

# SOURCE CLASSIFICATION FOR EMISSION INVENTORY

## FOR CRITERIA POLLUTANTS

This Instruction sheet provides a guide to source identification for facilities submitting data for the first time into the Vermont Air Pollution Emissions Inventory.

There are several general source categories for which separate forms exist. These categories, as labeled on the front page of the two page forms, are termed **COMBUSTION SOURCE, PROCESS SOURCE, OR VOLATILE ORGANICS SOURCE**. For Combustion Sources further distinctions are made between Wood Combustion, Internal Combustion engines, and all other combustion sources. Any individual combustion or industrial process which generates air pollution is considered a source. Some processes which combine combustion and process emissions may be considered two sources. For each source at your facility which emits air pollution, one of the forms described below must be filled out. If necessary you must produce additional forms by copying the blank ones provided. When the Air division receives your data submittal it will then determine which sources at your facility are significant by calculating air pollution emissions. That information will then be entered into our database and if your facility must register, a form will be supplied to you in following years containing the information you have submitted this year.

**A general description of the source types is given below :**

**EXTERNAL COMBUSTION SOURCE** - This category includes all sources of combustion used to generate heat or energy excepting wood and internal combustion sources. In general, this source category includes external combustion boilers for industrial, commercial, space heating, and utility applications.

**INTERNAL COMBUSTION SOURCE** - This category includes all sources of internal combustion used to generate heat or energy for industrial, commercial, space heating and utility applications. Generators and compressors are the most common sources in this category.

**WOOD COMBUSTION SOURCE** - This category includes all sources of wood combustion used to generate heat or energy for industrial, commercial, space heating and utility applications. Boilers comprise a large subset of this source type.

**PROCESS SOURCE** - This broadly defined source group includes all industrial processes whose primary constituent emissions are *not* volatile organic compounds (VOC)'s. Emissions from non-VOC process sources in Vermont are characteristically in particulate form (i.e. airborne aerosols). Process source emissions often but not always are emitted through a control device, such as a cyclone or baghouse. Common sources of this type include - sawing or planing in woodworking operations or lumbermills, feed and grain mill operations (such as grinding or loading), food processing operations, and most mineral industry processes, such as rock crushing, concrete batching, or asphalt production.

**VOLATILE ORGANICS** - This category includes all industrial processes which produce VOC

emissions. Common sources of this type include painting or surface coating operations, vapor degreasing, or electronics circuit board cleaning. VOC emissions are often of a fugitive nature, and these emissions may be summed together in emission estimates, as opposed to specifying unique stack designations for some process sources with control devices.

**INCINERATOR** - This category includes all waste incinerators. In Vermont medical waste incinerators are the most common.

After you have determined which form to use for each air pollution source identified at your facility provide an adequate description of the source under "Source ID Description" on the front page of the forms. Then to complete the forms see the "Air Pollution Emissions Inventory Instruction Sheet" in this mailing.