

## Gasoline Vapor Sources

Gasoline vapor sources (GVS) are sources which emit gasoline vapors and are one of the following types of facility:

Bulk Gasoline Plant is a gasoline storage and transfer facility that receives more than ninety percent of its annual gasoline throughput by transport tank, and reloads gasoline into transport tanks.

Gasoline Dispensing Facility is any site that dispenses gasoline into motor vehicle fuel tanks from stationary storage tanks.

Gasoline Loading Terminal is a gasoline transfer facility that receives more than ten percent of its annual gasoline throughput solely or in combination by pipeline, ship or barge, and loads gasoline into transport tanks.

### Emissions of Concern

Gasoline vapors are comprised of volatile organic compounds (VOC): alkanes approximately 89%; alkenes 8% and aromatics 3%. Butane, isopentane, isobutane, pentane, and propane are the top five constituents of gasoline vapors. Also contained in the VOC is benzene, a toxic air pollutant.

### Emission Controls

Emission controls include: floating roofs at large storage tanks; capture and condensation at storage and transport tanks; submerged filling of storage tanks; capture and condensation or incineration at dispensing pumps; and capture and control systems on newer vehicles.



### New Source Review (NSR) & Fees

YRCAA requires that a NSR permit application be submitted and approved prior to the construction, installation, establishment, replacement or modification of air contaminant sources, emissions units or air pollution control equipment in YRCAA jurisdiction. This includes equipment associated with stationary or portable devices or any part of such a device that emits or has the potential to emit any air contaminant, including GVS. There is a NSR permit application fee, and an Order of Approval fee, based on the staff time to conduct the review and draft the Order of Approval.



## COMPLIANCE ASSISTANCE PROGRAM

### Annual Registration & Fees

Sources of air contaminants, including GVS, must register annually with YRCAA and pay a fee. YRCAA's Board of Directors reviews fees annually. As a part of the registration program, businesses are required to complete and submit a registration form annually. The annual registration program enables YRCAA to classify sources and maintain an inventory of air contaminants. Information is also used to evaluate air pollution control strategies to attain and maintain National Ambient Air Quality Standards.

### Inspections

Regular inspections of registered sources are conducted to verify compliance with air pollution regulations. When inspecting GVS, the compliance team will:

- review records, including annual gasoline throughput;
- determine if any changes have been made to processes or equipment;
- observe operation and maintenance activities;
- determine if any violations of a rule, order or permit exist; and
- determine if any corrective actions are needed to avoid enforcement.

*If you have already installed a GVS or have installed or modified a process or any equipment within a GVS facility, or are planning to in the future, please contact YRCAA. Our staff is available to assist you with the permit and registration process.*

### YRCAA Rules

[YRCAA Regulation 1, Subsection 4.01](#) requires GVS to register annually and pay a fee. Subsection 4.01 also requires GVS to develop and implement an operations and maintenance plan designed to minimize air emissions.

### State Rules

GVS facilities are regulated by [WAC 173-491](#) and are required to install and maintain specific equipment to capture and control the vapors emitted from gasoline.

GVS facilities are also required to undergo NSR, according to WAC 173-400-110. For specific requirements regarding NSR, click [here](#).

[WAC 173-400](#) – General Regulations for Air pollution Sources

### Federal Rules

EPA has rules for control of hazardous air pollutants (HAPs) called maximum achievable control technology (MACT) standards. To determine if your facility, equipment or operation is subject to a MACT standard see the following links:

<http://www.epa.gov/airtoxics/mactfnlalph.html>

<http://www.epa.gov/ttn/atw/area/compilation.html>