Name That Source

1. Point Sources

These are specific places or stationary sources, such as a factory or power plant that produce a significant amount of air pollution. There are often smoke stacks associated with point sources. A facility is considered to have significant emissions if it emits about one ton or more of pollution in a calendar year.

Examples of point sources include:

- Factories, paper mills, refineries, and chemical processing plants.
- Power plants and turbine engines.
- Municipal incinerators (where things are burned).
- Petroleum storage tanks.

2. Area Sources

These stationary sources are many small sources of air pollution in which the contribution of each source is relatively small, but combined they may be a significant source of air pollution.

Major categories of area sources are:

- Stationary sources that burn fuel—home fireplace, wood-burning furnace.
- Solvent use—paint thinner, dry cleaners.
- Storing and transporting chemicals—gasoline storage, gas stations.
- Light industrial/commercial sources—wood working, surface coating, metal working.
- Agriculture—feedlots, crop burning.
- Waste management—landfills.
- Miscellaneous area sources—agricultural fires, wind erosion, unpaved roads.

3. Mobile Sources

These are a wide variety of vehicles, engines, and equipment that generate air pollution and that move, or can be moved, from place to place. Mobile sources pollute the air mostly by burning fuel. These emissions contribute greatly to air pollution nationwide and are the primary cause of air pollution in many urban areas. Emissions per car have decreased, but there are more cars on the road.

On-road source — (also called **Highway** source) includes vehicles used on roads for transportation of people or freight. On-road vehicles may be fueled with gasoline, diesel fuel, or alternative fuels such as alcohol or natural gas.

Non-road source — (also called **Off-road** source) includes vehicles, engines, and equipment used for construction, agriculture, transportation, recreation, and many other purposes. Some examples are motor boats, jet skis, planes, trains, freighters, tractors, snowmobiles, and all-terrain vehicles.

4. Natural Sources

This is air pollution that is naturally produced by volcanoes, desert dust, wildfires, sea spray, meteorites, radon, and living things. Volcanoes produce particles and gases such as carbon dioxide, sulfur dioxide, carbon monoxide, and hydrochloric acid. Some plants emit VOCs. Animals and decomposition give off carbon dioxide. Livestock produce significant quantities of methane, ammonia gas, and carbon dioxide. Biological particles such as pollen, spores, bacteria, and viruses can also become pollutants if enough of them enter the air. Lightning contributes to ozone production.

Source: U. S. Environmental Protection Agency. *Air Pollution Control Orientation Course*. Retrieved June 22, 2005, from http://www.epa.gov/apti/course422/ap.html.