

**GROUP AGAINST SMOG & POLLUTION COMMENTS REGARDING PA DEP'S
"GUIDANCE FOR PERFORMING SINGLE STATIONARY SOURCE
DETERMINATIONS FOR OIL AND GAS INDUSTRIES," DOC. NO. 270-0810-006**

I. Proper source determinations are vital to protecting Pennsylvania's air quality.

The Energy Information Administration projects that by 2035, shale gas production will increase fourfold from 2009 levels.¹ Much of that increase will occur in the large and relatively untapped Marcellus Shale and Utica formations. While natural gas produces far less air pollution than coal when combusted, the compressor stations, condensate tanks, dehydrators, and flares necessary to extract, process, and transmit natural gas emit significant quantities of nitrogen oxides (NO_x) and volatile organic compounds (VOCs), among other pollutants.

When any one of these emissions units is considered in isolation, its emissions may seem relatively small. In fact, these sources are often permitted as minor sources or are entirely exempted from permit requirements as *de minimis* or permit exempt sources.² However, when all of these emission units are considered together, the combined NO_x and VOC emissions from the oil and gas sector are enormous. For instance:

- A 2009 Southern Methodist University study found emissions of NO_x and VOCs from the oil and gas sector in the Dallas-Fort Worth area likely exceed emissions from all motor vehicles in the same area.³
- A 2008 analysis by the Colorado Department of Public Health and Environment concluded that NO_x and VOC emissions from Colorado's oil and gas operations exceeded vehicle emissions for the entire state.⁴
- In 2009, for the first time in the state's history, Wyoming failed to meet the National Ambient Air Quality Standard (NAAQS) for ozone. The Wyoming Department of Environmental Quality determined emissions from the state's growing oil and gas sector were to blame.⁵

Much of Pennsylvania and downwind states already struggle to meet federal health-based standards for ozone and PM_{2.5}. While many areas still fail to meet NAAQS standards, the ambient air concentrations of these pollutants has declined dramatically due the hard work of regulators, environmentalists, and existing industry. Pennsylvania's rapidly growing natural gas

¹ Presentation by Richard G. Newell, Administrator, Energy Information Administration, *The Long-term Outlook for Natural Gas* (Feb. 2, 2011), available at http://www.eia.doe.gov/neic/speeches/newell_aeo_ng.pdf.

² See Pa. Dep't of Env'tl. Prot., *Air Quality Permit Exemptions*, Doc. No. 275-2101-003, Exemption No. 38 at 6-7 (July 26, 2003), available at <http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-50381/275-2101-003.pdf>.

³ Al Armendariz, *Emissions from Natural Gas Production in the Barnett Shale Area and Opportunities for Cost-Effective Improvements* (Jan. 26, 2009), available at http://www.edf.org/documents/9235_Barnett_Shale_Report.pdf.

⁴ Colorado Dept. of Public Health & Environment, Air Pollution Control Division, Oil and Gas Emission Sources Presentation for the Air Quality Control Commission Retreat (May 15, 2008), at 3-4.

⁵ WYDEQ, Technical Support Document I for Recommended 8-Hour Ozone Designation for the Upper Green River Basin, WY, at viii (Mar. 26, 2009), available at http://deq.state.wy.us/out/downloads/Ozone%20TSD_final_rev%203-30-09_jl.pdf.

industry has the potential to halt or reverse this progress unless emissions from natural gas production activities are adequately controlled.

Single source determinations consistent with NSR and Title V requirements can provide a reasonable and effective means of reducing emissions from this industry. When related emission units are considered together as a single major source, they must satisfy BACT,⁶ conduct air modeling to demonstrate that the source will not cause or contribute to air pollution levels that would violate federal or state ambient air quality standards or exceed any applicable maximum allowable increase over baseline concentrations of air pollution in any area,⁷ consult with federal land managers regarding the impact of the source on nearby parks,⁸ and conduct compliance assurance monitoring to demonstrate that they are meeting federally enforceable emission limits.⁹

II. DEP must ensure that a full aggregation analysis is carried out for sources located outside the one-quarter mile radius.

Our understanding is that the Department's new source determination policy creates a presumption that sources located within one-quarter mile satisfy the "contiguous or adjacent" element of the source determination test. While DEP may safely adopt a presumption that the contiguous and adjacent factor is satisfied for sources located within one-quarter mile, such a policy does not eliminate the Department's duty to perform adequate case-by-case aggregation analyses when sources are greater than one-quarter mile apart. This includes analyzing each of the source determination factors and providing an explanation why the sources do or do not meet the criteria for aggregation. While this can be a fact-intensive and time-consuming process, it is required by state and federal law and is an essential part of the permitting process for oil and gas facilities.

A. Contiguous or adjacent

In September 2009, EPA issued the "McCarthy Memo," which clarified the method for making source determinations for oil and gas operations.¹⁰ The McCarthy memo states that while proximity is relevant to contiguous or adjacent determinations, it is not the only factor a permitting authority must evaluate.¹¹ In fact, in some cases distance may not be particularly important in the overall determination. For example, in the recent Summit Petroleum decision,

⁶ 40 C.F.R. § 51.166(j).

⁷ 40 C.F.R. §§ 51.166(c), (d), (e), (k).

⁸ 40 C.F.R. §§ 51.166(o).

⁹ 40 C.F.R. § 70.6(a)(3).

¹⁰ Memorandum from U.S. EPA Assistant Administrator Gina McCarthy to Regional Administrators, *Withdrawal of Source Determinations for Oil and Gas Industries* (Sept. 22, 2009), available at <http://www.epa.gov/region07/air/nsr/nsrmemos/oilgaswithdrawal.pdf> [hereinafter "McCarthy Memo"].

¹¹ *Id.*

EPA required a gas sweetening plant and connected gas wells constituted a single source.¹² Some of the wells were as far as eight miles from the sweetening plant, but were still considered to be “contiguous or adjacent” to the plant.¹³ In many cases, the existence of a connection such as a pipeline or railway will be sufficient to render geographically distant sources contiguous or adjacent.¹⁴ Thus DEP must look beyond the one-quarter mile rule of thumb, and beyond mere considerations of distance when determining whether sources greater than one-quarter mile apart are contiguous or adjacent.

B. Common control

As DEP acknowledges in its source determination guidance, whether facilities are under common control is based on the SEC’s definition of control: “the possession, direct or indirect, of the power to direct or cause the direction or the management and policies of a person, whether through ownership of voting shares, by contract, or otherwise.”¹⁵ Thus common control can be satisfied without a single entity possessing full or direct ownership of all sources. “[A]n ownership interest as low as 10 percent may result in control, while ownership of 50 percent necessarily results in control.”¹⁶

The common control element can also be satisfied by contract or lease agreements;¹⁷ if the facilities share workforces, managers, or executive officers; the facilities share equipment or other property; decisions made at one facility affect pollution control at the other facility; facilities have common payroll, employee benefits, or administrative functions; operations at one facility support operations at the other; or if one facility is dependent on the other to operate.¹⁸ While DEP mentions these factors in the guidance document, this is meaningless unless DEP

¹² Letter from Cheryl L. Newton, Director of EPA Region 5 Air and Radiation Division, to Scott Huber, Summit Petroleum Corp. (Oct. 18, 2010), available at <http://www.epa.gov/region07/air/title5/t5memos/singler5.pdf>.

¹³ *Id.* at 5-6.

¹⁴ See, e.g., Letter from EPA Region V Air and Radiation Division to Illinois Env’tl. Prot. Agency (Mar. 13, 1998), available at <http://www.epa.gov/region07/air/nsr/nsrmemos/acme.pdf> (aggregating two steel plants that were 3.7 miles apart, connected via commercial rail, and separated by a lake, landfills, an interstate, and a river); EPA Office of Air Quality Planning and Standards, *Analysis of the Applicability of Prevention of Significant Deterioration (PSD) to the Anheuser-Busch, Inc. Brewery* (Aug. 27, 1996), available at <http://www.epa.gov/region07/air/nsr/nsrmemos/abnt.pdf> (aggregating a brewery and landfarm located 6 miles apart and connected via pipeline); Letter from Judith Katz, EPA Region III Air Protection Division to James Salvaggio, PADEP Director of Air Quality (May 24, 2000), available at <http://www.epa.gov/region07/air/nsr/nsrmemos/nehubltr.pdf> (aggregating salt mining and production facilities located three miles apart and connected by pipelines).

¹⁵ 17 C.F.R. § 210.1-02(g); 45 Fed. Reg. 59,874, 59,878 (Sept. 11, 1980).

¹⁶ EPA Region 8, Single Source Determination for KN Power/Front Range Energy Associates, pp. 4-5 (Oct. 1, 1999) (quoting 44 Fed. Reg. 3279 (January 16, 1979)) available at: <http://www.epa.gov/region07/air/nsr/nsrmemos/frontran.pdf>; See also. EPA Region 2, Common Control Question - Dupont and Dupont Dow Elastomers (Nov. 25, 1997) available at: <http://www.epa.gov/region7/air/title5/t5memos/2-jntven.pdf>, (finding common control despite only 50% ownership); EPA Region 4, Common Control - United Technologies Corporation; (July 20, 1995), available at: <http://www.epa.gov/region7/air/title5/t5memos/site.pdf>, (finding common control despite only 50% ownership).

¹⁷ EPA Region 8, Single Source Determination - Coors/Trigen (Nov 12, 1998) available at: <http://www.epa.gov/region07/air/nsr/nsrmemos/coorstri.pdf>.

¹⁸ Letter from William Spratlin, EPA Region VII, to Peter Hamlin, Chief of Iowa Dept. of Natural Resources Air Quality Bureau, (Sept. 18, 1995), at 1-2, available at <http://www.epa.gov/region07/air/policy/control.pdf>.

staff actually investigates ownership relationships when determining if common control exists for purposes of making a single source determination.

III. The air permit compliance review form should be modified to require applicants to disclose additional information relevant to common control.

While the Department must evaluate this information to satisfy its NSR and Title V program obligations, it would be impractically time- and labor-intensive for the Department to gather this information itself for each and every permit application. Instead, the Department should consistently require permit applicants to provide full and accurate information regarding functional relationships, contractual agreements relevant to common control. This could be most easily achieved by amending the air permit application compliance review form to require applicants to provide information regarding contractual agreements, joint ventures, or functional dependencies relevant to common control.

IV. DEP must clarify that distance is measured from property boundary to property boundary when determining distance between sources.

DEP's single source determination guidances states that "properties located a quarter mile or less apart are considered contiguous or adjacent." DEP should revise the guidance to clarify that distance is to be measured from each facility's closest property boundary, not from facility center to facility center. A property center-to-center policy would reduce the one-quarter mile presumption of adjacency by the distance from property center to property fenceline. For facilities located on large sites this could eliminate the ¼ presumption entirely. Further, emission units at a site may be located near the property boundary, meaning the property center would not provide an accurate indication of the actual location of the emissions points. This concern is particularly relevant to the natural gas industry because emission units associated with gas production are often mounted on movable skids, meaning their location on the site may change relatively frequently compared to a traditional stationary source.

V. DEP should replace the term "daisy-chained sources" with "sources in a long-line operation."

The guidance document states that "facilities should not be 'daisy-chained' together to establish a contiguous grouping."¹⁹ DEP provides no legal support for a establishing a prohibition on "daisy-chaining" or any reasoning why a group of sources could not satisfy the common sense notion of plant.

In the pre-amble to the 1980 rule concerning source aggregation, EPA did state that it "does not intend 'source' to encompass activities that would be many miles apart along a long-line operation. For instance, EPA would not treat all of the pumping stations along a multistate pipeline as one 'source.'"²⁰ However, this does not support the prohibition on "daisy-chaining" that DEP proposes. Compressor or boosting stations along interstate pipelines are generally

¹⁹ Guidance Document at 4.

²⁰ 45 Fed. Reg. 52,676, 52,695 (Aug. 7, 1980).

located between 50 and 100 miles apart,²¹ the DEP proposal would apparently prohibit aggregation of sources connected along a line cannot be aggregated even if they are within one-quarter mile of one or perhaps all of the sources at issue. This interpretation is not supported by state or federal law, nor is it consistent with the common sense notion of plant. The prohibition should be removed.

²¹ Energy Information Administration, Office of Oil and Gas, *Natural Gas Compressor Stations on the Interstate Pipeline Network: Developments Since 1996*, Nov. 2007, at 1, available at http://38.96.246.204/pub/oil_gas/natural_gas/analysis_publications/ngcompressor/ngcompressor.pdf.