



## ANNUAL AIR POLLUTANT EMISSIONS INSTRUCTIONS

The purpose of this page is to convey, in conjunction with the annual emission inventory, information on the actual annual emissions from your facility. The information is needed by the Department and the applicant to assess permit fees, as required by 9 VAC 5-80-340.B. and -C., and also to allow compliance with 9 VAC 5-80-270.C.1.f., relating to public notification of emissions and fuels used. (See [Regulations](#), 9 VAC 5-80-270.C.1.f.)

**Emission Inventory Citation Option** - If desired, you may check the statement that the prior calendar year's Emissions Inventory reflects the emissions applied for as the basis of annual emission rates and permit fees in the permit. If the emission inventory is to be used in lieu of new submittal of emissions data in this application, you should first review the data and determine it to be both complete and accurate. Note that most sources with Hazardous Air Pollutant (HAP) emissions will need to supplement the emissions inventory. If the emissions data on file with DEQ are incomplete and/or inaccurate, the box may be still checked, and missing or corrected information added in the spaces provided. The second box is to enable you to point out discrepancies in unit reference numbers between the ones used on the Form and those in the Emissions Inventory. If there are discrepancies, please check this box and attach a list which cross-references the unit reference numbers between the Emissions Inventory and this Form.

**UNIT REF. NUMBER(S)** - continue assigned reference number(s) from previous page(s). For emissions units with **alternative scenarios**, list each scenario on a separate line, and assign a unique unit reference number and scenario number combination that is unique for each scenario, as before. Explain any alternative scenario relationships, using attachments if necessary. List each emissions unit, except those that qualify as insignificant. (To determine whether an emission unit is insignificant, see the "**Insignificant Emission Units/Activities**" and "**Insignificant Activities Worksheet**" pages of this Application (page 17 and optional page 2), along with 9 VAC 5-80-710 and -720.) Units may be combined, provided the method of quantifying emissions, including any emission factors, is the same for each, and the parts being combined are not subject to differing applicable requirements.

**VENT/STACK NO.** - use the unique vent/stack number previously assigned for each vent or stack.

**POLLUTANT** - list each pollutant on a separate line under the heading "**Pollutant name**," and indicate whether it is fugitive in the column entitled "**Check if fugitive**." List stack and fugitive emissions separately if calculated by different means, and indicate whether the pollutant is fugitive in the box to the right of the listed name. The following pollutants need to be included:

**PM<sub>10</sub> (particulate matter # 10 μm aerodynamic diameter)** (Do not list opacity as a pollutant on this page.)

**Sulfur dioxide (SO<sub>2</sub>)**

**Nitrogen oxides (NO<sub>x</sub>)**

**Volatile organic compounds (VOCs)** (see definition in 9 VAC 5-80-20). Do not include acetone as a VOC. Do not include perchloroethylene, but list it as a hazardous air pollutant (HAP). Do not include Title VI pollutants: (a) hydrochlorofluorocarbon, HCFC 225ca, (CAS # 422-56-0); (b) hydrochlorofluorocarbon, HCFC 225cb (CAS # 507-55-1); or (c) hydrofluorocarbon, HCFC 43-10mee (CAS # 138495-42-8).

**Carbon monoxide (CO)**

**Lead (Pb)**

**Reduced sulfur compounds (TRS)**

**Sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>)** (Do not include SO<sub>3</sub> or sulfuric acid mist emissions resulting from fuel combustion, as these are treated as SO<sub>2</sub> in emission factors.)

**Hazardous air pollutants (HAPs)** (Any pollutant subject to a standard promulgated under § 112 or other requirements established under § 112 of the federal Clean Air Act (CAA), particularly §§ 112(b), 112(d), 112(g)(2), and 112(j), but not any pollutant that is a regulated pollutant solely because it is subject to a standard or regulation under § 112(r) of the CAA. **Note:** Hazardous components of PM<sub>10</sub> and VOC emissions should be identified separately by component and listed on this page as specific hazardous pollutants, but do not need to be quantified.)

**CAS # IF HAP** - list the Chemical Abstract Services (CAS) number.

**ACTUAL EMISSIONS** - list the measured or calculated emission of each pollutant in tons per year. NOTE: If you have several units emitting the same pollutant but it is difficult to assign a quantity to each, combine the units in the "Unit Reference Number" column and combine the total emissions of the pollutant. For example, one line in the chart may say, under the respective columns, Unit reference numbers: "1-4," pollutant: "SO<sub>2</sub>," actual emissions: "120 tons/year." This information should take account of emissions through the control device as well as those which do not go through a control device.

**BASIS OF EMISSION ESTIMATES** - indicate how emissions listed have been derived by using Code K from the Code List. Attach a sample calculation for each different equation, and emission factor used. Show the source of the emission factor, including the edition number if EPA publication [AP-42](#), or similar works, are used.

**EXEMPT FROM FEES?** - certain pollutants are not included in the total emissions upon which fees are based. If the pollutant fits one of these categories, mark an "X" in the space.

**BASIS FOR BEING EXEMPT FROM FEES** - select one of the categories in Code L from the Code List if a fee exemption applies. Note that an emission is not exempt from fees simply because it is fugitive.

