

Pennsylvania Bulletin
February 25, 2011

NOTICES

Notice to Rescind Technical Guidance and Notice of Intent to Reopen the Public Comment Period on the Air Quality Exemption List and the General Plan Approval and/or General Operating Permit for Nonroad Engines

[41 Pa.B. 1066]

[Saturday, February 26, 2011]

The Department of Environmental Protection (Department) is taking three separate actions: Notice to **Rescind and Remove from the Official List of Department Technical Guidance Documents and Policies Interim Guidance for Performing Single Stationary Source Determinations for the Oil and Gas Industries (DEP ID: 270-0810-006) published at 40 Pa.B. 7429 (December 25, 2010)**; Notice of Intent to Reopen Public Comment Period on Air Quality Permit Exemptions (DEP ID: 275-2101-003) published at 40 Pa.B. 2822 (May 29, 2010)

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Air Quality

DOCUMENT NUMBER: 270-0810-006

TITLE: Interim Guidance for Performing Single Stationary Source Determinations for the Oil and Gas Industries

EFFECTIVE DATE: December 25, 2010

AUTHORITY: 25 Pa. Code § 127.83

POLICY: Because, the applicable requirements promulgated by EPA are adopted and incorporated by reference in their entirety into The Department of Environmental Protection's ("Department") regulations, The Department has consistently applied EPA guidance in interpreting and implementing this program.

PURPOSE: The purpose of this document is to provide interim guidance to assist the Department of Environmental Protection's Air Program staff in making major stationary source determinations for the oil and gas industries in Pennsylvania.

APPLICABILITY: This policy applies to DEP's non-regulatory public guidance documents that the Commonwealth of Pennsylvania catalogs annually in the *Pennsylvania Bulletin*.

This policy does not apply to administrative operating procedures, such as personnel rules, procurement processes, or the administrative handling of contracting.

DISCLAIMER: The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

Purpose

The purpose of this memorandum (“memo”) is to provide interim guidance to assist the Department of Environmental Protection’s (“Department”) Air Program staff in making major stationary source determinations for the oil and gas industries in Pennsylvania. As you know, there are significant gas exploration and extraction activities occurring in the Commonwealth within the Marcellus Shale formation. As a result, there are permitting issues related to whether the air emissions from exploration, extraction, or production activities should be aggregated to determine whether the emissions from these sources constitute a single “major stationary source” or “major facility” for purposes of New Source Review (“NSR”), Title V permitting programs and Prevention of Significant Deterioration (“PSD”).¹ The provisions of the Department’s NSR, PSD and Title V Permit programs are approved by the United States Environmental Protection Agency (EPA) and incorporated in the Commonwealth’s State Implementation Plan (“SIP”) at 40 CFR Part 52.2020. Because, the federal PSD requirements promulgated by EPA are adopted and incorporated by reference in their entirety,² the Department has consistently applied EPA guidance in interpreting and implementing this program since 1983. As a result, this memo relies upon EPA guidance in assisting Department Air Program staff in making single source determinations for the oil and gas industries.

On September 22, 2009, Gina McCarthy, Assistant Administrator for the EPA’s Office of Air and Radiation, issued a memo entitled “Withdrawal of Source Determinations for Oil and Gas Industries” to Regional Administrators (“McCarthy Memo”), which emphasized a fact-specific case-by-case approach for single source determinations. In making source determinations in the oil and gas industry, permitting authorities should rely foremost on the three regulatory criteria for identifying emissions activities that belong to the same “building,” “structure,” “facility,” or “installation.” The three regulatory criteria are: (1) whether the activities are under the control of the same person (or person under common control); (2) whether the activities are located on one or more contiguous or adjacent properties; and (3) whether the activities belong to the same industrial grouping. *See* 40 C.F.R. § 52.21 (b) (6). The McCarthy memo also makes several important observations. First in applying these criteria, permitting authorities

¹ A source is subject to Title V if it has the potential to emit 100 tons per year (“TPY”) or more of carbon monoxide (“CO”), nitrogen oxides (“NO_x”), sulfur dioxide (“SO_x”) and particulate matter 10 microns or less (“PM₁₀”) 50 TPY of volatile organic compounds (“VOCs”), 10 TPY of a single hazardous air pollutant (“HAP”), and 25 TPY of multiple HAPs. In southeastern Pennsylvania, the Title V thresholds for NO_x and VOCs are 25 TPY. *See* 25 Pa. Code § 121.1.

² 25 Pa. Code § 127.83. These regulatory provisions were adopted June 17, 1983, effective June 18, 1983, 13 Pa.B. 1940.

should also remain mindful of the explanation EPA provided in the 1980 preamble. *See* 45 Fed. Reg. 52676, 52694-95 (August 7, 1980). Second the past two decades, EPA's regional offices have applied these regulatory criteria in making source determinations in EPA permitting actions, and in providing guidance to other permitting authorities making such determinations. Third, EPA's case-by-case determinations illustrate the kind of reasoned decision-making that is necessary to justify adequately a permitting authority's source determination decision. Finally, these case-by-case source determinations represent highly fact specific decisions, and while informative of the necessary analytical process, no single determination can serve as an adequate justification for how to treat any other source determination for pollutant-emitting activities with different fact-specific circumstances. The September 2009 memo withdrew previous guidance that suggested that proximity of sources is the most informative factor in making source determinations in this industry.

Subsequently, on October 8, 2009, the EPA Administrator signed an Order finding that the Colorado Department of Public Health and Environment ("CDPHE") had not adequately explained its decision with respect to whether emissions from commonly owned gas wells and compressor stations should be aggregated for NSR and Title V purposes.³ The Order directed CDPHE to supplement the permit record and, as necessary, make appropriate changes to the permit based on an analysis using the three regulatory criteria outlined above. The Order also recommended that CDPHE further analyze all wells and other activities operated by the permittee in a particular gas field and determine whether they must be combined into a single source.⁴ By letter dated July 14, 2010, the CDPHE submitted its response to EPA Order in which it determined that "no gas wells or associated pollutant emitting activities...should be aggregated with emissions from the Frederick Compressor Station as a single air pollution source." The CDPHE requested that EPA deem the Order satisfied and take any administrative action actions to confirm the validity of the Title V Permit in light of the response to the Order.⁵

On October 18, 2010, EPA provided additional guidance relative to single source determinations within the context of the oil and gas industries in matters dealing with the Florida River Compression Facility in EPA Region 8⁶ and Summit Petroleum

³ *In Re Kerr-McGee/Anadarko, Petroleum Corporation, Fredrick Compressor Station*, Permit Number: 950PWE035, Order Granting Petition For Objecting To Permit, Before the Administrator, U.S. EPA, October 8, 2009 (Petitioner's requests for an objection to the issuance of the Kerr-McGee Anadarko Frederick Compressor Station Title V permit granted).

⁴ On July 14, 2010, the CDPHE reaffirmed its previous determination. EPA has not yet responded to this determination.

⁵ CDPHE's July 14, 2010 response to the October 8, 2009 EPA Order on the Title V renewal permit for the Kerr-McGee Frederick Station.

⁶ "Response to Comments on the Florida River Compression Facility" March 28, 2008 Draft Title V Permit to Operate."

Corporation in EPA Region 5.⁷ Taking into consideration the complex and diverse gas movement among the facilities, as well as the lack of interdependence among the facilities, EPA determined that the Florida River Compression Facility, and another compressor station and well sites were not interdependent and therefore should not be considered a single source. In the case of Summit Petroleum, however, EPA found that considering the facts specific to the permitting scenario and EPA's regulatory criteria for single source determinations, EPA determined that Summit's sour gas flares, natural gas wells, associated equipment and the sweetening plant should not be considered separate emission sources. EPA concluded that because the sour gas wells are truly interdependent on the sweetening plant they should be considered a single source.

While each of these cases reached a different result, they are consistent with the overall directive of the McCarthy Memo which is that EPA expects each single source determination to be conducted by permitting authorities on a "case-by-case," "highly fact-specific" basis, where "no single determination can serve as an adequate justification for how to treat any other source determination for pollutant-emitting activities with different fact-specific circumstances."⁸ Consequently, Department's Air Program staff should ensure that any single source determination is conducted on a case-by-case, highly fact-specific basis, taking into consideration EPA's regulatory criteria for single source determinations.

Factual Background

There are three phases in the development of gas from the Pennsylvania Marcellus Shale formation - exploration/extraction, dehydration and compression and final gas processing. Should exploration prove successful, wells are developed using directional drilling methods. Internal combustion engines that are mobile (i.e., portable or transportable) are treated as "nonroad engines" as defined in 40 CFR Section 89.2. The emissions from these temporary nonroad engines used during the drilling phase are not considered for single source determinations provided the engines do not remain at any site building, structure or facility for 12 or more consecutive months.

When natural gas leaves a well it is sent to a gathering station for dehydration to remove water to prevent the formation of hydrates in transmission lines, meet water dew point requirements, and prevent corrosion. The gas is then compressed by an internal combustion ("IC") engine(s) at compressor stations and conveyed to a processing facility via pipeline. However, in some instances the natural gas from compressor stations can be introduced into interstate pipelines without additional processing. The IC engines may operate on natural gas and range in size from 800 – 4,000 horsepower.⁹ Natural gas

⁷ Memo from Cheryl L. Newton, Director, EPA Region 5 to Scott Huber, Summit Petroleum Corporation, October 18, 2010.

⁸ McCarthy Memo at page 2.

⁹ GP-5 engines generally range from 800-1,380 and currently cannot be used for engines rated greater than 1,500 hp.

pipelines used to deliver gas for processing typically run between 2 and 10 miles in length, but longer pipelines could be constructed by adding more or larger compressor stations. At the gas processing facility, gas is fractionated to remove hydrocarbons such as ethane and propane prior to market. Processed gas is compressed again using IC engines or electric engines and conveyed to the open market. If the contributions of the associated IC engines, excluding nonroad engines, are combined, they may exceed major emission thresholds for NSR applicability purposes.

Pollutants emitted during drilling, compression and delivery include NSR regulated pollutants¹⁰ such as oxides of nitrogen (“NOx”) and carbon monoxide (“CO”). In addition, hazardous air pollutants and volatile organic compounds (“VOCs”) are emitted during all stages of development.

Regulatory Background

Air Quality Permit Exemptions List

Oil and gas exploration and production facilities and operations (include wells and associated equipment and processes), not located at a major source, and meeting certain requirements set forth in Air Quality Permit Exemptions (TGD No. 275-2101-003) are currently exempt from the Plan Approval requirements in 25 Pa. Code §§ 127.11 and 127.12. However, the Department proposes to revise the exemption that pertains to oil and gas exploration and production facilities and operations. The owners and operators of engines not meeting the requirements identified in Category No. 38 of the Exemption List may submit a request for determination (“RFD”) to the Department to determine if a plan approval or operating permit is required. If the RFD is not approved by the Department, an application seeking authorization to use a general plan approval, or plan approval application must be submitted to the Department, as appropriate.¹¹

General Plan Approvals and General Operating Permits

The gas dehydration/compression stage is covered by the Bureau of Air Quality’s General Permit for Natural gas, coal bed methane or Gob Gas production or recovery facilities (“GP-5”). The Bureau has proposed minor amendments to GP- 5 to allow an owner or operator to limit potential emissions based on the specifications in the application. Major modifications to GP-5 will expand the applicability of the General Permit to include all activities associated with natural gas production and processing facilities. However, any stationary air contamination source that is subject to the requirements of 25 Pa. Code Chapter 127, Subchapter D (relating to prevention of significant deterioration), E (relating to New Source Review), G (relating to Title V operating permits), or 25 Pa. Code § 129.91 (relating to control of major sources of NOx

⁵ See 40 C.F.R § 52.21(b) (50), which defines “NSR regulated pollutant.”

¹¹ See 40 Pa.B. 2822, (May 29, 2010).

and VOCs) may not construct or operate a natural gas, coal bed methane or gob gas production or recovery facility under GP-5.

The emissions of NO_x and VOCs during the drilling phase are largely from transportable internal combustion engines which may qualify to be nonroad engines.¹² The nonroad engines may be authorized under the Bureau of Air Quality's General Plan Approval And/Or General Operating Permit for Nonroad Engine(s) (BAQ-GPA/GP 11). However, engines which meet the Department's definition of "stationary internal combustion engine"¹³ are regulated under the Department's stationary source program.

A "nonroad engine" is further defined by federal regulation¹⁴ as any internal combustion engine that is: (1) in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function; or (2) in or on a piece of equipment that is intended to be propelled while performing its function; or (3) that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but not limited to, wheels, skids, carrying handles, dolly, trailer or platform.

The "nonroad engine" definition further states that an internal combustion engine is not a nonroad engine if the engine will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. Paragraph 2 of the federal definition of nonroad engine in 40 CFR Section 89.2 (relating to definitions), defines a "location" as any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is defined as a stationary source that remains in a single location for at least two years and that operates at a single location approximately three months or more each year. Section 89.2 notes that this definition does not apply to an engine after the engine is removed from the location.

The emissions from nonroad engines cannot be aggregated or considered for the purposes of NSR/PSD, Title V or hazardous air pollutants under Section 112 of the CAA. The Department has limited regulatory authority to regulate these engines¹⁵ and state and local permitting authorities are preempted from establishing any technology standards

¹² The term "nonroad engine" means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 of this title (relating to new source performance standards) or Section 7521 of this title (relating to emission standards for new motor vehicles or new motor vehicle engines). 42 U.S.C. § 7550(10).

¹³ See 25 Pa. Code § 121.1.

¹⁴ See 40 C.F.R. § 89.2.

¹⁵ See 42 U.S.C. § 7543(e)(2).

such as “best available technology.” It should be noted that other temporary sources, such as impoundments that hold fracking fluid that may emit VOCs, are considered air contamination sources and their emissions must be considered in any analysis of major source applicability.

Hazardous Air Pollutants

Congress provided specific direction on how emission sources in the oil and gas exploration and production industry should be grouped together for purposes of defining a major source under Section 112 of the CAA. Specifically, Section 112(n)(4) of the Act states: “[E]missions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.”¹⁶ For the purposes of these industries, major source refers to individual surface sites.¹⁷ It is important to note that this congressional direction is limited to Section 112 purposes only and is not extended to PSD and NSR programs.

PSD/NSR¹⁸

Major stationary sources located in attainment areas are subject to the PSD permit program.¹⁹ Before a person can construct a major source in an attainment area, they must receive a permit under the PSD program. The Department will issue a PSD permit, if an applicant demonstrates that the proposed source will, among other things, comply with the ambient air quality levels designed to prevent air quality deterioration and will employ the “best available control technology” (“BACT”) for each regulated pollutant.²⁰ Persons seeking to construct and operate a source in an attainment area in Pennsylvania

¹⁶ See 42 U.S.C. § 7412(n) (4).

¹⁷ See 40 C.F.R. Part 63, Subpart HH. See also 64 Fed. Reg. 32618, (June 17, 1999).

¹⁸ While much of the discussion in this section focuses on PSD and is taken from the preamble to the PSD final rule at 45 Fed. Reg. 52676 (August 7, 1980), EPA was clear in promulgating the Title V major source definition found at 40 C.F.R. § 71.2, that the language and application of the Title V definition was to be consistent with the NSR program. See 61 Fed. Reg. 34202, 34210 (July 1, 1996).

¹⁹ The PSD program applies to sources that have the potential to emit at least 250 TPY of a regulated pollutant, or at least 100 TPY of a regulated pollutant if the source falls within a listed source category. 40 C.F.R. § 52.21(b) (1). State Implementation Plans (“SIPs”) must also contain provisions to prevent significant deterioration of air quality. 40 C.F.R. § 51.166.

²⁰ See 42 U.S.C. § 7475.

must comply with the SIP-approved preconstruction permitting requirements under the PSD program.²¹

Major stationary sources²² located in non-attainment areas are subject to the non-attainment NSR permit program, which the States are responsible for implementing through their SIPs.²³ Before a person can construct a major source in a non-attainment area, they must receive a permit under the non-attainment permit program. To receive that permit, a person must show that the proposed source will, among other things, offset its potential to emit criteria pollutants by securing emission reductions within the Ozone Transport Region or from a nearby facility in PM_{2.5} nonattainment areas at a greater than 1:1 ratio and will employ the “lowest achievable emission rate” (“LAER”) for each regulated pollutant. *See* 42 U.S.C. § 7503. Those seeking to construct and operate a source in a non-attainment area in Pennsylvania must comply with the SIP-approved preconstruction permitting requirements under the non-attainment NSR program.²⁴

The federal PSD regulations, which Pennsylvania incorporates by reference in their entirety, define “stationary source” to mean “any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.”²⁵ Moreover, a building, structure, facility, or installation means all the pollutant-emitting activities which belong to the same industrial grouping²⁶; are located on one or more contiguous or adjacent properties; and are under the control of the same person.²⁷ For non-attainment NSR purposes, Pennsylvania defines “facility” to mean “an air contamination source or combination of air contamination sources located on one or more contiguous or adjacent properties and which is owned and operated by the same person under common control.”²⁸

²¹ *See* 25 Pa. Code Chapter 127 Subchapter D. The PSD requirements promulgated in 40 C.F.R. Part 52 are adopted in their entirety by the Department and incorporated by reference under this subchapter.

²² The non-attainment program applies to sources that have the potential to emit at least 100 TPY of a regulated non-attainment pollutant. 42 U.S.C. § 7602(j). These thresholds have been lowered for areas with more acute non-attainment problems. For instance, to 50 TPY for VOC and NO_x in serious ozone non-attainment areas, to 25 TPY for severe areas, and 10 TPY for extreme areas. *See generally*, 42 U.S.C. § 7511a.

²³ Each SIP shall satisfy the conditions of section 173 of the CAA relating to non-attainment major new source review permit program. 40 C.F.R. § 51.165.

²⁴ *See*, 25 Pa. Code Chapter 127 Subchapter E.

²⁵ 40 C.F.R. § 52.21(b)(5).

²⁶ Under this definition, activities are within the same industrial grouping if they share the same two-digit Standard Industrial Classification (“SIC”). Exploration, extraction, or production activities in the oil and natural gas development industry share the same two-digit SIC code – 13.

²⁷ 40 C.F.R. § 52.21(b)(6).

²⁸ 25 Pa. Code §121.1. The definition “facility” under Section 121.1 applies to the non-attainment NSR permit provisions under this subchapter and the state-only permit program. This definition has been “SIP-approved” by EPA as consistent with federal law and must be implemented as such to reflect that consistency.

Discussion

SIC Code

Pollutant-emitting activities are considered to be part of the same industrial grouping if they have the same first two digit SIC code. *See* 40 CFR Part 52.21(b) (6). In addition, a support facility is considered to be part of the same industrial grouping as that of the primary facility it supports even if the support facility has a different two digit SIC code. One source classification encompasses both primary and support facilities, even when the latter includes units with a different two digit SIC code. Support facilities are typically those which convey, store, or otherwise assist in the production of the principal product." *See* 45 Fed. Reg. 52695, (August 7, 1980).

In the August 7, 1980 preamble to the PSD regulations EPA clarified the definition of "support facility", which states:

"Each source is to be classified according to its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Thus, one source classification encompasses both primary and support facilities, even when the latter includes units with a different two-digit SIC code. Support facilities are typically those which convey, store, or otherwise assist in the production of the principal product. Where a single unit is used to support two otherwise distinct sets of activities, the unit is to be included within the source which relies most heavily on its support..."

Id. at 52676, 52695.

In defining the source where a potential support relationship exists between two or more facilities in a maintenance or attainment area, for PSD applicability purposes, the difference in SIC codes becomes irrelevant.²⁹ The only factors remaining to be considered are whether the facilities are contiguous or adjacent and under common control as considered according to the "common sense" notion of what constitutes a single source. Under nonattainment NSR, Pennsylvania's federally approved definition of "facility" found at 25 Pa. Code Section 121.1 (relating to definitions) does not include a requirement for sources to have the same SIC code to be part of the same facility. So, here too the only factors to be considered for non-attainment applicability purposes, are whether the facilities are contiguous or adjacent and under common control.

Contiguous or Adjacent

²⁹ *See* Memo from Judy M. Katz, U.S. EPA Region 3 to James Salvaggio, Pennsylvania Department of Environmental Protection, undated.

EPA policy does not include a bright line or numeric standard for determining how far apart activities may be and still be considered “contiguous” or “adjacent.”³⁰ Historically, EPA has stated that it is a case-by-case, fact-specific determination and has made that claim since the August 7, 1980 PSD regulations³¹ and in a number of EPA guidance documents.³² The determination of whether sources are adjacent is based on the “common sense” notion of source, and whether they functionally operate as a single source. In explaining this concept, EPA has noted that whether or not facilities are adjacent depends not only on the “common sense” notion of a source, but also the functional inter-relationship of the facilities and is not simply a matter of physical distance between the two facilities.³³

Due to the nature of the oil and gas extraction business, wells are scattered across the resource area creating duplicate facilities performing identical functions. For instance, well production pads and compressor stations are dispersed across an area so that the leases can be accessed and natural gas can be extracted, compressed, and conveyed via pipeline to a nearby processing facility. Processing facilities and compressor stations are scattered since natural gas is conveyed to them from the wells for processing, compression, and conveyance via pipeline to the open market. The number of compressors at a compressor station or processing facility may vary based on the amount of gas produced from nearby wells, processed from nearby facilities, the size of the pipeline, and the distance the gas has to travel to the nearest pipeline market.

While the distance from a well site to a processing facility could be several miles or more, EPA has made single source determinations where facilities were found to be contiguous and adjacent despite the physical distance between the activities, based on the specific facts of the case.³⁴ In these determinations, the examination of the facts of the

³⁰ See Memo from Pamela Blakely, U.S. EPA Region 5 to Don Smith, Minnesota Pollution Control Agency, March 23, 2010.

³¹ In EPA’s view, the December opinion of the court in Alabama Power sets the following boundaries on the definition for PSD purposes of the component terms of “source”: (1) it must carry out reasonably the purposes of PSD; (2) it must approximate a common sense notion of “plant;” and (3) it must avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of “building,” “structure,” “facility,” or “installation.” 45 Fed. Reg. 52676, 52693, (August 7, 1980).

³² See e.g., Memo from Douglas E. Hadesty, U.S. EPA Region 10 to John Kuterbach, Alaska Department of Environmental Conservation, August 21, 2001.

³³ See Memo from Steven C. Riva, U.S. EPA Region 2 to John T. Higgins, New York Department of Environmental Conservation, October 11, 2000. See also Memo from Steven C. Riva, U.S. EPA Region 2 to Robert Lenney, Alcoa Massena Modernization Project, March 9, 2009.

³⁴ See Memo from Pamela Blakely, U.S. EPA Region 5 to Don Smith, Minnesota Pollution Control Agency, March 23, 2010, and (Biomass processing plant that delivers biomass to a combined power and heat boiler that is three miles where 40 truckloads of biomass is transported per day, seven days a week is treated as a single facility.) See Memo from Judy M. Katz, U.S. EPA Region 3 to James Salvaggio, Pennsylvania

facilities led to a decision in which the functional inter-relationship of the facilities was determined to be more important than distance alone in deciding whether two or more facilities should be treated as a single source.

One “common sense” example of the notion of plant would be the situation where gas can only flow in one direction.³⁵ In other words, gas comes from the well and can only go to one compressor station, to one processing facility for finishing and to one compressor station to take the gas to market. Another example would be where gas cannot enter a market pipeline without additional processing to meet market pipeline specifications. In these situations none of the steps in the development chain can exist without the other even if there is a far distance between them. Accordingly, it would be reasonable to find that emissions from all steps in that process must be included in the permitting analysis as a single source. Such a conclusion is consistent with past EPA guidance that treated two or more facilities as one plant based on specific facts showing a functional inter-relationship between the emission points.³⁶ Moreover, this approach carries out the purposes of the NSR program, which is to ensure the attainment or

Department of Environmental Protection, undated, (Dedicated pipelines between a proposed salt plant and solution mining and gas storage plant three miles apart meet EPA’s criteria for being considered contiguous or adjacent). *See* Memo from Richard R. Long, U.S. EPA Region 8, to Dennis Myers, Colorado Department of Public Health and the Environment, April 20, 1999, (Mine and processing plant connected by a 44 mile pipeline need to be considered as a single stationary source, since they are functionally interdependent). *See also* Memo from Robert G. Kellam, U.S. EPA Research Triangle Park to Richard R. Long, U.S. EPA Region 8, April 27, 1996, (Brewery and land farm six mile apart are contiguous and adjacent for PSD purposes since the land farm is an integral part of the brewery operations).

³⁵ Memo from Cheryl L. Newton, Director, EPA Region 5 to Scott Huber, Summit Petroleum Corporation, October 18, 2010, (Sour gas wells are truly interdependent on the sweetening plant – the wells provide all their sour gas to the sweetening plant, the sour gas cannot flow anywhere else, and Summit owns and operates the sweetening plant and well sites).

³⁶ *See* Memo from Richard R. Long, U.S. EPA Region 8 to Lynn R. Menlove, Utah Department of Environmental Quality, August 8, 1997, (Two facilities 21.5 miles apart that are owned and operated by the same company are one plant based on dedicated channel and functional inter-relationship). *See* Memo from Joan Cabreza, U.S. EPA Region 10 to Andy Ginsberg, Oregon Department of Environmental Quality, August 7, 1997, (Two facilities owned and operated by the same company that are a couple of blocks away are one plant since they function together in that manner even though one foundry operates independently from the other). *See also* Memo from Cheryl L. Newton, U.S. EPA Region 5, to Donald Sutton, Illinois Environmental Protection Agency, March 13, 1998, (Although the two sites are separated by a lake, interstate highway, landfills, and a river, the close proximity of the sites, along with the interdependency of the operations and their historical operation as one source, as sufficient reasons to group these two facilities as one.)

maintenance of the NAAQS,³⁷ and aggregates pollutant-emitting activities that as a group would fit within the ordinary meaning of “building,” “structure,” “facility,” or “installation.”

To evaluate the contiguous or adjacent factor, it may be beneficial to use the “wagon-wheel” model and think of the processing facilities as “hubs” compressor stations as “spokes”, and the wheel itself as the well fields.³⁸ (*See Attachment*). In this model, the wells supply the spokes or compressor stations that deliver the natural gas to the hubs or processing facilities for processing and delivery. The flow of the wellhead gas and processed gas determines which spokes should be attached to which hubs. This model illustrates the functional inter-relationship of the facilities and the common sense notion that these facilities are a plant for the purposes of making a single source determination for NSR applicability. That is, the wells depend on the compressor stations for their operation since the wells would cease to operate, because there would otherwise be no means of compressing and transporting the gas to downstream facilities or to market pipelines. In addition, such an approach provides for a manageable NSR applicability determination and subsequent permit administration for the sources comprising the “wagon-wheel”.

Common Control and Ownership

The remaining factor to be considered in defining the source is whether a common control relationship exists between the two facilities. Through regulation and guidance, EPA has established a number of ways to determine common control as used in the definition of “major source” as defined under the Clean Air Act. First, common control can be established by ownership.³⁹ That is, both facilities are owned by the same parent company or a subsidiary of the parent company. Second, common control can be established if an entity such as a corporation has decision-making authority over the operation of a second entity through a contractual agreement or voting interest.⁴⁰ If

³⁷ *See e.g., Alaska Dep’t of Env’tl. Conservation v. EPA*, 540 U.S. 461, 470 (2004).

³⁸ This concept was developed by the Alaska Department of Environmental Conservation to determine stationary source for PSD and Title V applicability, where the longest wells or spokes were 3, 4, 6, and 9 miles respectively from the closest processing facilities or hubs. *Department of Environmental Conservation Air Quality Operating/Construction Permit*, Permit No. AQ0182TVP01, Issue Date: October 20, 2003. *See In Re BP Exploration (Alaska), Inc. Permit No. 182TVP01*, Order Denying Petition for Objection to Permit, Before the Administrator, U.S. EPA, April 20, 2007 (Administrator upheld the Alaska Department of Environmental Conservation permit). *See also MacClarence v. U.S. EPA*, (Administrator’s order upheld). *See also* Memo from Cheryl L. Newton, Director, EPA Region 5 to Scott Huber, Summit Petroleum Corporation, October 18, 2010, footnote 29.

³⁹ Memo from Steven C. Riva, U.S. EPA Region 2 to Robert Lenney, Alcoa Massena Modernization Project, March 9, 2009.

⁴⁰ Memo from Richard R. Long, U.S. EPA Region 8 to Margie Perkins, Colorado Department of Public Health and the Environment, October 1, 1999.

common control is not established by the first two ways, then one should next look at whether there is a contract for service relationship between the two companies⁴¹ or if a support/dependency relationship exists between the two companies, as discussed above, in order to determine if a common control relationship exists.

As with the contiguous or adjacent factor, EPA determines “control” on a case-by-case basis and is guided by the general definition of control used by the Securities and Exchange Commission (“SEC”).⁴² The SEC defines “control” (including the terms “controlling,” “controlled by” and “under common control with”) as the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise.⁴³ Additionally, EPA formulated a number of questions including but not limited to the following, to assist in determining whether there is common control⁴⁴:

- What is the dependency of one facility on the other? If one shuts down, what are the limitations on the other to pursue outside business interests?
- Does one operation support the operation of the other? What are the financial arrangements between the two entities?
- Do the facilities share intermediates, products, byproducts, or other manufacturing equipment? Can the new source purchase raw materials from and sell products or byproducts to other customers? What are the contractual arrangements for providing goods and services?
- Do the facilities share equipment, other property, or pollution control equipment? What does the contract specify with regard to the pollution control responsibilities of the contractee? Can the managing entity of one facility make decisions that affect pollution control at the other facility?
- Who accepts the responsibility for compliance with air quality control requirements? What about for violations of the requirements?
- Do the facilities share common workforces, plant managers, security forces, corporate executive officers or board executives?
- Do the facilities share common payroll activities, employee benefits, health plans, retirement funds, insurance coverage, or other administrative functions?

⁴¹ Memo from John S. Seitz, “Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permits of the Clean Air Act, August 2, 1996.

⁴² 45 Fed. Reg. 59874, 59878 (September 11, 1980).

⁴³ 17 C.F.R. § 240.12b-2.

⁴⁴ Memo from William A. Spratlin, U.S. EPA Region 7, to Peter Hamlin, Iowa Department of Natural Resources, September 18, 1995.

EPA indicates this list is not exhaustive and serves only as a vetting device. If the owners or operators of a facility can provide information showing that one facility has no ties to another facility, then they are most likely separate sources under their own control. However, if the owners or operators respond to these questions in such a way that one facility may be considered under the control of the other, or under common control of both companies, then it would not be considered a separate entity for permitting purposes. Absent any major relationships, one facility may still be considered to be under the control of the other if a significant number of the indicators point to common control.⁴⁵ Finally, the Department's checklist should be used to assist when making a determination related to common control. (See attached checklist).

Conclusion

On September 22, 2009, Assistant Administrator Gina McCarthy issued a memo that reemphasized the fundamental three-part regulatory criteria for making single source determinations as specified in existing regulations - belong to the same industrial grouping; are located on one or more contiguous or adjacent properties; and are under the control of the same person. However, where a potential support relationship exists between two or more facilities in a PSD attainment area, the difference in SIC codes becomes irrelevant and the only factors remaining to be considered are whether the facilities are contiguous or adjacent and under common control. Therefore, while the proximity of the emission units is important, it should not be the sole deciding factor in making the single source determination. The interdependent nature of the emission units should also be considered when determining whether these units should be treated as a single source. In applying these criteria, the McCarthy memo emphasized that aggregation is a fact-specific case-by-case determination. Consequently, permitting authorities including the Department should make those case-by-case single source determinations consistent with EPA guidance from the body of determinations made over the past two decades.

⁴⁵ Memo from Kathleen Henry, U.S. EPA Region 3 to John Slade, Pennsylvania Department of Environmental Protection, undated.