal Form 2018

Permit number(s) <u>V99999</u>

Check one:

NOTE: If you need blank copies of this form, call the Emissions Inventory Unit at (602) 506-6790 or consult our web page at http://www.maricopa.gov/aq/divisions/planning_analysis/emissions_inventory/Default.aspx

Provide one off-site recycling/disposal form for each <u>waste stream</u> at your business location. A waste stream is the waste from one or more processes mixed together to make one waste product before it is taken off site for recycling, disposal or combustion.

- 1) Assign a unique two-digit ID number to identify the waste stream that will be described below. <u>01</u> (Start with ID# 01 for first waste stream. Make copies of a blank Off-Site Recycling/Disposal form and use 02 for second, etc.)
- 2) What was the quantity of this waste stream in 2018?
 Indicate whether this quantity is reported in pounds or gallons. Keep waste company manifests as proof that this amount of waste was taken off-site.
- What was the **average** pollutant content of the waste stream? NOTE: Report in the same units (pounds or gallons) as used in line 2.

VOC <u>4.25</u> lbs/unit HAP&NON _____ lbs/ unit NHx _____ lbs/ unit

NOTE: Waste normally has less pollutant content than the new product. Some of the pollutant evaporates during the use of the product, and there is usually dirt, water or other contaminants in the waste stream. The estimated pollutant content of the waste is usually between 50% and 95% of the new product. This example estimates an average VOC content (on line 3) to be 75% of the original VOC content of 5.67 lbs/gal., to account for evaporation and contaminants. See page 20 to calculate a weighted average.

- 4) Calculate the total annual pollutant content of the waste in this waste stream. (volume of waste, from Line 2) × (pollutant content, from Line 3) = Total pollutants in waste stream, in lbs/yr.
 VOC <u>10,200</u> lbs/yr
 HAP&NON _____ lbs/yr
 NHx _____ lbs/yr
- 5) List the process ID numbers of the processes contributing to this waste stream. Also estimate the pounds of pollutant that each process contributed to this waste stream.

NOTE: In this example, the amount each process material contributed to total pollutants in the waste stream (Line 4) is based on the percentage, by weight, of each material that contributed to the waste stream (e.g., Process ID #6 contributed 5.6%, therefore $5.6\% \times 10,200$ lbs/yr = 569 lbs. See example on page 20).

NOTE: Column totals in the table below must equal the total for each pollutant type reported on line 4. The quantities you report below for each pollutant and process must also be reported in column 12 on the Evaporative Process Form.

Process ID	Annual VOC (lbs)	Annual HAP&NON (lbs)	Annual NHx (lbs)
6 Contributed about	<i>569</i> lbs	lbs	lbs
7 Contributed about	1,884 lbs	lbs	lbs
8 Contributed about	1,006 lbs	lbs	lbs
9 Contributed about	6,741 lbs	lbs	lbs

EXAMPLE: Documentation of Emission Factor Calculations

Identify the process ID number(s) and pollutant(s). Show calculations made to obtain the emission factors used for the process(es). Include references to data sources used, including the document name, date published, page numbers, etc.

Emission Factor Calculation

Proces	ss ID		P	ermit number	<i>V99999</i>
	sion factors derived fron also attached).	n source test performed 12,	/2/00 by XYZ En	gineering Compan	y (copy of summary
Outle	t (after controls):				
со	= 0.43 lb/hr × 1 hr/60 t = 92.0 lb/MMCF	$min \times 1 min/77.9 cu. ft \times 1$,000,000 cu. ft/M]	MCF	
NOx	= 0.09 lb/hr × 1 hr/60 i = 19.3 lb/MMCF	min × 1 min/77.9 cu. ft × 1,	,000,000 cu. ft/M]	MCF	

Weighted average sample calculation

NOTE: The example below shows how the weighted average of the materials going into the waste stream is calculated. A weighted-average emission factor has been calculated by listing usage amounts and emission factors for each material, summing each column, and then dividing the total emissions by the total gallons used.

In this example: 23,231 lbs \div 4,096 gal = $\underline{5.67}$ lb/gal average VOC content. This emission factor is then used to calculate the average pollutant content in the Off-site Recycling/Disposal Form example.

This process can also be used to find the weighted average emission factor for similar materials if you are reporting them together as a single line item on the Evaporative Process form. Refer to the explanation of "grouping" on page 6.

Process		2018		VOC	VOC Emissions	Percent contributed
ID#	ID # Material Type		Units	(lbs/unit)	(= Usage × VOC	to waste stream
					content)	
6	gun cleaner	180	gal	7.2	1,296 lbs.	5.6 %
7	xyz stripper	1,300	gal	3.3	4,290 lbs.	18.5 %
8	cleaning solvent	358	gal	6.4	2,291 lbs.	9.9 %
9	MEGASOLVE	2,258	gal	6.8	15,354 lbs.	66.1 %
	Totals:	4,096	gal		23,231 lbs.	100.0 %

Average	<u>23,231 lbs.</u>	_ 5.67
VOC content:	4,096 gals	- lb/gal

EXAMPLE (for all sources except Title V sources)

Data	Cor	tifica	tion	Form	2019
11313	L.er	11111112	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	rorm	7.1117

Permit number	999999	
I CHIIII HUIHDCI	777777	

For EACH pollutant listed, total up all emissions recorded on your General Process and Evaporative Process Forms. Enter these numbers in column 1, "Totals from Process Forms." Report any emissions from accidental releases in column 2. Add the figures in each row across, and enter the result in column 3, "Total Emissions".

NOTE: "Accidental Releases" reported in column 2 should include all excess emissions reported to the Department under Rule 140, Section 500.

	(1)	(2)	(3)
Summary of 2018 Annual Emissions:	Totals from	+ Accidental	= TOTAL
	Process Forms	Releases	2018 Emissions
CO	1,106	0	1,106
NH_x	0	0	0
Lead	0	0	0
HAP&NON	354	0	354
VOC	23,561	0	<i>23,561</i>
NO_x	4,8224	0	4,8224
SO_x	2	0	2
PM_{10}	2,511	0	2,511

NOTE: Review specific requirements for data confidentiality on page 5. We cannot hold any data confidential without the required documentation.

TO COMPLETE YOUR EMISSIONS INVENTORY REPORT:

- Complete the Confidentiality Statement below.
- Sign and date this form below where indicated.
- Send the **original** copy of your completed forms to: Maricopa County Air Quality Dept., Emissions Inventory Unit, 3800 North Central Avenue, Suite 1400, Phoenix, AZ 85012.
- Keep a copy of all forms for your records.

Signature of owner/business officer

CONFIDENTIALITY STATEMENT: This annual emissions report contains requests to keep some data confidential. YES NO If you check "YES", you must submit documentation and meet certain requirements before your data can be deemed confidential. See enclosed instructions for further details.
NOTE: The Data Certification form must be signed by a responsible company official.
CERTIFICATION STATEMENT: I declare under penalty of perjury that the data (e.g. inputs, emission factors, controls, and annual emissions) presented herein represents the best available information and is true, accurate and complete to the best of my knowledge.

Date of signature

Type or print full name of owner/business officer

Type or print full title

Telephone number

How to calculate an emission fee (for Title V sources only):

1. For each pollutant listed on the "Data Certification/Fee Calculation" form, total up all emissions recorded on your General Process and Evaporative Process Forms. Enter these numbers in column 1, "Totals from Process Forms."

NOTE: While most processes that generate PM₁₀ should be reported on line 5 of the Data Certification/Fee Calculation form, "[f]ugitive emissions of PM₁₀ from activities other than crushing, belt transfers, screening, or stacking" (County Rule 280, § 304.2d) are NOT subject to annual emission fees. The most common occurrences of these PM₁₀-producing activities that are NON-billable are listed below:

SCC codes and description of PM₁₀-producing processes that are NOT subject to emission fees

SCC	Major Category	Subcategory	Facility / Process Type	Process Description
30200814	Industrial Processes	Food and Agriculture	Feed Manufacture	Storage
30300834	Industrial Processes	Primary Metal Production	Iron Production	Paved Road Travel
30400737	Industrial Processes	Secondary Metal Production	Steel Foundries	Raw Material Silo
30500120	Industrial Processes	Mineral Products	Asphalt Roofing Manufacture	Storage Bins: Ferric Chloride
30500121	Industrial Processes	Mineral Products	Asphalt Roofing Manufacture	Storage Bins: Mineral Stabilizer
30500134	Industrial Processes	Mineral Products	Asphalt Roofing Manufacture	Blown Saturant Storage
30500135	Industrial Processes	Mineral Products	Asphalt Roofing Manufacture	Blown Coating Storage
30500141	Industrial Processes	Mineral Products	Asphalt Roofing Manufacture	Granules Storage
30500143	Industrial Processes	Mineral Products	Asphalt Roofing Manufacture	Mineral Dust Storage
30500203	Industrial Processes	Mineral Products	Asphalt Concrete	Storage Piles
30500212	Industrial Processes	Mineral Products	Asphalt Concrete	Heated Asphalt Storage Tanks
30500213	Industrial Processes	Mineral Products	Asphalt Concrete	Storage Silo
30500290	Industrial Processes	Mineral Products	Asphalt Concrete	Haul Roads: General
30500303	Industrial Processes	Mineral Products	Brick Manufacture	Storage of Raw Materials
30500608	Industrial Processes	Mineral Products	Cement Manufacturing (Dry Process)	Raw Material Piles
30500708	Industrial Processes	Mineral Products	Cement Manufacturing (Wet Process)	Raw Material Piles
30501710	Industrial Processes	Mineral Products	Mineral Wool	Storage of Oils and Binders
30502007	Industrial Processes	Mineral Products	Stone Quarrying - Processing	Open Storage
30502012	Industrial Processes	Mineral Products	Stone Quarrying - Processing	Hauling
30502504	Industrial Processes	Mineral Products	Construction Sand and Gravel	Hauling
30502507	Industrial Processes	Mineral Products	Construction Sand and Gravel	Storage Piles
30502760	Industrial Processes	Mineral Products	Industrial Sand and Gravel	Sand Handling, Transfer, & Storage
30531090	Industrial Processes	Mineral Products	Coal Mining, Cleaning, Material Handling	Haul Roads: General
30532007	Industrial Processes	Mineral Products	Stone Quarrying - Processing	Open Storage
30704002	Industrial Processes	Pulp/Paper & Wood Products	Bulk Handling and Storage - Wood/Bark	Stockpiles
31100199	Industrial Processes	Building Construction	Construction: Building Contractors	Other Not Classified
31100299	Industrial Processes	Building Construction	Demolitions/Special Trade Contracts	Other Construction/Demolition
50100401	Waste Disposal	Solid Waste Disposal	Landfill Dump	Unpaved Road Traffic
50100402	Waste Disposal	Solid Waste Disposal	Landfill Dump	Fugitive Emissions
50100403	Waste Disposal	Solid Waste Disposal	Landfill Dump	Area Method
50100404	Waste Disposal	Solid Waste Disposal	Landfill Dump	Trench Method
50100405	Waste Disposal	Solid Waste Disposal	Landfill Dump	Ramp Method

- 2. Report any accidental releases in column 2. Add columns 1 and 2 together for each pollutant, and enter the sum in column 3. Sum lines 1 through 5 together, and enter the total on line 6.
- 3. Divide your facility's total billable emissions (on line 6) by 2,000 to convert pounds into tons. **Round to the nearest ton**, and enter this value (a whole number) on line 7. Multiply this number by \$44.60, and enter the result on line 8. This is your 2018 emission fee.

EXAMPLE (for Title V sources only)

Data Certification/Fee Calculation Form 2018

For EACH pollutant listed, total up all emissions recorded on your General Process and Evaporative Process Forms. Enter these numbers in column 1, "Totals from Process Forms." Report any emissions from accidental releases in column 2. Add the figures in each row across, and enter the result in column 3, "Total Emissions".

Carefully follow the instructions on lines 6 through 8 to calculate any emission fee owed.

NOTE: "Accidental Releases" reported in column 2 should include all excess emissions reported to the Department under Rule 140, Section 500.

	(1)	(2)	(3)
Summary of 2018 Annual Emissions:	Totals from	+ Accidental	= TOTAL
	Process Forms	Releases	2018 Emissions
CO	1,106	0	1,106
NH_x	0	0	0
Lead	0	0	0
PM ₁₀ (non-billable; see page 22)	2,400	0	2,400

Emissions fees are based on your emissions of the following pollutants ONLY:

			81			
1	HAP&NON	354	0		354	
2	VOC	23,561	0		23,561	
3	NO_x	4,824	0		4,824	
4	SO _x	2	0		2	
5	PM ₁₀ (billable; see page 22)	141	0		141	
6	Add "TOTAL" column from lines 1 through 5 ONLY:				28,882	lbs.
7	Divide the total on line 6 by 2000 (pounds per ton) to get tons, and round the number to the nearest ton. (Drop any decimal of .499 or less. Increase to the next whole number any decimal of .500 or more.) Enter the resulting WHOLE NUMBER here.					4 TONS
8	Multiply line 7 (a WHOLE number) by \$ 44.60. This is your 2018 ANNUAL EMISSION FEE.			\$	624.40	

NOTE: Review specific requirements for data confidentiality on page 5. We cannot hold any data confidential without the required documentation.

TO COMPLETE YOUR EMISSIONS INVENTORY REPORT:

- Include a check (made payable to Maricopa County Air Quality Department) for the amount calculated on line 8 above.
- Complete the Confidentiality Statement below.
- Sign and date this form below where indicated.
- Send the **Original** copy of your completed forms along with any emission fee due to: Maricopa County Air Quality Department, Emissions Inventory Unit, 3800 North Central Avenue, Suite 1400, Phoenix, AZ 85012.
- Keep a copy of all forms for your records.

(100	VEI	DEN	JTIAI	ITV	STA	TFN	IFN	т٠
١		AT.I	יעע	N I I/NI		\mathcal{L}	1 111		

This annual emissions report contains requests to keep some data confidential.

YES

NO

If you check "YES", you must submit documentation and meet certain requirements before your data can be deemed confidential. See enclosed instructions for further details.

NOTE: The Data	a Certification form	m must be signed	l by a responsi	ible company official.

CERTIFICATION STATEMENT:

I declare under penalty of perjury that the data (e.g. inputs, emission factors, controls, and annual emissions) presented herein represents the best available information and is true, accurate and complete to the best of my knowledge.

Signature of owner/business officer	Date of signature	Telephone number
Type or print full name of owner/business officer	Type or print full title	