

DEFINITION OF “FACILITY”

This document was obtained from the State of Colorado’s web site, www.cdphe.state.co.us/ap/onglinks.asp. It defines an “Oil and Natural Gas Facility” and it provides some background information on how the industry’s definition was determined.

The definition of facility is important for understanding how this rule applies to the oil and gas industry and how emissions are aggregated for major source determination. In many places of the 1990 Clean Air Act Amendments (CAAA), facilities were defined as sites that were contiguous and under common control by a company. However, for the oil and gas industry, this definition could potentially lead to the aggregation of emissions from dehydrators that are a substantial distance apart, since one company often controls large geographic areas. To avoid this unintended consequence, the Environmental Protection Agency (EPA) developed a unique definition of facility for the oil and gas industry. Key excerpts from the definition are as follow:

“Facility means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contact specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For the purpose of major source determination, facility (including a building, structure, or installation) means oil and natural gas production equipment that is located within the boundaries of an individual surface-site as defined in this section. Equipment...will typically be located within close proximity to other equipment... Pieces of production equipment located on different...leases, tracts, or sites...shall not be considered part of the same facility. Examples of facilities...include...well sites, satellite tank batteries, central tank batteries, a compressor that transports natural gas to a natural gas processing plant, and natural gas processing plants.”

“Surface-site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which the equipment is physically affixed.”

In the preamble to the rule, the EPA explains that it intended that the facility definition should lead to an aggregation of emissions for major source determination that is reasonable, consistent with the intent of the CAAA, and easily implemented. Many of its decisions were clearly driven by the desire for the definition to be reasonable and easily implemented. For example, the EPA does not believe it would be reasonable to aggregate emissions from surface sites that are located on the same lease, but at great distances apart, nor is it reasonable to aggregate emissions from different leases. The EPA also believes the terms of definition (leases, tracts, surface sites) are well understood within the industry and by enforcement agencies.

The EPA also intends that only emissions from glycol dehydrators and storage vessels with potential for flashing emissions should be included in aggregating emissions for field production facilities (i.e., wellhead facilities prior to custody transfer). The EPA believes that other potential HAP emissions at these sites are inconsequential and would place an excessive burden on owners and operators.

Similarly, the EPA notes that the primary HAPs associated with oil and natural gas are BTEX and n-hexane. Although the EPA is not explicit in saying that other HAPs listed are inconsequential, the EPA’s exclusion of them as “primary” HAPs, coupled with previous emission data, clearly implies that the other listed HAPs in the rule are inconsequential and are not a concern for determining if a facility is a major source.

However, the aggregation of only emissions from glycol dehydrators and storage vessels with the potential for flash emissions only applies prior to the point of lease custody transfer. Owners and operators of facilities after lease custody transfer (including gas processing plants) must aggregate emissions from all HAP emissions units at the facility when determining whether or not the facility is a major source. The preamble specifically mentions amine treaters and sulfur recovery units as potential emission points for HAPs. (Emissions from amine units have been somewhat well documented, while little data exists on potential HAPs from sulfur recovery units. The EPA requested feedback and data on sulfur recovery units from industry during the proposal but received little/none since this information does not exist. It is generally believed that HAPs from sulfur recovery units are negligible.)

The EPA also notes in the preamble that natural gas storage fields should not qualify as production facilities (due to the definition of “field natural gas”).