What Facilities Must be Considered in an Oil and Gas Registration?

When calculating emission rates or evaluating impacts for oil and gas sites under Permits By Rule (PBR) 106.352 or the oil and gas standard permit, it is important to know how to determine which facilities within one fourth mile should be included in the registration or project. Combinations of facilities and equipment, which are constructed and operated together to handle materials, are considered to be related. The distance measurement is limited to a radius of no more than one fourth mile from facilities or groups of facilities that have the potential of increasing emissions.

Emissions:

When calculating emission rates for a project or registration at a site, all facilities within one fourth mile of one another, that are operationally dependent, owned and operated by the same company, on contiguous or adjacent properties, and having the same two digit Standard Industrial Classification (SIC) code, must be included.

Impacts:

If a full protectiveness (impacts) review is required, emissions from all facilities within one fourth mile of the project (all facilities within one fourth mile of any emitting source in the project) for the PBR and within one mile of the project for the Standard Permit, regardless of the authorization type must be included in the impacts evaluation. These facilities must be owned and operated by the same company. For example, a site that is authorized under PBR would have to consider all emissions from the site being registered, as well as any emissions from other facilities at other site(s) that are in close proximity, within one fourth mile, that are owned and operated by the same company, on contiguous or adjacent properties, and having the same SIC code.

When determining compliance with ambient air standards for NO₂, SO₂, and H₂S, the closest property line within one fourth mile of each emitting source must be considered for PBR Level 1 sites. The closest property line within one half mile must be considered for PBR Level 2 sites, and the closest property line within one mile must be considered for Standard Permit sites.

When determining compliance with the health effects screening level (ESL) for benzene, the closest off-property receptor within one fourth mile of each emitting source must be considered for PBR Level 1 sites. The closest off-property receptor within one half mile must be considered for PBR Level 2 sites, and the closest off-property receptor within one mile must be considered for Standard Permit sites.

A full impacts evaluation is not required in some situations. If there is not a receptor within one fourth mile of a Level 1 registration, or one half mile of a Level 2 registration, or one mile of a standard permit, no further ESL review is needed for benzene. If there is not a property line within one fourth mile of a Level 1 registration, or one half mile of a Level 2 registration, or one mile of a standard permit, no further ambient air quality standard review is needed for NO₂, SO₂, and H₂S. If total emissions from the project are less than those limits specified in §106.352(k)(C)(3), then no additional analysis is required. Lastly, a full impacts review is not required if a project's maximum predicted concentrations are less than or equal to 10 percent of the ESL (for benzene) or if a project's maximum predicted concentrations are less than or equal to 25percent of the ESL when combined with project increases over a 60-month period.