

Anadarko Frederick Compressor Station: Source Determinations for the Oil and Natural Gas Industry

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I. Introduction

On February 21, 2012, the Tenth Circuit Court of Appeals dismissed an appeal (EPA) involving Anadarko Petroleum Corporation's (Anadarko) Frederick Natural Gas Compressor Station (the Frederick Compressor Station).¹ The appeal challenged a February 2, 2011 ruling by the United States Environmental Protection Agency (EPA) refusing to object to the issuance of a Title V permit renewal issued to Anadarko.² With the dismissal of the appeal, the Colorado Department of Protection of Health and Environment's (CDPHE) decision to issue the Title V renewal has finally been upheld. The Frederick Compressor Station is located northeast of the Denver metropolitan area. It utilizes three internal combustion

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¹ See *WildEarth Guardians v. U.S. E.P.A.*, Case No. 11-9527 (10th Cir. Feb. 21, 2012) (Order). At the time this permitting saga began, the Frederick Compressor Station was owned by Kerr-McGee Gathering, LLC (Kerr-McGee); Kerr-McGee subsequently became a wholly-owned subsidiary of Anadarko. *Id.* at 4. These entities are collectively referred to herein as Anadarko. The dismissal was part of a settlement reached between WildEarth Guardians (WEG) and EPA Region 8 involving both the Anadarko matter and a separate permit issued by Region 8 to BP America Production Company's (BP) Florida River Compressor Station in La Plata County, Colorado, which was on appeal before the Environmental Appeals Board (EAB) (Appeal No. CAA-10-04). See 76 Fed. Reg. 71,027 (Nov. 16, 2011). As part of the settlement agreement, Region 8 agreed to implement a pilot program for reviewing new and renewal Title V permits involving oil and natural gas operations as to which Region 8 is the initial permitting authority.

² *In re Anadarko Petroleum Corp., Frederick Compressor Station*, Permit No. 950PWE035, Pet. No. VIII-2010-4, Order Denying Petition for Objection to Permit, U.S. E.P.A. (Feb. 2, 2011) (hereinafter, EPA Order III).

engines to power units that compress natural gas produced from the Wattenberg natural gas field (the Wattenberg Field) for transmission to sales pipelines.³ EPA's 2011 ruling is the latest in a series of source determinations regarding aggregation of individual oil and natural gas operations, and likely will have a significant impact on the scope and applicability of Prevention of Significant Deterioration (PSD) and Title V review for oil and natural gas activities under the Clean Air Act (the Act).

This paper explores the significance of EPA's Frederick Compressor Station decision in the context of growing discord among regulators and the regulated community regarding whether to aggregate air emissions from individual oil and natural gas emissions units. In the context of permitting emissions from such activities, a strict reading of the statutory and regulatory text mandates that regulators treat individual units which share the same industrial classification and are under common control as a single stationary source only when they are located on properties "contiguous or adjacent" to one another, *i.e.*, touching or immediately nearby. Miles of pipeline often separate oil and natural gas units, and the individual operations often create a patchwork footprint of property interests covering many square miles. Frequently, several different entities own the oil and natural gas units in a single field, but collectively the units work in concert to provide processed hydrocarbons for delivery to market. Out of necessity, companies connect oil and natural gas operations to one another via pipeline; indeed, an intricate network of pipelines ultimately connects the entire country. Regulators seemingly cannot agree whether these "connections" should require them to treat separate and distant compressor stations, wells, and other pollutant-emitting activities as single "plants" for air permitting purposes.

This paper will show how regulators' divergence from the text and spirit of their own regulations has resulted in an ongoing air permitting debate that often defies common sense. While regulators historically permit the various pollutant-emitting oil and natural gas activities separately, regulators have recently strained the text of the regulations implementing the Act to find ways to require aggregation. Indeed, this is often the only mechanism for subjecting these sources to major source review. Specifically, regulators have incorrectly and impermissibly read an "interdependence" criterion into a strictly geographic inquiry to determine that oil and natural gas operations that are separated by many miles are nevertheless located "adjacent" to one another because they depend upon each other. After determining that the separate and distant oil and natural gas units are "adjacent," regulators can permit them as a single stationary source. This paper posits that adherence to the regulatory text which has purportedly guided air permitting for thirty years will result in

³ *Id.* at 3-4.

more pragmatic, predictable, and defensible permitting procedures and decisions for the oil and natural gas industry.

Part II of this paper sets out the statutory framework of the Act and traces EPA's inconsistent application of the Act and its regulations when making source determinations for oil and natural gas operations. Part III discusses the facts, issues, and results surrounding Anadarko's attempts to renew its Title V permit for the Frederick Compressor Station and the ensuing challenges, which focused on whether CDPHE should treat the Frederick Compressor Station and the Anadarko-owned wells that feed it collectively as a single stationary source. Part IV analyzes the methodologies used by CDPHE and EPA in their decision to permit the Frederick Compressor Station individually as a single source. This paper concludes with Parts V and VI, which analyze the potential impact of EPA's recent ruling on future source determinations for oil and natural gas operations.

II. The Clean Air Act: Statutory Framework and Source Determinations

A. Statutory Framework

Congress enacted the Clean Air Act in 1963 to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.”⁴ Congress created in the Act a scheme of “cooperative federalism,” whereby state and local governments bear the primary onus of enforcement, but they conduct their regulatory efforts under federal financial assistance and leadership for the development of cooperative federal, state, tribal, regional, and local programs to prevent and control air pollution.⁵

The Act separates sources into major sources and other, non-major sources for permitting purposes, and certain programs apply only to “major stationary sources” or “major sources.” For example, under the Act’s PSD requirements, a company cannot construct or significantly modify a “major stationary source” until it obtains a permit prescribing emission limitations.⁶ Similarly, Title V of the Act requires “major sources” of pollutants to obtain operating permits that have been reviewed by the public and approved by EPA.⁷ Each Title V permit must include

⁴ 42 U.S.C. § 7401(b)(1); *see also MacClarence v. EPA*, 596 F.3d 1123, 1125 (9th Cir. 2010) (holding that the EPA Administrator did not act arbitrarily and capriciously in denying a citizen request that EPA object to issuance of an operating permit for pollutant-emitting activities at an oil and natural gas processing unit).

⁵ *MacClarence*, 596 F.3d at 1125; *see also N. Carolina ex rel. Cooper v. Tennessee Valley Auth.*, 615 F.3d 291, 299-300 (4th Cir. 2010).

⁶ 42 U.S.C. § 7475.

⁷ 42 U.S.C. § 7661a.

enforceable emission limitations, a schedule of compliance, monitoring requirements, and other conditions.

An emission unit's status as a major or non-major source is based upon its potential emissions. For example, in the PSD program, Congress defined "major stationary source" as a "stationary source" that emits or has the potential to emit a certain quantity of pollutants.⁸ In turn, EPA defined a "stationary source" as any building, structure, facility, or installation that emits or may emit a regulated pollutant.⁹ Many oil and natural gas operations, such as compressor stations and wells, do not individually emit pollutants at a level sufficient to qualify as "major sources," and regulators historically have not treated these individual units as major sources. This does not mean that regulators ignore oil and natural gas operations. On the contrary, while non-major sources of air emissions are not subject to some of the Act's more rigorous requirements, they are nevertheless subject to federal and state performance standards. If regulators aggregate emissions from individual oil and natural gas operations, however, the separate emissions units might collectively surpass the emission thresholds and become "major sources."

For regulators to treat multiple individual oil and natural gas units as a single source, they must first determine that these operations collectively fall within the regulatory definition of a "building, structure, facility, or installation." Accordingly, regulators can only aggregate individual pollutant-emitting sources if these separate emissions sources: (1) belong to the same industrial grouping, (2) are located on one or more contiguous or adjacent properties, and (3) are under the control of the same person.¹⁰ Under these definitions, regulators must conclude that separate oil and natural gas units meet all three factors before they can aggregate the

⁸ 42 U.S.C. §§ 7479(1), 7602(j). The authors do not suggest that all oil and natural gas operations are "minor sources" of emissions, which itself is a regulatory term of art. Engineering evaluation and modeling are necessary to determine a unit's potential to emit air pollutants. However, individual "non-major" oil and natural gas operations should not be treated collectively as "major sources" absent a regulatory basis for aggregating the emissions from the separate units.

⁹ 40 C.F.R. § 51.166(b)(5).

¹⁰ See 40 C.F.R. § 51.166(b)(6) (defining "building, structure, facility, or installation" to include "all of the pollutant-emitting activities which 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 (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively)"); see also 40 C.F.R. § 51.165(a)(1)(ii) (EPA New Source Review (NSR) Regulation). After the 1990 Clean Air Act Amendments created the Title V Operating Permit Program, this three-prong analysis was extended to Title V major source permitting. See 42 U.S.C. § 7661(2).

emissions from those units to determine whether they collectively surpass the “major source” threshold.

Regulators often face the seemingly difficult question of whether these three regulatory factors require aggregation of noncontiguous oil and natural gas units. When determining whether to aggregate various pollutant-emitting activities for air permitting purposes, EPA requires a case-by-case analysis considering the foundational concepts of the Act and the specific facts presented.¹¹ However, federal case law and EPA’s regulations set specific boundaries on this analysis.¹²

First, regulators must determine that the separate emissions units each fall within the same Standard Industrial Classification (SIC) code.¹³ In 1980, EPA adopted the use of SIC codes for the aggregation analysis in lieu of a more complicated analysis of the functional interrelationships between different operations.¹⁴ According to EPA, “any assessment of functional interrelationships would be highly subjective” and “any attempt to assess those interrelationships would have embroiled the Agency in numerous, fine-grained analysis.”¹⁵ EPA stated that SIC codes are “narrow enough to separate sets of activities into common sense groupings” yet “broad enough to minimize the likelihood of artificially dividing a set of activities that does constitute a plant.”¹⁶ Typically, oil and natural gas development activities, including geological and geophysical exploration for petroleum deposits, drilling oil and natural gas wells, and separating natural gas liquids from crude oil, fall into SIC Major Group 13 (e.g., 1311).¹⁷ On the other hand, natural gas transmission activities generally fall within SIC Major Group 49 (e.g., 4922).

Second, regulators must determine that separate units are located on one or more “contiguous or adjacent” properties. The regulations do not define the terms “contiguous or adjacent.” As the starting point for the analysis, some courts and agencies, including CDPHE, have used dictionary definitions of contiguous, *i.e.*, “being in actual contact; touching along a boundary or at a point,” and adjacent, *i.e.*, “not distant; nearby;

¹¹ See, e.g., EPA Order III, *supra* note 2, at 6-7.

¹² See *Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1979); 45 Fed. Reg. 52,676 (Aug. 7, 1980).

¹³ As described in the regulations, activities belong to the same industrial grouping if they are part of the same two-digit SIC Major Group in the U.S. Government Printing Office SIC Manual, *i.e.*, each has the same two-digit code. See 40 C.F.R. § 51.166(b)(6).

¹⁴ 45 Fed. Reg. at 52,695.

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ See “Source Determinations for Oil and Gas Industries,” Memorandum from William L. Wehrum, Acting Assistant Administrator, EPA, to Regional Administrators I – X, at 1 n.2 (Jan. 12, 2007) (hereinafter, the Wehrum Memo).

having a common endpoint or border.”¹⁸ While the definitions and the common usage of “contiguous” and “adjacent” implicate notions of proximity, neither the definitions nor EPA guidance provide any quantifiable basis for deciding whether noncontiguous properties are nevertheless “adjacent.”¹⁹ Several states, including Texas, Oklahoma, Louisiana, and, most recently, Pennsylvania, have adopted a general proximity-based rule-of-thumb, whereby regulators more closely scrutinize emissions units located within a quarter-mile radius.²⁰ EPA, on the other hand, has emphasized that regulatory agencies cannot rely on proximity alone in making aggregation decisions.²¹ At times, in their attempt to deemphasize proximity in source determinations, regulators have introduced factors like “interdependence” into this geographical

¹⁸ See *In re Kerr-McGee/Anadarko Petroleum Corporation, Frederick Compressor Station*, Permit No. 95OPWE035, Petition No. VIII-2008-02, “Response of Colorado Department of Public Health and Environment, Air Pollution Control Division, to Order Granting Petition for Objection to Permit,” U.S. E.P.A., at 15 (July 14, 2010) (hereinafter, the CDPHE Response) (citing the online version of Merriam-Webster Dictionary). Courts interpret regulations by looking at the plain language and considering the terms in accordance with their straightforward and commonsense meanings. *Lane v. Principi*, 339 F.3d 1331, 1340 (Fed. Cir. 2003); *Henry Ford Health Sys. v. Shalala*, 233 F.3d 907, 910 (6th Cir. 2000); see generally *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410, 414-15, 65 S.Ct. 1215, 89 L.Ed. 1700 (1945) (focusing on the “plain words of the regulation” to ascertain the meaning of the regulation). Courts regularly look to definitions contained in legal and non-legal dictionaries to discern such common meanings. *Nat’l Cotton Council of Am. v. E.P.A.*, 553 F.3d 927, 936 (6th Cir. 2009), cert. denied, 130 S. Ct. 1505 (2010) (reviewing *The New Oxford American Dictionary* (Jewell & Abate eds. 2001) and *Black’s Law Dictionary* (8th ed. 2004) definitions of “waste”); *United States v. Lachman*, 387 F.3d 42, 51 (1st Cir. 2004) (“Dictionaries of the English language are a fundamental tool in ascertaining the plain meaning of terms used in statutes and regulations.”) (citing *Carey v. Saffold*, 536 U.S. 214, 219-20 (2002)).

¹⁹ See, e.g., 45 Fed. Reg. at 52,695 (“EPA is unable to say precisely at this point how far apart activities must be in order to be treated separately.”).

²⁰ CDPHE Response, *supra* note 18, at 19. See, e.g., “Definition of Site,” Texas Counsel on Environmental Quality (http://www.tceq.state.tx.us/assets/public/permitting/air/Guidance/Title_V/site.doc); “Air Permitting Collocated Facilities,” Oklahoma Department of Environmental Quality (<http://www.deq.state.ok.us/factsheets/air/PermittingCollocated.pdf>); “Interpretation of Contiguous for Oil and Gas Production Facilities,” Louisiana Department of Environmental Quality (<http://www.deq.louisiana.gov/portal/tabid/2347/Default.aspx>); “Guidance for Performing Single Stationary Source Determinations for Oil and Gas Industries,” Pennsylvania Department of Environmental Protection (http://files.dep.state.pa.us/Air/AirAggregation/AirAggregationPortalFiles/TechnicalGuidance_SingleSourceAirAggregation_101211.pdf).

²¹ See “Withdrawal of Source Determinations for Oil and Gas Industries,” Memorandum from Gina McCarthy, Assistant Administrator, EPA, to Regional Administrators I – X (Sept. 22, 2009) (hereinafter, the McCarthy Memo).

discussion.²²

Third, the regulators must determine that the units are under common control. Congress did not define the phrase “common control” in the Act.²³ Elsewhere in its regulations, however, EPA has defined “common control” as “the power to direct or cause the direction of the management and policies of a person or organization, whether by ownership of stock, voting rights, by contract, or otherwise.”²⁴ Similarly, EPA has historically presumed that two emissions units are under common control for aggregation purposes when one entity has as much as 50% voting interest

²² CDPHE Response, *supra* note 18, at 14-15. The CDPHE Response provides an exhaustive summary of the binding and nonbinding EPA guidance regarding source determinations in general and “interdependence” in particular. *Id.* at 17-21. CDPHE notably refuted the notion that it *must* consider “interdependence” as a *de facto* fourth prong in the source determination analysis, specifically stating that it had “thoughtfully considered ‘interdependency’ as part of its contiguous or adjacent analysis, given the unique engineering and commercial complexities in the oil and gas production and midstream sector, [CDPHE] will not necessarily look to interdependency as a determining factor in this or other similar cases.” *Id.* at 15. EPA similarly recited and distinguished several prior source determinations when it upheld CDPHE’s decision not to aggregate the oil and natural gas facilities at issue. EPA Order III, *supra* note 2, at 12-19.

²³ *Ocean County Landfill Corp. v. EPA*, 09-2937, 2011 WL 310391, at *1 n.1 (3d Cir. Feb. 2, 2011) (holding that EPA Region 2’s letter to the state permitting agency opining that two emissions units were under common control and directing the state agency to reopen the units’ separate Title V permits not “final,” so the federal appellate court lacked jurisdiction under the Act to review EPA Region 2’s determination); *see also Pub. Serv. Co. of Colorado v. EPA*, 225 F.3d 1144, 1146-49 (10th Cir. 2000) (holding that EPA’s two letters to the state permitting agency and the permit applicant opining that a proposed new power plant and the applicant’s existing power plant were under common control did not constitute “final action” under the provision of Clean Air Act governing judicial review, so the federal court lacked jurisdiction under the Act to review EPA’s determination).

²⁴ *Ocean County Landfill Corp.*, 09-2937, 2011 WL 310391, at *1 n.1 (citing 40 C.F.R. § 66.3(f), which sets forth when penalties may be imposed on a source that fails to meet a deadline or make an upgrade); *see also Pub. Serv. Co. of Colorado*, 225 F.3d at 1146 (dismissing an appeal of EPA’s opinion that two power plants were under common control where a power supply agreement essentially vested control in one company over the other company’s power plant and where a holding company held ownership interests in both companies).

in both units.²⁵ On the other hand, the limited case law on the issue of common control *requires* regulators to determine that one entity own at least a 50% voting interest in the two entities controlling separate operations.²⁶ Even so, it is not clear whether the 50% criterion is useful for oil and natural gas activities; for example, an entity owning a minority working interest in a well with the right to take hydrocarbons in-kind can have a forceful impact on the daily operations in the well. States such as Texas and Oklahoma have identified several additional factors indicative of common control, including ownership, decision-making authority, and contractual relationships.²⁷ Business relationships within an oil and natural gas field are often very complex.²⁸ A single natural gas company commonly owns or operates multiple emissions units within a single well field.²⁹ But while one company usually owns and operates an oil and natural gas well site, several additional working interest owners might also have decision-making authority over certain operations at the well site. Thus, the common control prong might require regulators to perform a rigorous analysis of the contractual and operational relationships at each individual well.

Notwithstanding the potential complexities of the common control analysis, in the little available aggregation guidance directly applicable to oil and natural gas operations, the interested parties rarely dispute the “industrial grouping” and “common control” factors. Accordingly, source determinations for the oil and natural gas industry typically hinge upon the

²⁵ “Definition of Source – Arizona Chemical Co.,” Memorandum from Edward E. Reich, Director, Division of Stationary Source Enforcement, EPA, to Diana Dutton, Director, Enforcement Division, EPA Region VI (Mar. 16, 1979). In addition, EPA relies on the Securities and Exchange Commission (“SEC”) definition of control. 45 Fed. Reg. 59,874, 59,878 (Sept. 11, 1980). The SEC defines control as “the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person (or organization or association) whether through ownership of voting shares, contract, or otherwise.” “DuPont and DUSA Int’l Single Source Determination,” Letter from R. Douglas Neeley, Chief, Air and Radiation Technology Branch, Air, Pesticides, and Toxics Management Div., EPA Region IV, to Errol Reksten, Chattanooga-Hamilton County Air Pollution Control Bureau, at 2 (Aug. 8, 2001) (citing 17 C.F.R. § 240.12b-2 for the following definition of control: “the possession, direct or indirect, of the powers to direct or cause the direction of the management and policies of a person (or organization or association) whether through the ownership of voting shares, contract, or otherwise.”).

²⁶ *Harsco Corp. v. Natural Res. & Envtl. Prot. Cabinet*, 2003-CA-000025-MR, 2004 WL 1103594 (Ky. Ct. App. May 14, 2004), *review denied* (Ky. Ct. App. Jan. 12, 2005).

²⁷ See sources cited *supra* note 20.

²⁸ See CDPHE Response, *supra* note 18, at 7-8.

²⁹ Similarly, EPA presumes that two operators of pollutant-emitting activities are under common control for the purposes of air emissions permitting when one operator locates its emissions unit *on* the property of another. *Ocean County Landfill Corp.*, 09-2937, 2011 WL 310391, at *1 n.2.

“contiguous or adjacent” prong of the analysis.³⁰ Over the years, EPA has provided varied and inconsistent guidance on the aggregation of pollutant-emitting activities and the designation of “major sources” and “major stationary sources” under these circumstances, and specifically, how regulators should interpret the undefined terms “contiguous” and “adjacent.” For example, EPA issued guidance in 2007 specifically addressed to oil and natural gas operations (the Wehrum Memo), which attempted to simplify the aggregation calculus by focusing first on proximity.³¹ However, EPA issued another memorandum in 2009 (the McCarthy Memo), which withdrew the Wehrum Memo and suggested that source determinations for oil and natural gas operations require a more complicated approach.³² The McCarthy Memo emphasized the need to give equal consideration to all three factors in the regulations that implement the Act.³³ Accordingly, an adequate understanding of the aggregation process requires regulators and the regulated community to return to the source of the three-prong test.

³⁰ *Cf. In re Shell Offshore, Inc., Kulluck Drilling Unit & Frontier Discoverer Drilling Unit*, 13 E.A.D. 357, 384-85 (E.A.B. Sept. 14, 2007) (rejecting an appellant’s contention that the state permitting agency must determine adjacency for offshore oil and natural gas wells with reference to the offshore lease blocks but remanding with instructions that the permitting agency must provide more support for its adjacency determination in the record).

³¹ See Wehrum Memo, *supra* note 17, at 1, 3. In the Wehrum Memo, EPA also refuted the notion that regulators must address “interdependence”:

Notably, in 1980, we declined to add a specific “functionality” criteria [sic] to the definition of source because we believed that “assessments of functional interrelationships would be highly subjective” and “embroil[] the Agency in fine-grained analysis.” We also made clear that we do not intend “source” to encompass activities that would be many miles apart along a long-line. For instance, EPA would not treat all of the pumping stations along a pipeline as one source. Accordingly, for this [oil and natural gas] industry, we do not believe determining whether two activities are operationally dependent drives the determination as to whether two properties are contiguous or adjacent, because it would embroil the Agency in precisely the fine-grained analysis we intended to avoid, and it would potentially lead to results which do not adhere to the common sense notion of a plant.

Id. at 3.

³² See McCarthy Memo, *supra* note 21, at 1. EPA opined that it

recognize[d] that source determinations within the oil and gas industries will continue to be complex, involving in some cases in-depth analyses of ownership and operational issues. The [Wehrum Memo] attempted to simplify this analysis by focusing on one of the three regulatory criteria for source determinations – whether activities are “adjacent or contiguous.” It emphasized proximity in addressing this criterion. In practice, however ... individual facts warrant a closer examination of all three criteria identified in those regulations to arrive at a reasoned decision, and therefore, the simplified approach provided in the [Wehrum Memo] should not be relied on by permitting authorities as a sufficient endpoint in the decision-making process.

Id.

³³ *Id.*

B. Source Determinations and Aggregation of Emissions

1. *Alabama Power v. Costle*

The stationary source definition is derived from EPA regulations interpreting and enforcing the Act. In 1979, the D.C. Circuit Court of Appeals reviewed the statutory and regulatory framework and outlined the guiding principles for determining whether and how to aggregate emissions in each case. In *Alabama Power Co. v. Costle*,³⁴ the court explained that Congress intended regulators to consider entire industrial “plants” as a single “source” for PSD permitting purposes. After first identifying various types of industrial operations that fit the common sense notion of a “plant” and which were specifically defined as “stationary sources” for the purposes of PSD permitting in Section 169(1) of the Act,³⁵ such as “fossil-fuel fired steam electric plants . . . , Portland Cement plants, [and]. . . iron and steel mill plants,” the court concluded that aggregation of individual emissions units within a plant into a single source was permissible under the PSD provisions of the Act.³⁶ In other words, *these* commonly and specifically identified large industrial operations, such as coal-fired power plants, are the *types* of operations Congress had in mind when defining “major stationary sources” in the Act.

The court went on to find that smaller sources *could* reach the “major stationary source” threshold and that the Act allowed for aggregation of smaller units or components.³⁷ However, the court held that “EPA cannot treat contiguous and commonly owned units as a single source unless they fit within the four permissible statutory terms” that comprise a “stationary source.”³⁸ The *Alabama Power* court accordingly directed EPA to comply with Congress’ vision by revising the regulatory definitions of the terms “structure,” “building,” “facility,” and “installation” to provide for the aggregation, where appropriate, of industrial activities at a single “plant”

³⁴ 636 F.2d 323, 397 (D.C. Cir. 1979).

³⁵ 42 U.S.C. § 7479.

³⁶ 636 F.2d at 397. Sometimes, companies request aggregation of multiple units at a single “plant” for the purpose of streamlining the air permitting process or netting potential new emissions against emission reductions elsewhere at the “plant.” See, e.g., *Citizens for Clean Air & Water in Pueblo & S. Colorado v. Colorado Dept. of Pub. Health & Env’t, Air Pollution Control Div.*, 181 P.3d 393, 397 (Colo. Ct. App. 2008) (holding that CDPHE did not abuse its discretion, when reviewing an electric utility’s permit application for a new coal-fired generation unit at an existing power plant, by netting emissions from multiple units as a single source rather than as separate sources because the proposed new unit (1) belonged to the same industrial grouping as the two existing generation units, (2) was located on a property contiguous to the existing units, and (3) all three units were operated by the same entity).

³⁷ *Id.* at 398 (“As demonstrated by offshore oil spills, a great pollution hazard can be caused by a relatively small source.”).

³⁸ *Id.* at 397.

“according to considerations such as *proximity and ownership*.”³⁹

2. 1980 PSD Regulations

In response to the *Alabama Power* opinion, EPA amended its PSD regulations. EPA specifically sought to comply with the court’s requirement that the definition of source properly provide for aggregation of individual pollutant-emitting activities according to considerations of proximity and ownership.⁴⁰ In the preamble to the 1980 adoption, EPA stated:

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.”⁴¹

Accordingly, EPA defined “stationary source” as “any *building, structure, facility, or installation* which emits or may emit a regulated NSR pollutant.”⁴² EPA further defined “building, structure, facility, or installation” as “all of the pollutant-emitting activities which *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* (or persons under common control)”⁴³ EPA’s definition was the origination of the three-prong test for source aggregation. To aggregate emissions from separate sources or emissions units, regulators must determine that these sources: (1) belong to the same industrial grouping, (2) are located on one or more contiguous or adjacent properties, and (3) are under common control.⁴⁴

EPA promulgated the general definitions in the 1980 PSD Regulations to apply across all industrial sectors, without any special considerations given to oil and natural gas operations. If anything, the 1980 PSD Regulations indicated that regulators should *not* aggregate separately located oil and natural gas units. Specifically, in attempting to provide additional clarity for the source definition it was adopting, EPA instructed that the aggregation of pollutant-emitting activities was not intended “to encompass activities that would be many miles apart along a long-line

³⁹ *Id.* (emphasis added).

⁴⁰ 45 Fed. Reg. at 52,694.

⁴¹ 45 Fed. Reg. at 52,694-95.

⁴² 40 C.F.R. § 51.166(b)(5) (emphasis added); *see also* 42 U.S.C. § 7411(a)(3) (Clean Air Act NSPS Section); 40 C.F.R. § 51.165(a)(1)(i) (EPA NSR Regulation).

⁴³ 40 C.F.R. § 51.166(b)(6) (emphasis added).

⁴⁴ *See id.*

operation,” because operations located separately along a pipeline, as oil and natural gas units often are, do not sit on “contiguous” or “adjacent” properties.⁴⁵ For example, EPA indicated it would *not* treat all of the pumping stations along a multistate pipeline as one “source.”⁴⁶ However, EPA refused to define any specific distance requirement, instructing that regulators should make such determinations on a case-by-case basis.⁴⁷ Despite EPA’s attempt to craft aggregation principles applicable across all industries, it was clear in 1980, and is still apparent today, that regulators must give special consideration to the unique nature of oil and natural gas operations.

C. EPA Guidance for Oil and Natural Gas Operations

As this background illuminates, determining the proper scope and extent of a “source” for air permitting purposes is a complicated matter in general, but the issue is even more complex in the oil and natural gas industry. The distinctive characteristics of oil and natural gas operations significantly affect how regulators should define a stationary source or plant within this industry. For example, CDPHE emphasized that the “unique nature” of the oil and natural gas industry significantly complicated the analysis when it reviewed the Frederick Compressor Station permit application:

Not surprisingly, [CDPHE]’s analysis reveals the highly complex and unique nature of oil and gas production operations... Oil and gas fields often comprise a labyrinth of gas flows, ownership and operational interests and other components that are in a constant state of flux. *Such large, complex and dynamic processes generally do not fit consistently within the common sense notion of a plant.*⁴⁸

Regulators face understandable confusion. Essentially, an elaborate network of pipes extending from the wellhead to the ultimate end-users connects the entire natural gas production, gathering, processing, and transportation system.⁴⁹ This intricate grid is comprised of more than 210

⁴⁵ 45 Fed. Reg. at 52,695.

⁴⁶ *Id.*

⁴⁷ *Id.* (“EPA is unable to say precisely at this point how far apart activities must be in order to be treated separately. The agency can answer that question only through case-by-case determinations.”). EPA did, however, comment that a surface coal mine and an electrical generator located twenty miles apart and connected by a railroad would be “too far apart” to treat the two emissions sources as a single source.

⁴⁸ See CDPHE Response, *supra* note 18, at 4 (emphasis added).

⁴⁹ See “About U.S. Natural Gas Pipelines,” http://www.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/ngpipeline/index.html. According to the U.S. Energy Information Administration (EIA), the country’s “natural gas pipeline network is a highly integrated transmission and distribution grid that can transport natural gas to and from nearly any location in the lower 48 States.”

natural gas pipeline systems, over 305,000 miles of interstate and intrastate transmission pipelines, and more than 1,400 compressor stations.⁵⁰ Companies base the physical locations of oil and natural gas units on a combination of practical and regulatory considerations, including the producer's ability to efficiently and economically extract mineral resources as well as laws and regulations that dictate proximity through spacing, pooling, and unitization.⁵¹ Faced with this reality, CDPHE clarified: "The simple fact that a pipe connects two physically separate oil and gas facilities or emission units does not, by itself, imply that these two facilities or units should be considered to be a part of the same emission source."⁵² EPA has recently attempted to provide guidance as to whether and how to aggregate oil and natural gas emissions for permitting purposes, but has failed to clarify any practical method for source determinations in this industry.

1. The Wehrum Memo

On January 12, 2007, EPA Acting Assistant Administrator William L. Wehrum issued a memorandum to EPA's Regional Administrators entitled "Source Determinations for Oil and Gas Industries."⁵³ The stated purpose of the Wehrum Memo was to provide guidance to permitting authorities attempting to make major stationary source determinations for operations within the oil and natural gas industry.⁵⁴ According to the Wehrum Memo, "the foremost principle that guides our decision-making is that we should apply a 'common sense notion' of a plant."⁵⁵ Recognizing that source determinations for the oil and natural gas sector are "not always

⁵⁰ *See id.*

⁵¹ CDPHE Response, *supra* note 18, at 7 ("It does not appear to [CDPHE] that the locations of oil and gas exploration, production and gathering sites are typically chosen for the purpose of avoiding air quality requirements, or to define an emission source in one manner versus another. The siting considerations in the oil and gas industry are unique and inherent to the industry and do not necessarily establish a conclusion on the relationship between two facilities that might apply in a different industrial sector."); *see also id.* at 40.

⁵² *Id.* at 5. CDPHE went on to state that "[w]hile a physically dedicated connection between two facilities (such as a pipeline) *could* be an overwhelming factor in a source determination *in a different industry*, in part because of its uniqueness within that particular industry, it is not a distinguishing feature in the natural gas production and gathering sector of the oil and gas industry." *Id.* at 6 (emphasis in original). EPA has also refused to require aggregation of oil and natural gas units that are otherwise connected by a pipeline, unless those emission points had a "unique or dedicated interdependent relationship with one another." *BP America Production Company Florida River Compression Facility Title V Permit - Renewal # 1 # V-SU-0022-05.00*, Letter from Callie A. Videtich, Director Air Program, to John O. Lowe, Deputy Florida Operations Manager, BP America Production Co., at 9, 11, 13 (Oct. 18, 2010) (hereinafter, the EPA BP Determination).

⁵³ *See Wehrum Memo, supra* note 17.

⁵⁴ *Id.* at 1.

⁵⁵ *Id.* at 2.

straightforward,” the Wehrum Memo noted that “the unique geographical attributes of the oil and gas industry necessitate a detailed evaluation of whether the activities are contiguous and [sic] adjacent.”⁵⁶ Accordingly, the Wehrum Memo directed regulatory agencies to look first at the “contiguous or adjacent” prong by focusing on the concept of proximity, *i.e.*, considering the physical distance between two pollutant-emitting activities, as the “most informative factor” for source determinations.⁵⁷ Finally, the Wehrum Memo instructed that two sites are in close proximity *only* when they are physically contiguous or separated by no more than a short distance.⁵⁸

2. The McCarthy Memo

A little more than two years (and an administration change) later, EPA changed course. Assistant Administrator Gina McCarthy issued a memorandum to the Regional Administrators on September 22, 2009, entitled “Withdrawal of Source Determinations for Oil and Gas Industries.”⁵⁹ In addition to specifically withdrawing the Wehrum Memo, the McCarthy Memo directed permitting authorities to look back to “the fundamental criteria” for making source determinations as set forth in the 1980 PSD Regulations.⁶⁰ Despite recognizing the complexity of source determinations for the oil and natural gas industry, the McCarthy Memo explicitly rejected the Wehrum Memo’s simpler approach and the use of proximity as the guiding factor.⁶¹ While stopping short of rejecting proximity as a *useful* method of analyzing the “contiguous or adjacent” prong in a source determination, the McCarthy Memo directed permitting agencies to conduct a case-by-case determination that gives full

⁵⁶ *Id.*

⁵⁷ *Id.* at 3.

⁵⁸ *Id.* at 4 (recognizing that many states apply a common-sense rule whereby pollutant-emitting activities located outside a one-quarter-mile radius should be treated as separate sources).

⁵⁹ See McCarthy Memo, *supra* note 21.

⁶⁰ *Id.* at 1.

⁶¹ *Id.* Colorado specifically complained about the complexity generated by the McCarthy Memo, suggesting that, by twice requiring CDPHE to supplement its permit record, EPA was requiring CDPHE to undertake the type of fine-grained analyses that the 1980 PSD Regulations directed regulators to avoid:

[T]o require such a detailed and complex aggregation analysis on every oil and gas permitting decision would require permit engineers to analyze every possible natural gas flow permutation potentially connected to the source being permitted as well as to other ancillary operating equipment, no matter how tangential and contingent that pipeline connection might be, while simultaneously requiring that attorneys working with the permitting representatives similarly analyze commercial, royalty and gathering contracts to determine how natural gas is owned and controlled. This would be significantly subjective, and is in any event not practicable.

CDPHE Response, *supra* note 18, at 8.

consideration to all three relevant factors.⁶²

3. Different Regions, Different Opinions

It is axiomatic that no single previous decision controls the current and future case-by-case determinations required by EPA regulations and demanded by the McCarthy Memo. But permitting authorities reviewing past EPA determinations for guidance face heightened confusion. For example, two different EPA regional offices issued almost directly contrary opinions on October 18, 2010, in matters in Colorado and Michigan, each of which currently remains on appeal.⁶³ In Colorado, EPA Region 8 refused to aggregate two compressor stations with coalbed methane wells in the same mineral basin on the ground that although the compressors and wells shared SIC codes and were under common control, and while gas from one compressor station and various wells *could* supply the other main compressor station, they *could* also supply gas to other operations controlled by third parties in the field.⁶⁴ By contrast, EPA Region 5 decided to aggregate oil and natural gas wells in Michigan with associated flares and a sweetening plant because the evidence in the permitting record did *not* show that the permit applicant's sweetening plant and wells could receive and supply gas to other operations controlled by third parties in the field.⁶⁵ EPA's attempts to bootstrap "interdependence" into the "contiguous or adjacent" analysis have undoubtedly caused the confusion and unpredictable results issued on the same day in the EPA BP Determination and EPA Summit Determination. Whereas proximity is an objective criterion capable of straightforward application, interdependence is a subjective concept which necessarily requires regulators and the regulated community to perform fine-grained analyses and results in inconsistent permitting decisions.

⁶² McCarthy Memo, *supra* note 21, at 2.

⁶³ Compare EPA BP Determination, *supra* note 52, with "Summit Petroleum Corp. Single Source Determination," Letter from Cheryl L. Newton, Director, Air and Radiation Division, to Scott Huber, Summit Petroleum Corp. (Oct. 18, 2010) (hereinafter, the EPA Summit Determination). The EPA BP Determination was on appeal before the EAB on a petition brought by WEG, the same group that challenged CDPHE's determination regarding the Frederick Compressor Station, but that appeal was resolved by the same settlement agreement that resolved the Frederick Compressor Station matter. See *In re BP America Production Company, Florida River Compression Facility*, CAA Appeal No. 10-04 (EAB); 76 Fed. Reg. 71,027. The EPA Summit Determination is currently pending on appeal in the United States Court of Appeals for the Sixth Circuit. See *Summit Petroleum Corp. v. EPA*, Case No. 09-4348 (6th Cir.). Oral argument is scheduled for April 17, 2012.

⁶⁴ EPA BP Determination, *supra* note 52, at 11-13 (finding that the separate units did not have the type of "dedicated interrelatedness" needed to be "adjacent" by means of "interdependence").

⁶⁵ EPA Summit Determination, *supra* note 63, at 6-7; see also EPA Order III, *supra* note 2, at 17.

III. Frederick Compressor Station

A. Permitting Background

On January 1, 2007, CDPHE granted a renewal of Operating Permit 95OPWE035, originally issued to Anadarko⁶⁶ on April 1, 1998, under Colorado's authority to implement the Title V regulations (herein, the Permit).⁶⁷ The Permit authorized emissions associated with operation of the Frederick Compressor Station in the Wattenberg Field, which is located near the community of Fort Lupton in Weld County, Colorado.⁶⁸ The Frederick Compressor Station is a natural gas gathering and compression facility that falls under Standard Industrial Classification 1311, *i.e.*, in SIC Major Group 13.⁶⁹ The compressor station is comprised of three internal combustion engines used in the compression and transmission of natural gas and one triethylene glycol dehydrator unit to remove water from the natural gas.⁷⁰ Anadarko submitted its renewal application on September 13, 2002, as the Permit was scheduled to expire on April 1, 2003.⁷¹ After many years of review and responding to comments from Anadarko, environmental groups, and other interested citizens, CDPHE made its permitting determination in October 2006 and supported its decision with a Technical Review Document.⁷²

B. The Challenge: Round 1

CDPHE's permitting decision was met with instant challenges. On December 29, 2006, an environmental group known as Rocky Mountain Clean Air Action (RMCAA), which later merged with WEG, petitioned

⁶⁶ As mentioned in footnote 1, Kerr McGee became a wholly-owned subsidiary of Anadarko during the Frederick Compressor Station permitting process, and the combined Kerr-McGee/Anadarko entity is referred to herein as Anadarko.

⁶⁷ Pursuant to 42 U.S.C. § 7410(a), EPA delegated the responsibility of administering the Act to the State of Colorado, and air pollution prevention and control, therefore, is now regulated by CDPHE. EPA granted interim approval of the State of Colorado's Title V operating permit program effective February 23, 1995. *See* 60 Fed. Reg. 4563 (Jan. 24, 1995). EPA granted full approval to Colorado's program effective October 16, 2000. *See* 65 Fed. Reg. 49,919 (Aug. 16, 2000); *see also* *N. Carolina ex rel. Cooper v. Tennessee Valley Auth.*, 615 F.3d 291, 299 (4th Cir. 2010) (explaining that the states have flexibility in determining how to structure their SIPs, and must enforce the limitations they adopt in their SIPs).

⁶⁸ *See* "Technical Review Document for Renewal of Operating Permit 95OPWE035," Prepared by Matthew S. Burgett, CDPHE, at 2 (Nov. 2005-Oct. 2006) (hereinafter, the Technical Review Document).

⁶⁹ *Id.* at 1.

⁷⁰ *Id.*

⁷¹ *Id.* at 4

⁷² *Id.*

EPA pursuant to Section 505(b)(2)⁷³ of the Act and 40 C.F.R. § 70.8(d)⁷⁴ to object to CDPHE’s renewal of the Permit (herein, Petition I).⁷⁵ In the petition, *i.e.*, Petition I, RMCAA identified itself as a Colorado-based nonprofit group “dedicated to protecting clean air in Colorado and the surrounding Rocky Mountain region for the health and sustainability of local communities.”⁷⁶

In addition to the Frederick Compressor Station, Anadarko operated over 3,600 active natural gas wells and six other natural gas compressor stations in the Wattenberg Field.⁷⁷ RMCAA’s primary contention was that CDPHE improperly failed to account for emissions from all the natural gas wells in the Wattenberg Field that supplied natural gas to the Frederick Compressor Station in its permit decision.⁷⁸ RMCAA argued that CDPHE should treat the Frederick Compressor Station and all the natural gas wells that supplied natural gas to the compressor as a single emissions source under PSD and Title V permitting requirements.⁷⁹ In response to comments regarding source aggregation raised during the public comment period, CDPHE stated:

The Division will address the issue of Oil and Gas facilities source

⁷³ 42 U.S.C. § 7661d(b)(2) (“If the Administrator does not object in writing to the issuance of a permit pursuant to paragraph (1), any person may petition the Administrator within 60 days after the expiration of the 45-day review period specified in paragraph (1) to take such action... The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency.”) Under the standards of Section 505(b)(2), a petition must be based on objections that were raised with reasonable specificity during the comment period provided by the permitting agency; a petitioner bears the burden to “demonstrate to the Administrator that the permit is not in compliance” with the requirements of the Act. *See also* 40 CFR § 70.8(c)(1), (d); *N.Y. Pub. Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2002).

⁷⁴ This section requires that federally authorized state programs incorporate a requirement consistent with Section 505(b)(2) of the Act.

⁷⁵ *In re Kerr-McGee Gathering LLC., Frederick Compressor Station*, Permit No. 950PWE035, “Petition for Objection to Issuance of Operating Permit for Kerr-McGee Frederick Compressor Station,” U.S. E.P.A. (Dec. 29, 2006) (hereinafter, Petition I).

⁷⁶ *Id.* at 4-5.

⁷⁷ *Id.* at 2.

⁷⁸ *Id.* at 6. In sum, Petition I alleged that, in issuing the Permit for the Frederick Compressor Station, CDPHE failed to comply with 40 C.F.R. part 70 in four ways: (1) CDPHE failed to assure compliance with PSD requirements by refusing to consider whether emissions from adjacent and interrelated pollutant emitting activities (*i.e.*, natural gas wells owned by Anadarko that supplied natural gas to the Frederick Compressor Station) triggered PSD review; (2) in light of CDPHE’s failure to consider PSD compliance, it is likely that the Permit must include a compliance schedule; (3) CDPHE failed to respond to significant comments submitted during the public comment period; and (4) CDPHE failed to consider adjacent and interrelated pollutant emitting activities in defining the “source” subject to Title V review.

⁷⁹ *Id.* at 10, 13.

aggregation upon further action relating to this interpretation, for example, by the U.S. E.P.A. Until that time, the Division will issue permits in a manner consistent with how it has historically made single source determinations for oil and gas operations, which in this case would be to consider the listed facilities as separate sources for both Title V and PSD purposes.⁸⁰

RMCAA argued that CDPHE's response failed to comport with the agency's duties in implementing the Title V requirements.

EPA responded to Petition I by Order dated February 7, 2008, *i.e.*, EPA Order I.⁸¹ EPA conducted a thorough review of Colorado's permitting record, including the permit, RMCAA's comments and CDPHE's response, and the Technical Review Document.⁸² EPA's analysis focused on the claimed inadequacies of CDPHE's response to the comments raised during the public comment period. EPA concluded that CDPHE's response to RMCAA's comments "does not adequately respond to [RMCAA's] comments regarding source aggregation of additional emission units owned by [Anadarko] in the vicinity of the emission units permitted under the title V permit issued to [Anadarko] for the Frederick Compressor Station."⁸³ Accordingly, EPA granted Petition I and directed CDPHE to address RMCAA's comments related to source aggregation and, without making any specific recommendation or conclusion, requested CDPHE to supplement the permit record, as necessary, and make any appropriate changes to the Permit.⁸⁴

C. *The Challenge: Round 2*

On April 29, 2008, in response to EPA Order I, CDPHE issued an Addendum to the January 1, 2007 Technical Review Document in support of the Permit for the Frederick Compressor Station, *i.e.*, the TRD Addendum.⁸⁵ CDPHE cited its twenty years of experience working with EPA Region 8 and independently analyzed several single source and aggregation determinations. CDPHE then provided additional support for its decision, specifically analyzing EPA's January 2007 source determination guidance issued by Acting Administrator Wehrum.⁸⁶

⁸⁰ *Id.* at 12 (quoting CDPHE's October 11, 2006 response to RMCAA's September 14, 2006 comments, at 5).

⁸¹ *In re Kerr-McGee Gathering LLC., Frederick Compressor Station*, Permit No. 950PWE035, "Order Granting Petition for Objection to Permit," U.S. E.P.A. (Feb. 7, 2008) (hereinafter, EPA Order I).

⁸² *Id.* at 2.

⁸³ *Id.* at 4.

⁸⁴ *Id.* at 4-5.

⁸⁵ See "Addendum to the January 1, 2007 Technical Review Document for Renewal Operating Permit 950PWE035, CDPHE (Apr. 29, 2008) (hereinafter, the TRD Addendum).

⁸⁶ *Id.* at 2 (citing the Wehrum Memo).

Recognizing that the Wehrum Memo emphasized that “proximity” was the most informative factor for making source determinations for the oil and natural gas industry, CDPHE noted that: (1) the nearest Anadarko compressor station to the Frederick Compressor Station was separated by approximately 7.2 miles,⁸⁷ and (2) the 4000-plus natural gas wells in the Wattenberg Field covered a surface area in excess of 600 square miles, and treating these wells as part of the Frederick Compressor Station for permitting purposes did not comport with the “common sense notion of a plant.”⁸⁸ Accordingly, CDPHE concluded that no other emissions units met all three elements of the three-prong test,⁸⁹ as none of the other compressor stations or wells were located contiguous or adjacent to the Frederick Compressor Station.⁹⁰ Thus, CDPHE chose not to aggregate any other sources with the Frederick Compressor Station, and chose not to change the Permit per the TRD Addendum.⁹¹

On August 11, 2008, RMCAA submitted a second petition under Section 505(b)(2) of the Act, *i.e.*, Petition II, again requesting that EPA object to CDPHE’s renewal of the Permit for the Frederick Compressor Station.⁹² RMCAA argued that the Permit still failed to ensure compliance with all applicable requirements, including PSD and Title V permitting requirements, as a result of CDPHE’s decision not to aggregate emissions from all natural gas wells in the Wattenberg Field under the ownership and control of Anadarko.⁹³

On October 8, 2009, EPA Administrator Jackson issued an Order, *i.e.*, EPA Order II, granting Petition II.⁹⁴ According to Administrator Jackson, the information set forth by CDPHE in the TRD Addendum with regard to its determination not to aggregate emissions from the Anadarko-owned natural gas wells in the Wattenberg Field was not sufficient to support its decision:

⁸⁷ *Id.* at 7.

⁸⁸ *Id.* at 8-9.

⁸⁹ As discussed elsewhere, the three-part test is derived from EPA’s definition of a “building, structure, facility, or installation,” which is defined to include all of the pollutant-emitting activities that (1) belong to the same industrial grouping, (2) are located on one or more contiguous or adjacent properties, and (3) are under the control of the same person. *See* 40 C.F.R. § 51.166(b)(6).

⁹⁰ TRD Addendum, *supra* note 85, at 7, 9.

⁹¹ *Id.* at 9-10.

⁹² *In re Kerr-McGee/Anadarko Petroleum Corporation, Frederick Compressor Station*, Permit No. 95OPWE035, Petition No. VIII-2008-02, “Petition for Objection to Issuance of Operating Permit for Anadarko Petroleum Corporation’s Frederick Compressor Station,” U.S. E.P.A. (Aug. 11, 2008) (hereinafter, Petition II).

⁹³ *See id.* at 6-22.

⁹⁴ *In re Kerr-McGee/Anadarko Petroleum Corporation, Frederick Compressor Station*, Permit No. 95OPWE035, Petition No. VIII-2008-02, “Order Granting Petition for Objection to Permit,” U.S. E.P.A. (Oct. 8, 2009) (hereinafter, EPA Order II).

The record does not show that CDPHE considered all relevant regulatory criteria in making the source determination decision. Although CDPHE quotes heavily from the Wehrum Memo, its conclusion appears to be based on the size of the oil field and the complexity of ownership issues within the well field. There is no explanation of how the overall size of the well field or the complexity of ownership issues is relevant to the source determination criteria identified in the applicable regulations.⁹⁵

In granting Petition II, EPA directed CDPHE to: (1) evaluate Anadarko's complete system map showing all emission sources owned or operated by Anadarko in the Wattenberg Field; (2) review a flow diagram showing the movement of natural gas from the well sites to the various emissions units in the Wattenberg Field operated by Anadarko and other companies; and (3) obtain business information regarding the nature of control of the Frederick Compressor Station and nearby wells between Anadarko and other companies in the Wattenberg Field to determine whether CDPHE should consider various pollution emitting activities under common control for purposes of making a source determination.⁹⁶ As with Petition I, EPA Order II directed CDPHE to supplement the permit record, as necessary, and make any appropriate changes to the Permit.⁹⁷

D. The Challenge: Round 3

On July 14, 2010, CDPHE submitted a third document supporting its determination to renew the Title V Permit for the Frederick Compressor Station, *i.e.*, the CDPHE Response.⁹⁸ The *forty-two-page* CDPHE Response reflected a remarkable amount of effort on the part of CDPHE's Air Pollution Control Division (the Division), and CDPHE specifically noted that it should not exert such effort when making future source determinations for oil and natural gas operations.⁹⁹ Based upon the information and analysis contained in the CDPHE Response, CDPHE determined that its conclusion to issue the renewal Permit for the Frederick Compressor Station was correct and that no changes to the Permit were

⁹⁵ *Id.* at 6.

⁹⁶ *Id.* at 8.

⁹⁷ *Id.*

⁹⁸ *See supra* note 18.

⁹⁹ *Id.* at 4 ("The Division's actions in connection with this response reflect an extraordinary amount of effort. Not surprisingly, the Division's analysis reveals the highly complex and unique nature of oil and gas production operations. This is particularly true in mature, large gas plays such as the Wattenberg Field. Oil and gas fields often comprise a labyrinth of gas flows, ownership and operational interests and other components in a constant state of flux. Such large, complex and dynamic processes generally do not fit consistently within the common sense notion of a plant. The Division does not anticipate that the level of analysis accompanying this response to the Administrator's Order is necessarily warranted or appropriate in other oil and gas source determinations.")

warranted.¹⁰⁰

The environmental group, now called WEG,¹⁰¹ subsequently petitioned EPA to object for a third time to the issuance of the Frederick Compressor Station Permit on November 3, 2010, *i.e.*, Petition III.¹⁰² WEG raised arguments in Petition III that closely resembled those set forth in Petitions I and II. However, WEG went on to allege that CDPHE “concocted an analysis” and conducted a “biased source determination” based upon its “predetermined, and legally unjustified, position” rather than “independently assess to what degree aggregation may be appropriate.”¹⁰³ On February 2, 2011, more than four years after the initial Title V Permit renewal was issued for the Frederick Compressor Station, EPA issued its third Order, *i.e.*, EPA Order III, this time denying WEG’s Petition III.¹⁰⁴ In the roughly twenty-page EPA Order III, EPA conducted a thorough analysis of previous statements and determinations involving aggregation and found that CDPHE had properly determined the Frederick Compressor Station was a single source for purposes of PSD and Title V permitting.

WEG subsequently appealed EPA’s Order III to the Tenth Circuit Court of Appeals. On November 16, 2011, EPA announced a settlement agreement with WEG to resolve WEG’s challenges to the permits issued by EPA Region 8 to Anadarko as well as BP’s Florida River Compressor Station.¹⁰⁵ As part of the agreement, EPA Region 8 agreed to conduct a pilot program for new and renewal Title V permit applications involving oil and natural gas operations for which Region 8 is the initial permitting authority.¹⁰⁶ The Tenth Circuit dismissed WEG’s appeal at the parties’ request in accordance with the terms of the settlement agreement on February 21, 2012.¹⁰⁷

IV. Analysis: The Three-Prong Test Applied to the Frederick Compressor Station

Source aggregation is proper under EPA regulations only where separate activities collectively meet the definition of a “building, structure,

¹⁰⁰ *Id.*

¹⁰¹ WEG is a nonprofit group based in Santa Fe, New Mexico, with the stated goal of “protecting and restoring the American West,” which merged with RMCAA in 2008 and remained as the surviving entity. *In re Anadarko Petroleum Corporation, Frederick Compressor Station*, Permit No. 95OPWE035, Petition No. VIII-2010-04, “Petition for Objection,” U.S. E.P.A., at 8 (Nov. 3, 2010) (hereinafter, Petition III).

¹⁰² *Id.*

¹⁰³ *Id.* at 2.

¹⁰⁴ *See supra* note 2.

¹⁰⁵ *See* 76 Fed. Reg. 71,027.

¹⁰⁶ *See id.*

¹⁰⁷ *See supra* note 1.

facility, or installation.” As discussed above, this definition controls the scope of a source and accordingly whether regulators must more rigorously scrutinize a pollutant-emitting activity for air permitting purposes.¹⁰⁸ The regulatory definition lists three *conjunctive* factors.¹⁰⁹ In other words, in order for regulators to determine that separate emissions units constitute a single “stationary source” for the purpose of PSD and Title V permitting, those units must:

1. Belong to the same SIC Major Group; **and**
2. Be under the control of the same person (or persons under common control); **and**
3. Be located on one or more contiguous or adjacent properties.

Regulators have to consider the three-prong test for aggregation in light of the *Alabama Power* court’s directive that a source must meet the component terms of a stationary source, *i.e.*, it must include a building, structure, facility, or installation **and** comport with the “common sense notion of a plant.”¹¹⁰

A. SIC Major Group

With regard to the first factor of the three-prong test, as with most source determinations for the oil and natural gas industry, the analysis for the Frederick Compressor Station is relatively straightforward. As CDPHE noted, exploration and production activities (including well site production and gathering compressor stations and their associated equipment, such as storage tanks) generally share the same two-digit SIC code.¹¹¹ The SIC code for a natural gas gathering and compression facility is 1311, and Major SIC code 13 includes oil and natural gas well operations in addition to gathering equipment and compressor stations.¹¹² Accordingly, a compressor station, gathering system, and wells belong to the same industrial grouping for purposes of the source aggregation analysis.¹¹³

¹⁰⁸ See 42 U.S.C. §§ 7479(1), 7602(j); 40 C.F.R. § 51.166(b)(5). *Cf. In re Shell Gulf of Mexico, Inc., Shell Offshore Inc. (Frontier Discovery Drilling Unit)*, OCS Appeal Nos. 10-01, 10-02, 10-03, & 10-04, slip op. at 27 (EAB Dec. 30, 2010) (“The PSD permitting requirements apply to ‘major emitting facilities,’ which are defined as ‘stationary sources’ that emit pollutants in excess of certain thresholds identified in the statute.... The [EAB], in addressing the relationship between the ... source and the PSD permitting requirements, has held that after EPA has identified the existence of a[] ... source, EPA must next ‘determin[e] the scope of the ‘stationary source’ for PSD purposes.’ In other words, the ‘stationary source’ continues to be the relevant unit of analysis for determining PSD applicability”) (some alteration in the original).

¹⁰⁹ 40 C.F.R. § 51.166(b)(6).

¹¹⁰ 636 F.2d at 397.

¹¹¹ CDPHE Response, *supra* note 18, at 34.

¹¹² *Id.*

¹¹³ *Id.*

Because all of the Anadarko operations fell within SIC Major Group 13, the first factor for aggregation was indisputably met.

Although the analysis is straightforward, EPA provided an important clarification in response to WEG's challenges. In attempting to downplay the significance of proximity in the aggregation analysis, WEG contended that prior EPA guidance did not mandate "complete and exclusive interdependence" between sources to support aggregation; rather, WEG argued that the notion that one emissions unit is a "support facility" of another alone can make the two separate units "adjacent" for the purposes of the analysis.¹¹⁴ EPA responded that WEG had confused two of the three regulatory criteria by attempting to overlay a "support facility" analysis onto the contiguous or adjacent prong.¹¹⁵ The support facility concept is relevant *only* to the SIC code determination.¹¹⁶ Accordingly, EPA clarified that because oil and natural gas pollutant-emitting activities typically share the same two-digit Major SIC code, regulators have no reason to analyze whether the units have a "support facility" relationship.¹¹⁷

B. Common Control

Regulators must also determine whether the same entity, or entities under common control, owns the various pollutant-emitting sources. CDPHE concluded that all of the oil and gas exploration and production units connected via pipeline to the Frederick Compressor Station which were owned or controlled by subsidiaries of Anadarko satisfied the common control requirement for purposes of aggregation.¹¹⁸ Conversely, CDPHE determined that any pollutant-emitting sources, such as wells, condensate tanks, or glycol dehydrators, owned and operated by any third party were not under the common control of Anadarko.¹¹⁹ Thus, CDPHE chose not to consider them part of the Frederick Compression Station, even if they would otherwise meet the other two parts of the test, *i.e.*, the same two-digit Major SIC code and the contiguous or adjacent criteria.¹²⁰ According to CDPHE, Anadarko did not control the oil and natural gas production activities at such third-party owned or operated sites.¹²¹ Thus, CDPHE properly refused to find that common control existed for the entire

¹¹⁴ Petition III, *supra* note 101, at 18-22. As discussed below, it is significant to note that EPA clarified that the "support facility" concept is relevant only when analyzing the first prong of the aggregation test, *i.e.*, whether separate emissions units share the same industrial grouping. See EPA Order III, *supra* note 2, at 17.

¹¹⁵ EPA Order III, *supra* note 2, at 16.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 17.

¹¹⁸ CDPHE Response, *supra* note 18, at 35.

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

Wattenberg Field, at least in part because “ownership of the gas is fragmented; and ownership and operation of the wells, compressor stations, and various interstitial and ancillary equipment is dispersed among at least fifty different exploration and production companies and several midstream companies.”¹²²

CDPHE’s analysis reflects the complexity of source determinations involving the oil and natural gas industry. Indeed, EPA described the Wattenberg Field as “a spider web” of “gas gathering lines operated by many oil and gas exploration and production companies, as well as condensate tanks, glycol dehydrators and gas gathering compressor stations operated by many gas gathering companies.”¹²³ Attempting to overlay common control among various operators, working interest owners, and royalty owners in the field would make both permitting and enforcement of such permits difficult, if not impossible, to administer and result in the kind of fine-grained analyses EPA declared was not practicable or necessary in the preamble to the 1980 PSD Regulations.

C. Contiguous or Adjacent

Source determinations for the oil and natural gas industry often turn on whether individual emissions units are “located on one or more contiguous or adjacent properties.” Regulators increasingly find this to be a highly challenging, fact-specific determination, particularly within the context of the oil and natural gas industry. Based on EPA’s inconsistent guidance, permitting agencies face a difficult assessment of whether a noncontiguous, and even distant, well is nevertheless “adjacent” to a compressor station for aggregation purposes.

As background for its determination, CDPHE pointed out that EPA has considered the “contiguous or adjacent” factor in source determinations involving a wide range of industries, and has reached various conclusions based on the case-specific facts.¹²⁴ More particularly, CDPHE noted that EPA has found pollutant-emitting activities forty-four miles apart to be “adjacent,” but considered other facilities as close as one-quarter mile apart, even physically within the same parcel, “nonadjacent.”¹²⁵ EPA has consistently refused to adopt any specific distance requirement associated with adjacency and has maintained instead that regulators should assess adjacency on a case-by-case basis.¹²⁶

Because neither the Act nor the EPA regulations define the terms contiguous and adjacent, and in light of EPA’s instruction to consider

¹²² *Id.* at 29.

¹²³ EPA Order III, *supra* note 2, at 14-15.

¹²⁴ CDPHE Response, *supra* note 18, at 14.

¹²⁵ *Id.*

¹²⁶ *See, e.g.*, 45 Fed. Reg. at 52,695.

contiguosness and adjacency consistent with the “common sense notion” of a plant, CDPHE looked first to the dictionary definitions:

- Contiguous: being in actual contact; touching along a boundary or at a point
- Adjacent: not distant; nearby; having a common endpoint or border¹²⁷

Based on this definition of “contiguous,” an oil and natural gas well located on land that is geographically separated from a compressor station site is not “contiguous” within the plain meaning of that term.¹²⁸ Moreover, the term “adjacent” naturally connotes a physical separation of no more than a short distance.

Consistent with its obligations under the text of the regulations and the McCarthy Memo’s attempt to redirect the focus on the three factors, CDPHE concluded that, under the specific circumstances of the Wattenberg Field, proximity was a significant factor. Indeed, with regard to other compressor stations, proximity was almost determinative, as the other Anadarko compressor stations in the field were located between 7.2 and 17 miles from the Frederick Compressor Station.¹²⁹ Although the nearest pollutant-emitting activity owned by Anadarko, a condensate storage tank, was located only 0.3 miles from the Frederick Compressor Station, CDPHE found that proximity remained an important factor, as this distance was beyond the quarter-mile radius considered significant by other states.¹³⁰ CDPHE concluded that the locations of the wells and their associated pollutant-emitting equipment in relation to the Frederick Compressor Station were not chosen based upon their proximity to or dependence on the station. According to CDPHE, “[w]ithin the context of the oil and gas industry, the lack of proximity between the Frederick Station and the wells/pollutant emitting-equipment strains the common sense notion of plant.”¹³¹

EPA affirmed CDPHE’s use of proximity in arriving at its aggregation decision. According to EPA, “CDPHE did not use distance as *the* determinative factor in its source determination, but rather CDPHE considered proximity of emission points as ‘*another* important factor’ in a larger contiguous/adjacent analysis.”¹³² Thus, EPA concluded that CDPHE properly considered proximity in its analysis, specifically noting CDPHE’s discussion of the fact that “there are no commonly-controlled pollutant-

¹²⁷ CDPHE Response, *supra* note 18, at 15 (citing the online version of Merriam-Webster Dictionary).

¹²⁸ *Id.*

¹²⁹ *Id.* at 32-33.

¹³⁰ *Id.* at 36, 40; *see also supra* note 20.

¹³¹ *Id.* at 40 (emphasis added).

¹³² EPA Order III, *supra* note 2, at 19 (emphasis in original).

emitting activities within a quarter mile of” the Frederick Compressor Station.¹³³

CDPHE also considered the concept of “interdependency” in its adjacency analysis. Although neither the 1980 PSD Regulations nor the federal regulations defining “source” for PSD or Title V purposes discuss this term, many individual EPA determinations have considered or emphasized the role of “functional interdependence” between and among separate emissions sources in determining whether they are located on contiguous or adjacent properties.¹³⁴ CDPHE indicated it did not consider interdependency as a determining factor in aggregation decisions for the oil and natural gas sector.¹³⁵ Wyoming has recently also entreated EPA not to consider interdependency in its aggregation analysis for oil and natural gas sources.¹³⁶

Finally, CDPHE pointed out that the fact-specific nature of prior EPA determinations made them only marginally valuable when conducting the case-by-case analysis required by EPA.¹³⁷ Notwithstanding, CDPHE identified a significant trend:

However, a general pattern among the cases indicates that there should be a high level of connectedness and interdependence between two activities for EPA to consider them adjacent. In particular, it appears that interdependence requires that the two activities rely on each other – not just that one activity relies on the other activity. In addition, reliance means that one activity cannot operate or occur without the other. If the activities operate independently or the activities do not act solely as a support operation for each other, the activities are generally not considered adjacent for source determination purposes.¹³⁸

In other words, CDPHE emphasized that interdependency, if regulators consider it at all, requires that the two activities rely exclusively upon one another, and one activity cannot operate without the other.¹³⁹ That level of complete and exclusive dependency typically does not exist in an oil and natural gas field. Accordingly, CDPHE concluded that “the uncertain pathways” followed by natural gas in the Wattenberg Field, coupled with “regular changes that take place on gathering systems,” make it unreasonable “to conclude that any specific well and associated pollutant-

¹³³ *Id.*

¹³⁴ *Id.* at 14.

¹³⁵ *Id.* at 15.

¹³⁶ See Wyoming Department of Environmental Quality, “Aggregation in Wyoming,” PowerPoint Presentation to EPA (Feb. 23, 2010) (available at http://www.cdphe.state.co.us/ap/down/A-7WyomingPowerPointPresentation2_23_2010.pdf).

¹³⁷ CDPHE Response, *supra* note 18, at 21.

¹³⁸ *Id.*

¹³⁹ *Id.* at 36.

emitting equipment owned or operated by [Anadarko] should be aggregated with the Frederick Station as a single source.”¹⁴⁰

EPA implicitly, if not explicitly, concurred with CDPHE’s analysis. Indeed, EPA stated that its “prior agency statements and determinations related to oil and gas activities ... may be instructive” but do not provide reliable guidance for making specific source determinations for oil and natural gas operations¹⁴¹ Moreover, EPA has noted that it previously aggregated separate oil and natural gas emissions units only when there was an “exclusively dependent” relationship between the units.¹⁴²

V. Implications of the Frederick Compressor Station Ruling

The Frederick Compressor Station ruling reflects the start of a genuine and much-needed return by EPA to the text of the 1980 PSD Regulations. In the McCarthy Memo, EPA emphasized that all source determinations had to begin with the three regulatory criteria but went on to tout its previous determinations and guidance as relevant to the aggregation analysis. However, the two state courts that have heard appeals of aggregation determinations have reversed the decisions below to aggregate emissions on the grounds that the permitting bodies impermissibly strayed from regulatory language or the definitive statements in official guidance

¹⁴⁰ *Id.* at 38.

¹⁴¹ EPA Order III, *supra* note 2, at 8.

¹⁴² *Id.* at 11-12, 17; EPA BP Determination, *supra* note 52, at 11; EPA Summit Determination, *supra* note 63, at 6-7 n.29; *see also* CDPHE Response, *supra* note 18, at 17, 20, 36-37. In the appeal of the EPA BP Determination to the EAB, EPA Region 8 argued,

In fact, when looking specifically at those [source determinations] related to the oil and gas industry (i.e., Summit, Valero, Forest Oil), ***it is clear that aggregation of multiple emission points across an entire field was only found to appropriate when there was an exclusively dependent relationship between those units.*** Looking specifically at the Summit determination, it is relevant to note that EPA determined that aggregation of multiple points across an entire field was appropriate because the information provided by Summit shows that the source gas wells are truly interdependent on the sweetening plants—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.

In re BP America Prod. Co., Florida River Compression Facility, CAA Appeal No. 10-04, at 35 (EAB Feb. 24, 2011) (hereinafter, EPA Region 8 Response) (emphasis added).

documents.¹⁴³ A return to the regulatory text will provide more clarity and predictability for the permitting of oil and natural gas operations.

EPA first clarified that regulators should only consider the “support facility” concept when analyzing whether separate emissions units share the same industrial grouping.¹⁴⁴ In other words, the existence of a “support relationship” does *not* result in common control and does *not* result in two units separated by some distance being considered adjacent. For permitting purposes, it does not matter whether two emissions units have a “support relationship” if the units share the same two-digit Major SIC code. Because most oil and natural gas exploration and production units, including wells, gathering systems, and compressor stations, operate under Major SIC code 13, it is irrelevant to what extent they “support” one another. Accordingly, regulators should not consider the existence and details of any “support relationship” when determining whether to aggregate separate and noncontiguous oil and natural gas operations or emissions units.

EPA also began the process of returning “adjacency” to a question of proximity. Over the years, EPA has cultivated an unavailing notion that the word “adjacent” connotes a relationship beyond physical, geographic proximity; rather, EPA has determined in nonbinding letters to various permitting agencies that regulators can consider distant, separate emissions units “adjacent” if they are sufficiently “interrelated.”¹⁴⁵ As EPA recognized in the Wehrum Memo, proximity should be the first, and often determinative, consideration in a source aggregation analysis for the oil and natural gas industry. While EPA facially heralded a return to the regulatory criteria in the McCarthy Memo, EPA’s resounding de-emphasis of proximity raised an obvious question: how *should* regulators and the regulated community determine “adjacency” if not by proximity? The McCarthy Memo’s reference to “reasoned decision-making” in other case-by-case determinations certainly suggested that interrelatedness is still a

¹⁴³ See *Harsco Corp. v. Natural Res. & Envtl. Prot. Cabinet*, 2003-CA-000025-MR, 2004 WL 1103594 (Ky. Ct. App. May 14, 2004), *review denied* (Ky. Ct. App. Jan. 12, 2005) (reversing the state air permitting agency’s and circuit court’s source determination that two emissions units should be aggregated on the grounds that the agency had defined the “common control” prong in an official guidance document to require a single entity to own at least 50% interest in the separate units and so could not make a finding of common control where 50% ownership was absent regardless of other factors indicating common control); *Color Commc’ns, Inc. v. Ill. Pollution Control Bd.*, 680 N.E.2d 516 (Ill. App. Ct. 1997), *appeal denied* (Ill. Oct. 1, 1997) (reversing the state air permitting agency’s and the state pollution control board’s source determination that two emissions units should be aggregated on the grounds that by relying on the “support facility” concept, the agency and board improperly looked beyond the unambiguous language of the state’s air permitting regulations, which stated that stationary sources must belong to the same SIC Major Group).

¹⁴⁴ EPA Order III, *supra* note 2, at 17.

¹⁴⁵ See *supra* note 22 and accompanying text.

significant factor in EPA's adjacency analysis.¹⁴⁶ This interpretation of "adjacent" defies the directive of the *Alabama Power* court and the text of the 1980 PSD Regulations.

Although the 1980 PSD Regulations expressly refused to identify a specific geographic distance which would make two separate emissions units "adjacent," regulators must use the "common sense notion of a plant" as the guiding principle to determine when units are so *proximate* that they are "adjacent" and thus a single aggregated source. CDPHE placed great significance on proximity, or lack thereof, with regard to the Frederick Compressor Station and the other pollutant-emitting activities in the Wattenberg Field. It certainly strains common sense to suggest that two compressor stations located 7.2 miles apart could be one "plant."¹⁴⁷ EPA's affirmation of CDPHE's use of proximity as a useful tool in analyzing adjacency signals some return to the regulatory text.¹⁴⁸

EPA took another important step toward returning "adjacent" to an analysis of proximity by clarifying that the pipelines which necessarily

¹⁴⁶ McCarthy Memo, *supra* note 21, at 2.

¹⁴⁷ EAB has similarly negated a contention that "contiguous or adjacent" lease blocks spanning hundreds of miles in the Beaufort Sea are sufficiently "adjacent" to warrant aggregation of offshore oil and natural gas facilities. *In re Shell Offshore, Inc., Kulluck Drilling Unit & Frontier Discoverer Drilling Unit*, 13 E.A.D. 357, 384-85 (E.A.B. Sept. 14, 2007). According to EAB,

Applying the phrase "contiguous or adjacent properties" as requiring aggregation of emissions producing activities spanning hundreds of miles interspersed with vast swaths of open water that is accessible to the public would distort the ordinary meaning of "building, structure, facility, or installation" in a manner that EPA did not intend when it promulgated the definition. In the [1980 PSD Regulations], EPA gave two examples of activities connected by contiguous or adjacent properties that EPA said would not be aggregated because of the distance between the components. With respect to an example of pumping stations along a pipeline, EPA explained that it had "stated in the past and now confirms that it does not intend 'source' to encompass activities that would be many miles apart along a long-line operation." Likewise, with respect to an example of a coal mine connected by a 20-mile rail line to an electric generator, EPA explained that most determinations must be made on a case-by-case basis, but that in the example "the mine and the generator would be too far apart." These two examples demonstrate that, where the emissions units are separated by many miles, a contiguous pipeline and rail line are not sufficient connections to be "contiguous or adjacent properties" within the regulation's meaning, notwithstanding a real estate ownership or leasehold interest in the rail line or pipeline. Similarly, we reject in the present case [the petitioner's] argument that, notwithstanding the potential distance of many miles between [the] OCS sources, those OCS sources must be treated as a single stationary source simply because the OCS sources are located on contiguous or adjacent lease blocks. ***The phrase "contiguous or adjacent properties" must be understood as connoting a more substantial connectedness, proximity, or continuity that would correspond to a common understanding of building, structure, facility, installation, or plant.***

Id. (internal citations omitted) (emphasis added).

¹⁴⁸ See *supra* note 22 and accompanying text.

connect oil and natural gas operations do not render them interdependent.¹⁴⁹ While EPA has left open the possibility that permitting agencies *can* consider noncontiguous emissions points “adjacent” based on their interrelatedness, even if they are not physically “near” each other, EPA nevertheless emphasized that such a finding must be based on the “exclusive dependence” between the separate emissions units. EPA recognized that when looking at the complexity of the oil and natural gas industry, including the diverse ownership interests, the patchwork of property interests, and the variability of gas movement through the system, the aggregation of multiple emission points across an entire oil and natural gas field could be appropriate, if at all, only where those units have an “exclusively dependent” relationship.¹⁵⁰ Accordingly, when permitting oil and natural gas operations, regulators should consider whether there are points across an oil and natural gas field where one company can offload its natural gas to another company’s pipelines, compressor stations, or natural gas plants or where a company can accept natural gas from other companies’ wells and systems.¹⁵¹ While various entities frequently develop mature fields like the Wattenberg Field in a manner that results in such interconnections, operators in new fields will likely need to show that the possibility and intent of interconnectedness should prevent regulators from considering the initial wells and other emissions units “exclusively dependent” on each other.

In the Frederick Compressor Station decision, EPA clarified that proximity still must be an important factor in any aggregation analysis for oil and natural gas operations and narrowed its look at “interrelationships” to those unique cases where emissions units are “exclusively dependent” on each other. Notwithstanding these significant findings, EPA stopped short of abandoning “interrelatedness” as a sub-factor under the contiguous or adjacent prong. EPA’s continued insistence that exclusive dependence can make two separate units “adjacent” even if they are not physically near each other is a clear violation of the regulatory text. Indeed, regulators *should* find absence of proximity sufficient to rule out adjacency, but any state permitting authority that ignores the analysis of whether separate emissions units are exclusively dependent runs a significant risk of having its decision reversed by EPA, *even if that decision is correct*, as EPA may find that the state’s permitting decision is not supported in the record. Until such time as EPA promulgates an interrelatedness factor through formal rulemaking or issues guidance suggesting it should not be considered in an aggregation analysis, regulators will be faced with the

¹⁴⁹ See *supra* note 135 and accompanying text.

¹⁵⁰ See *id.*

¹⁵¹ See *id.*

dilemma of how to apply this “nonregulatory” factor.¹⁵²

Lastly, and perhaps most importantly, EPA’s ruling refocuses on the *Alabama Power* court’s directive that regulators must analyze the three regulatory criteria that define a stationary source in a manner consistent with the “common sense notion of a plant.” For example, the “common sense notion of a plant” undergirds the notion that two emissions units with separate Major SIC codes might nevertheless have a support relationship, although that issue is often irrelevant for oil and natural gas operations. The more likely relevant issue is that, in the absence of EPA guidance stating how “near” separate emissions units must be in order to be “adjacent,” regulators must use the “common sense notion of a plant” as the guiding principle for determining whether two units are adjacent. If two emissions units connected by a long-line pipeline do not fit that “common sense notion” based on physical proximity, then they simply are not adjacent.

VI. Conclusion

By returning to the text of the 1980 PSD Regulations, permitting agencies and the regulated community are more likely to craft sensible, defensible source determinations for oil and natural gas operations. Regulators must make stationary source determinations on a case-by-case basis considering the foundational concepts provided in the Clean Air Act and the 1980 PSD Regulations. While source determinations are highly fact-specific, and no single determination can serve as an adequate justification for how to treat any other aggregation decision for pollutant-emitting activities with different factual circumstances, adherence to the regulatory text, and in particular the “common sense notion of a plant,” will result in more pragmatic and predictable permitting decisions for the oil and natural gas industry.

¹⁵² Because this term is not sourced from the statutory or regulatory text, the only legitimate means for EPA to enforce exclusive dependence as a factor in the source aggregation analysis is through formal rulemaking. Federal law prohibits EPA from escaping the notice and comment requirements of the Act by characterizing a major substantive legal addition to a rule as a mere interpretation. See *Appalachian Power Co. v. EPA*, 208 F.3d 1015, 1024-28 (D.C. Cir. 2000) (holding that EPA had conducted improper rulemaking through substantive guidance directing state permitting authorities to enhance monitoring requirements in individual permits beyond those contained in state or federal emissions standards).