BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of the Title V)
Operating Permit)
Issued by the)))
Colorado Department of Public Health) Permit Number 950PWE035
and Environment, Air Pollution Control)
Division)
)
to)
)
Kerr-McGee Gathering LLC)
to operate the Frederick Natural Gas)
Compressor Station in Weld County,)
Colorado)

PETITION FOR OBJECTION TO ISSUANCE OF OPERATING PERMIT FOR ANADARKO PETROLEUM CORPORATION'S FREDERICK COMPRESSOR STATION

Pursuant to section 505(b)(2) of the Clean Air Act ("CAA"), 40 CFR § 70.8(d), and applicable state regulations, Rocky Mountain Clean Air Action hereby petitions the Administrator of the U.S. Environmental Protection Agency (hereafter "Administrator" or "EPA") to object to the April 29, 2008 Addendum to the January 1, 2007 Technical Review Document (hereafter "TRD Addendum") supporting the renewed Title V Permit for Anadarko Petroleum Corporation's Frederick Compressor Station, Permit Number 950PWE035 (hereafter "Title V Permit"), issued by the Colorado Department of Public Health and Environment, Air Pollution Control Division (hereafter "Division"), as well as the Division's determination that "no changes to the [Title V] permit" are warranted based on the TRD Addendum.^{1,2}

¹ The April 29, 2008 Addendum to the January 1, 2007 Technical Review Document is hereby attached as **Exhibit** 1, the January 1, 2007 TRD is hereby attached as **Exhibit 2**, and the January 1, 2007 Title V Permit is hereby attached as **Exhibit 3**.

The Division claims that the Addendum to the TRD is a "full" response to the Administrator's February 7, 2008 decision granting Rocky Mountain Clean Air Action's January 3, 2007 petition for objection to the issuance of the renewed Title V permit for the Frederick Compressor Station. In that decision, the Administrator determined the Division had failed to adequately respond to comments from Rocky Mountain Clean Air Action regarding the need to aggregate connected sources of air pollution, such as interrelated natural gas wells and compressor stations, together with the Frederick Compressor Station as a single source of air pollution.³

Unfortunately, the Division's TRD Addendum, together with its determination that "no changes to the [Title V] permit are warranted," continue to defy the CAA. In short, the Title V Permit continues to fail to ensure compliance with all applicable requirements, including Prevention of Significant Deterioration ("PSD") and Title V permitting requirements, as well as the Colorado State Implementation Plan ("SIP"). Consequently, the Frederick Compressor Station poses a danger to clean air and public health, a shameful outcome given that the region in which the Compressor Station is located continues to violate health standards limiting ozone air pollution. In responding to this petition, the Administrator has a nondiscretionary duty to object to the issuance of the Title V Permit in accordance with section 505(b)(2) of the CAA.

Rocky Mountain Clean Air Action submits this petition pursuant to section 505(b)(2) of the CAA on the basis of assurance from the EPA that this petition will be responded to in accordance with section 505(b)(2) of the CAA.⁴

² Anadarko Petroleum Corporation was formerly known as Kerr-McGee Gathering LLC and may also be known as Kerr-McGee Oil and Gas Onshore LP, a wholly owned subsidiary of Anadarko Petroleum Corporation.

³ See 73 Fed Reg. 18793-18794. The Administrator's February 7, 2008 decision granting Rocky Mountain Clean Air Action's petition to object is hereby attached as **Exhibit 4**.

⁴ This assurance was put in writing in a letter from Callie Videtich, Region 8 Director of Air and Radiation, dated August 2, 2008. This letter is hereby attached as **Exhibit 5**.

INTRODUCTION

The Frederick Compressor Station collects and processes natural gas. The facility consists of three large natural gas-fired reciprocating internal combustion engines, two of which are 4,670 horsepower in size, a natural gas dehydrator capable of processing 80 million cubic feet of natural gas per day, five 225 barrel condensate tanks, one 200 barrel condensate tank, one 300 barrel condensate tank, and leaking equipment.⁵ The primary pollutants of concern from the Frederick Compressor Station include volatile organic compounds ("VOCs"), nitrogen oxides ("NOx"), carbon monoxide ("CO"), and hazardous air pollutants ("HAPs"). The most recent TRD reports the facility has the potential to release 933,880 pounds of NOx, 412,400 pounds of VOCs, 496,600 pounds of CO and over 50,000 pounds of HAPs on an annual basis.⁶ The amount of NOx released is equivalent to the amount released by over 24,000 cars each driven 12,500 miles a year.⁷ Among the HAPs released by the Frederick Compressor Station are formaldehyde and benzene. The National Cancer Institute identifies formaldehyde and benzene as known carcinogens, with benzene known to cause leukemia.⁸

VOC and NOx pollution from the Frederick Compressor Station is of particular concern because these pollutants react with sunlight to form ozone, the key ingredient of smog. The Denver metro area, including most of Weld County, is currently in violation of National Ambient Air Quality Standards ("NAAQS") for ozone.⁹ According to the Title V Permit, the facility is a

⁵ See also, Exhibit 4 at 1.

 $^{^{6}}$ Exhibit 2 at 3.

⁷ According to the EPA, an average vehicle emits 38.2 pounds of NOx per year. See, <u>www.epa.gov/otaq/consumer/f00013.htm</u>.

⁸ See <u>http://www.cancer.gov/cancertopics/factsheet/Risk/formaldehyde</u> and <u>http://www.cancer.gov/cancertopics/factsheet/Benzene</u>.

⁹ See <u>http://www.cdphe.state.co.us/ap/ozone.html</u>.

major source of air pollution because it has the potential to release more than 250 tons of NOx.¹⁰ Any modification of the facility that leads to a significant increase in NOx, VOCs, and/or CO may result in the application of PSD review requirements under 40 CFR § 51.166 and the Colorado SIP and/or nonattainment New Source Review ("NSR") requirements under 40 CFR § 51.165 and the Colorado SIP.

The Frederick Compressor Station collects natural gas from numerous wells in the Wattenberg natural gas field. According to the Division, the Wattenberg natural gas field is a large natural gas producing region north of Denver and located primarily in Weld County, Colorado.¹¹ According to the Division, Anadarko Petroleum Corporation operates "4,000" active natural gas wells in the Wattenberg field.¹² The Frederick Station is one of at least five natural gas compressor stations owned and operated by Anadarko Petroleum Corporation in the Wattenberg field.

On December 29, 2006, Rocky Mountain Clean Air Action filed a petition requesting the EPA Administrator object to the issuance of the Title V Permit for the Frederick Compressor Station on the basis that the Title V Permit failed to aggregate connected sources of air pollution, such as interrelated natural gas wells and compressor stations, together with the Frederick Compressor Station as a single source of air pollution in accordance with the CAA. The Title V Permit and TRD for the Frederick Compressor Station were issued on January 1, 2007. On February 7, 2008, the Administrator granted the petition, objecting to the issuance of the Title V Permit on the basis that the Division had failed to adequately respond to comments submitted by Rocky Mountain Clean Air Action. In response to the objection, the Division issued an Addendum to the January 1, 2007 TRD on April 29, 2008 and determined in a cover letter that

¹⁰ Exhibit 3 at 5 ¹¹ Exhibit 1 at 11.

¹² Exhibit 1 at 10

"no changes to the [Title V] permit were warranted."¹³ According to the Division, the cover letter and TRD Addendum "constitute a full response by the state to EPA's Order."¹⁴

According to the EPA, the issuance of the April 29, 2008 TRD Addendum triggered EPA's 45-day review period under section 505(b)(1) of the CAA. This 45-day review period ended on June 13, 2008. Based on Rocky Mountain Clean Air Action's conversations with Region 8 EPA staff, the EPA did not object to the April 29, 2008 TRD Addendum or to the issuance of the Title V Permit. This petition is thus timely filed within 60 days following the conclusion of EPA's review period and failure to raise objections in accordance with section 505(b)(2) of the CAA.

This petition is based on the continued failure of the Division to aggregate connected sources of air pollution that are interrelated with the Frederick Compressor Station. As will be explained in greater detail, key provisions of the CAA, as well as the Colorado SIP, require the Division to aggregate interrelated and connected natural gas wells, compressor stations, and other related equipment together with the Frederick Compressor Station as a single source of air pollution. This petition is based on objections to the permit related to aggregation issues that were raised with reasonable specificity during the public comment period. Rocky Mountain Clean Air Action submitted comments on September 14, 2006 (comments on draft Title V Permit), on December 29, 2006 (petition to object to the issuance of the Title V Permit), and on March 24, 2008 (comments regarding Division's response to EPA objection).¹⁵

To the extent the EPA may somehow believe this petition is not based on comments raised with reasonable specificity during the public comment period, Rocky Mountain Clean Air Action requests the Administrator also consider this a petition to reopen the Title V Permit for

¹³ Exhibit 1 at 2.

¹⁴ Id.

¹⁵ These comments are hereby attached as **Exhibits 6, 7, and 8**, respectively.

the Frederick Compressor Station in accordance with 40 CFR § 70.7(f).¹⁶ A permit reopening and revision is mandated in this case because of one or both of the following reasons:

- 1. Material mistakes or inaccurate statements were made in establishing the terms and conditions in the permit.¹⁷ As will be discussed in more detail, the Title V Permit for the Frederick Compressor Station suffers from material mistakes that render several terms and conditions meaningless, ambiguous, unenforceable as a practical matter, in violation of applicable requirements, etc.; and
- 2. The permit fails to assure compliance with the applicable requirements.¹⁸ As will be discussed in more detail, the Title V Permit for the Frederick Compressor Station fails to assure compliance with several applicable requirements.

PETITIONER

Petitioner Rocky Mountain Clean Air Action is a Denver, Colorado-based, nonprofit membership group dedicated to protecting clean air in Colorado and the surrounding Rocky Mountain region for the health and sustainability of local communities. Rocky Mountain Clean Air Action submitted detailed comments on the draft Title V Permit and TRD Addendum. The objections raised in this petition were raised with reasonable specificity in comments on the Title V Permit and TRD Addendum.

¹⁶ To the extent the Administrator may not believe citizens can petition for reopening for cause under 40 CFR § 70.7(f), Petitioner also hereby petitions to reopen for cause in accordance with 40 CFR § 70.7(f) pursuant to 5 USC § 555(b). ¹⁷ See 40 CFR § 70.7(f)(1)(iii). ¹⁸ See 40 CFR § 70.7(f)(1)(iv).

GROUNDS FOR OBJECTION

Petitioner requests the EPA object to the issuance of Permit Number 950PWE035 and the TRD Addendum for the Frederick Compressor Station and/or find reopening for cause for the reasons set forth below.

I. The Title V Permit Fails to Assure Compliance with PSD Requirements

A Title V Permit is required to include emission limitations and standards that assure compliance with all applicable requirements at the time of permit issuance.¹⁹ Applicable requirements include, among other things, NSR requirements, particularly PSD requirements set forth under Title I of the CAA, regulations at 40 CFR § 51.166, and the Colorado SIP at Air Quality Control Commission ("AQCC") Regulation Number 3.²⁰ If a source will not be in compliance with an applicable requirement, including PSD, at the time of permit issuance, the applicant must disclose the violation and provide a narrative showing how it will come into compliance, and the permit must include a compliance schedule for bringing the source into compliance.²¹

The CAA prevents significant deterioration of air quality to protect human health and welfare and air quality in class I areas.²² Prevention of significant deterioration requirements apply to the construction of major sources and/or major modifications of major sources of air pollution in areas designated as attainment.²³ In the case of the Frederick Compressor Station, the Title V Permit fails to assure compliance with PSD requirements under the CAA. Furthermore, the Title V Permit fails to include a compliance schedule to bring the source into

¹⁹ 42 USC § 7661c(a); 40 CFR § 70.6(a)(1).
²⁰ 40 CFR § 70.2.
²¹ 42 USC § 7661b(b); 40 CFR § 70.6(b)(3).

²² 42 USC § 7470.

²³ 42 USC § 7475; 40 CFR § 51.166(a)(7); AQCC Regulation No. 3..

compliance with PSD requirements. As will be explained in more detail below, the Administrator must therefore object to the issuance of the Title V Permit.

A. The Division Failed to Consider Emissions form Adjacent and Interrelated Pollutant Emitting Activities: Anadarko's Natural Gas Wells

The Frederick Compressor Station is currently a major source of air pollution due the fact that the facility has the potential to emit 250 tons/year or more of NOx.²⁴ According to the Title V Permit, "Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.27 and 44) for any pollutant as listed in Regulation No. 3, Part D, Section II.A.44 or a modification which is major by itself may result in the application of the PSD review requirements."²⁵ While the Division claims that PSD review requirements have not yet been triggered for the Frederick Station, this claim is baseless as **the Division failed to consider emissions from all adjacent and interrelated pollutant emitting activities, namely the natural gas wells and associated equipment that supply natural gas to the Frederick Compressor Station.**

Prevention of Significant Deterioration regulations at 40 CFR § 51.166(b)(5) define a stationary source as, "any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant."²⁶ Regulations at 40 CFR § 51.166(b)(6) further define "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)[.]"²⁷ The regulations further state, "Pollutant emitting activities are considered part of the same industrial grouping if

²⁴ Exhibit 3 at 5.

 $^{^{25}}$ Id.

²⁶ See also AQCC Regulation No. 3, Part A, Section I.B.41

²⁷ See also AQCC Regulation No. 3, Part A, Section I.B.41

they belong to the same 'Major Group' (i.e., which have the same first two digit code) as described in the Standard Industrial Classification Manual[.]"²⁸

In this case, before issuing the Title V Permit for the Frederick Compressor Station, the Division failed to appropriately consider and address pollutant emitting activities from the dozens, perhaps hundreds or even thousands, of natural gas wells and associated equipment currently owned and operated by Anadarko that supply the Frederick Compressor Station with natural gas. Furthermore, the Division failed to aggregate Anadarko's natural gas wells and associated equipment together with the Frederick Compressor Station as a single source under PSD. We address how the Division has failed to appropriately address whether interrelated pollutant emitting activities must be aggregated with the Frederick Compressor Station in accordance with the CAA.

1. Natural Gas Wells Owned or Controlled by Anadarko Constitute Pollutant Emitting Activities Connected with the Frederick Compressor Station

To begin with, natural gas wells owned or under common control by Anadarko Petroleum Corporation are pollutant emitting activities that are connected with the Frederick Compressor Station. In Rocky Mountain Clean Air Action's December 29, 2006 petition to object to the issuance of the Frederick Compressor Station, it was explained:

According to [Anadarko], the company operates "over 3,600 active natural gas wells in the Wattenberg field" and "over 2,000 wellhead [condensate storage] tank batteries that collect and store natural gas condensate." **Ex. 3 at 1**. A map of [Anadarko's] natural gas wells prepared with data from the Colorado Oil and Gas Conservation Commission shows that the majority of these wells are concentrated in southwestern Weld County, where the Frederick Compressor Station is located. **Ex. 6** (see also, **Ex. 7**).²⁹

²⁸ See also AQCC Regulation No. 3, Part A, Section I.B.41

²⁹ Exhibit 7 at 7. We hereby incorporate the referenced exhibits in Exhibit 7 by reference.

Furthermore, as Rocky Mountain Clean Air Action explained in past comments and its December 29, 2006 petition, Anadarko's natural gas wells in the Wattenberg gas field of Weld County are all pollutant emitting activities related to the production of natural gas. Importantly, in the TRD Addendum, the Division did not deny that Anadarko operates thousands of wells in the Wattenberg field.³⁰

Indeed, information from the Division shows that activities related to the production of natural gas release significant amounts of air pollution. Of note, an emissions inventory prepared for the Division shows that oil and gas operations just in Weld County release 12,310 tons of NOx annually and 64,111 tons of VOCs annually, releasing more pollution than all other northeastern Colorado counties combined.³¹ According to the report, the largest sources of NOx in Weld County include compressor engines, such as those utilized at the Frederick Compressor Station and including compressor engines that are typically exempt from reporting and permitting requirements under the Colorado SIP, and drill rig engines. Compressor engines and drill rig engines are all associated with the operation of natural gas wells.

The report also shows that the largest sources of VOC emissions in Weld County include condensate storage tanks, such as those utilized at the Frederick Compressor Station, fugitive VOC emissions from leaking equipment, pneumatic devices, venting from well blowdowns, and compressor engines. These sources are all associated with the operation of natural gas wells.

The table below summarizes the contribution of NOx and VOCs from the major pollutant emitting activities.

³⁰ See Exhibit 1.

³¹ See Bar-Ilan, A., J. Grant, R. Friesen, A.K. Pollack, D. Henderer, D. Pring, and K. Sgamma, "Development of baseilne 2006 emissions from oil and gas activity in the Denver-Julesberg Basin," report prepared for Colorado Department of Public Health and Environment at 28 (April 30, 2008). This report is hereby attached as **Exhibit 9**.

Pollutant Emitting Activity	VOCs Released	NOx Released	
Compressor engines (inc. exempt engines)	1,773	8,381	
Drill rigs	209	3,012	
Heaters		400	
Large condensate tanks	38,349		
Pneumatic devices	8,164		
Small condensate tanks	5,977		
Unpermitted fugitives	5,348		
Venting—well blowdowns	1,360		
Truck loading of condensate liquid	693		

Table 1. Oil and gas-related pollutant emitting activities and amount of VOCs and NOx released in Weld County (in tons/year).³²

Compressor engines, drill rigs, heaters, condensate tanks, pneumatic devices, fugitive emissions, well blowdowns, and truck loading of condensate liquid are all activities related to the operation of oil and gas wells by Anadarko Petroleum Corporation. Importantly, in the TRD Addendum, the Division did not deny that Anadarko operates thousands of natural gas wells in the Wattenberg field.³³ Given the sheer number of wells operated and owned by Anadarko, NOx, VOC, and likely other emissions from the company's producing natural gas wells that supply natural gas to the Frederick Compressor Station are most likely significant.

Not only are Anadarko's producing natural gas wells pollutant emitting activities, together with Anadarko's Frederick Compressor Station, they are connected pollutant emitting activities. Indeed, the Frederick Compressor Station clearly receives natural gas from wells via pipeline in the Wattenberg gas field, thus the facility depends upon the operations of these wells for its function. Similarly, all or some of the natural gas wells owned and operated by Anadarko depend upon the Frederick Station for their operations. Without the existence of the Frederick Compressor Station, all or some of Anadarko's natural gas wells would cease to operate as there

³² Exhibit 9 at 29 and 30.

³³ See Exhibit 1.

would be no means of compressing and transporting natural gas to market pipelines or to downstream processing plants.

Although we have not been granted access to information that explicitly shows which of Anadarko's producing natural gas wells supply natural gas to the Frederick Station, we have ample information showing that there are dozens, perhaps hundreds or thousands, of wells supplying the compressor station.³⁴ In prior comments on the Title V permit for the Frederick Compressor Station, including Rocky Mountain Clean Air Action's December 29, 2006 petition to object to the issuance of the Title V permit for the Frederick Compressor Station, Rocky Mountain Clean Air Action explained:

[T]here are thousands of producing wells owned and operated by [Anadarko Petroleum Corporation], many in the vicinity of the Frederick Station. In fact, according to information on file with the Colorado Oil and Gas Conservation Commission, there are at least four producing gas wells owned and operated by [Anadarko] within Section 15 of Township 1N, Range 67W, where the Frederick Compressor is located. **Ex. 9**. Furthermore, there are over 150 producing gas wells owned by [Anadarko] within Township 1N, Range 67W. **Ex. 10**. Thus, over 150 producing natural gas wells are within a three to four mile radius of the Frederick Compressor Station. The best information we have available to us shows that there are hundreds of wells in close proximity to the Frederick Station, and that most, if not all, of these wells, or pollutant emitting activities, are interrelated with the Frederick Station[.]³⁵

Importantly, in the TRD Addendum, the Division did not deny that there are hundreds, perhaps

thousands, of wells supplying the compressor station.

³⁴ The Division has in its possession "maps of [Anadarko Petroleum Corporation's] operations in Colorado." *See* Colorado Oil and Gas Review Memorandum at faxed page 7 (January 4, 2005). This memo is hereby attached as **Exhibit 10**. The Division further stated that "the maps identified each location where [Anadarko Petroleum Corporation] has operating equipment." *Id.* Unfortunately, the Division has refused to provide this information to Rocky Mountain Clean Air Action.

³⁵ Exhibit 7 at 9. We hereby incorporate the referenced exhibits in Exhibit 7 by reference.

2. Natural Gas Wells Owned or Controlled by Anadarko Constitute Pollutant Emitting Activities that are Contiguous or Adjacent to the Frederick Compressor Station

Anadarko's connected natural gas wells are considered adjacent for PSD purposes. In its TRD Addendum, the Division provides several reasons for rejecting considering Anadarko's connected natural gas wells as adjacent. Unfortunately, the Division's reasons are baseless, unfounded, and contrary to the CAA.

To begin with, the Division relies heavily, if not entirely, on a 2007 policy guidance memo issued by former EPA Assistant Administrator, William L. Wehrum (hereafter "Wehrum memo"). The Division apparently believes that the Wehrum memo constitutes reasonable guidance for determining if and how to aggregate pollutant emitting activities related to oil and gas operations under NSR permitting programs, particularly including PSD. Contrary to the Division's assertion otherwise, this guidance memo inappropriately subverts the plain language of the PSD regulations, as well as the Colorado SIP.

Indeed, the Wehrum memo suffers from two major flaws. To begin with, it inappropriately conflates Section 112 of the CAA, which addresses the regulation of hazardous air pollutants, with the NSR permitting programs, which are set forth under sections 160, *et seq.*, and 501, *et seq.*, of the CAA, respectively. Section 112(n)(4)(A) contains a specific provision that prohibits aggregating interrelated oil and gas facilities when assessing whether a facility is a major source of hazardous air pollutants. In his memo, Wehrum advises permitting authorities to "look to the Section 112 approach of segregating" oil and gas operations under the NSR permitting programs.³⁶ While Wehrum's advice is well and good for decisions made under section 112, it is inappropriate for permitting authorities carrying out the NSR permitting programs, such as the Division, to conflate this utterly unrelated requirement.

³⁶ Wehrum Memo at 4.

Secondly, the Wehrum memo defies nearly three decades of EPA policy and guidance making clear that the determination of whether to aggregate pollutant emitting activities is largely dependent upon the "common sense" notion of a source. This "notion," first enumerated by the EPA in its 1980 regulations implementing the PSD program, means that two or more facilities with a functional interrelationship, such as a support facility to a larger plant or factory, should be considered together a single source of air pollution for NSR permitting purposes—irrespective of the distance between the facilities.³⁷

The Wehrum memo implicitly rejects this long-held means of assessing whether or not to aggregate pollutant emitting activities under the NSR permitting program. Indeed, Wehrum does not even address whether two or more oil and gas operations may have a functional interrelationship, but rather simply asserts that the concept of "proximity," or the "physical distance between two activities," should be the sole factor in determining whether to aggregate. Wehrum goes on to assert that permitting authorities should only aggregate two or more oil and gas operations "if they are physically adjacent, or if they are separated by no more than a short distance (e.g. across a highway, separated by a city block or some similar distance)."³⁸

While EPA has recognized that distance between two or more facilities may be a factor in determining whether or not to aggregate pollutant emitting activities, the agency has never taken the position that distance should be the sole determining factor. For example, in response to a request for guidance from the State of Utah, EPA Region 8 stated:

[A]ny evaluation of what is "adjacent" must relate to the guiding principle of a common sense notion of "source." (The phrase "common sense notion" appears on page 52695 of the August 7, 1980 PSD preamble, with regard to how to define "source.") Hence, a

³⁷ See 42 Fed. Reg. 52695.

³⁸ Wehrum Memo at 4.

determination of "adjacent" should include an evaluation of whether the distance between two facilities is sufficiently small that it enables them to operate as a single "source."³⁹

The EPA has long held that "the distance associated with 'adjacent' must be considered on a case-by-case basis."⁴⁰ This was firmly noted in the preamble to the agency's 1980 PSD

Letter from Richard R. Long, Region VIII Director, Air Program, to Lynn R. Menlove, Manager, New Source Review Section, Division of Air Quality, Utah Department of Environmental Quality (August 8, 1997) (stating, "To our general knowledge, previous determinations, which have been made by EPA and states, have always determined that activities which support the primary activities of a source are considered to be part of the sources to which they provide support. Distance between the operations is not nearly as important in determining if the operations are part of the same source as the possible support that one operation provides for another."). This memo is attached as Exhibit 2 to Exhibit 8 to this petition.

Letter from Richard R. Long, Region VIII Director, Air and Radiation Program, to Jeffrey L. Ingerson, Senior Environmental Specialist, Questar Gas Management Company (August 7, 1998) (stating, "Distance between operations is not nearly as important in determining if the operations are part of the same source as the possible support that one operation provides for another."). This memo is attached as Exhibit 3 to Exhibit 8 to this petition.

Letter from Richard R. Long, Region VIII Director, Air and Radiation Program, to Dennis Myers, Construction Permit Unit Leader, Stationary Sources Program, Air Pollution Control Division, Colorado Department of Public Health and Environment (April 20, 1999) (stating, "whether two facilities are 'adjacent' is based on the 'common sense' notion of a sources and the functional interrelationship of the facilities, and is not simply a matter of the physical distance between two facilities."). This memo is attached as Exhibit 4 to Exhibit 8 of this petition.

⁴⁰ *Id.* at 1. For additional supporting EPA statements, we refer the Administrator to the following additional exhibits:

Memo from Steven Rothblatt, Region V Chief, Air Programs Branch to Edward E. Reich, Director, Stationary Source Enforcement Division (June 8, 1981) (stating that EPA adjacency determinations are based on a case-by-case basis). This memo is attached as Exhibit 5 to Exhibit 8 to this petition.

Memo from William B. Hathaway, Region VI Director, Air, Pesticides and Toxics Division to Allen Eli Bell, Executive Director, Texas Air Control Board (November 3, 1986) (stating "For cases where sources are not located on contiguous or adjacent properties, EPA cannot say precisely how far apart the activities must be in order to be treated separately. EPA can only answer that question through case-by-case determinations[.]" This memo is attached as Exhibit 6 to Exhibit 8 to this petition.

Memo from Robert G. Kellam, OAQPS Acting Director, Information Transfer and Program Integration to Richard R. Long, Region VIII Director, Air Program (August 27, 1996) (stating "Whether facilities are contiguous or adjacent is determined on a case-by-case basis, based on the relationship between the facilities."). This memo is attached as Exhibit 7 to Exhibit 8 of this petition.

Letter from Joan Cabreza, Region X Permits Team Leader, Office of Air Quality to Andy Ginsberg, Manager, Program Operations Section, Air Quality Division, Oregon Department of Environmental Quality

³⁹ Memo from Richard R. Long, Region VIII Dir., Air and Radiation Program to Lynn Menlove, Manager, New Source Review Section, Utah Division of Air Quality at 2 (May 21, 1998) at 2. This memo is hereby attached as Exhibit 1 to Exhibit 8 of this petition. For additional supporting EPA statements, we refer the Administrator to the following additional exhibits:

regulations, which state that "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."⁴¹

Despite the EPA's long held position, the Wehrum memo not only asserts that permitting authorities should only assess distance in determining whether to aggregate oil and gas operations as single sources, but clearly directs permitting authorities to reject considering adjacency on a "case-by-case" basis in relation to oil and gas operations. Indeed, the Wehrum memo specifically directs permitting authorities to consider "adjacency" of oil and gas operations only in relation to proximity. Amazingly, the Wehrum memo does exactly what EPA has long held it could not do: say "precisely" how far apart activities must be in order to be treated as separate sources under PSD.

It is true that the EPA is free to change its policy positions, but the agency must at least articulate a rationale, particularly when, as in this case, the policy represents a 180 degree shift in position. In the case of the Wehrum memo, the only reason given for rejecting nearly 30 years of consistent EPA policy is "the diverse nature of oil and gas activities."⁴² The only piece of information that the Wehrum memo cites to support this rationale is the fact that section 112 of the CAA prohibits aggregating interrelated oil and gas facilities when assessing whether a

⁴¹ 42 Fed. Reg. 52676..

⁴² Wehrum Memo at 3.

⁽August 7, 1997) (stating, "The guiding principle behind this guidance is the common sense notion of plant. That is, pollutant emitting activities that comprise or support the primary product or activity of a company or operation must be considered part of the same stationary source."). This memo is attached as Exhibit 8 to Exhibit 8 of this petition.

Letter from Steven C. Riva, Region II Chief, Permitting Section, Air Programs Branch to John T. Higgins, Director, Bureau of Application Review and Permitting, Division of Air Resources, New York State Department of Environmental Conservation (October 11, 2000) (stating "there is no bright line, numerical standard for determining how far apart activities may be and still be considered 'contiguous' or 'adjacent.' As explained in the preamble to the August 7, 1980 PSD rules, such a decision must be made on a case-by-case basis."). This letter is attached as Exhibit 9 to Exhibit 8 to this petition.

facility is a major source of hazardous air pollutants. Once again, it is inappropriate to assume that since Congress clearly specified exemptions under section 112 that Congress intended similar exemptions to apply under other programs of the CAA. Furthermore, it is inappropriate to assume that since Congress recognized the oil and gas industry was unique in the context of section 112 hazardous air pollutant regulation requirements, Congress similarly recognized the oil and gas industry was unique in the context of NSR regulatory requirements.

Notwithstanding the claimed "diverse" nature of oil and gas activities, it has never prevented the EPA from determining that oil and gas operations should be aggregated under NSR permitting programs, including PSD, notwithstanding the fact that such operations were not in close proximity to each other. For example, in a 1999 memo, the EPA concluded that:

[E]ach compressor station with its associated emitting units (e.g. compressor engines, wells, pumps, dehydrators, storage and transmission tanks, etc...) comprises a 'group of stationary sources' and would be considered a single source for purposes of determining Title V applicability.⁴³

In these situations, the EPA has made clear that, while distance is a consideration, the interrelatedness of pollutant emitting activities is key to determining whether to aggregate oil and gas operations. As the EPA has further directed, natural gas compressor stations and their associated emitting units, including wells, should be aggregated as a single source.⁴⁴

⁴³ Letter from Richard R. Long, Region VIII Director, Air and Radiation Program, to Jack Vaughn, EnerVest San Juan Operating Co. (July 8, 1999). This letter is attached as Exhibit 10 to Exhibit 8 of this petition. For additional supporting EPA statements, we refer the Administrator to the following additional exhibit:

Letter from Richard R. Long, Region VIII Director, Air and Radiation Program to Lee Ann Elsom, Environmental Coordinator, Citation Oil and Gas Corporation (December 9, 1999). This letter is attached as Exhibit 11 to Exhibit 8 to this petition.

⁴⁴ Although the referenced EPA memos address permitting under Title V of the Clean Air Act, the direction is equally applicable to NSR permitting requirements given that the definition of "major source" under both Title V and NSR regulations are exactly the same.

Notably, the EPA has issued these directives related to the aggregation of oil and gas operations under the NSR permitting program, notwithstanding the claimed "diverse" nature of the activities. Why is this? Because the statutory provisions of the CAA make clear that under the NSR permitting applies equally to all industry sectors and makes no exceptions for oil and gas.⁴⁵

At the least, the EPA has made clear that it is incumbent upon permitting authorities to understand the full nature of oil and gas operations and their potentially interrelated pollutant emitting activities before issuing both Title V and/or NSR permits. In a 2004 letter to the Division related to permitting of a natural gas processing plant, the EPA recommended that:

[A]n analysis of how natural gas is transported to and from the Rifle [natural gas processing] Station should be conducted. The role the Rifle Station plays in the final product of any natural gas facility or facilities providing this compression should be established. Once this information is obtained, a factual and legal analysis should be conducted to determine if the Rifle Station is operating independently, or whether it should be considered a single stationary source with other pollutant emitting activities.⁴⁶

The EPA continued, "[W]e recommend that the Division completely analyze whether the Rifle [natural gas processing] Station is truly operating independently as a single stationary source before establishing synthetic minor limits for the Title V program." ⁴⁷

Unfortunately, as the Division analyzed whether or not to aggregate interrelated pollutant emitting activities with the Frederick Compressor Station in response to the Administrator's February 7, 2008 order in the TRD Addendum, the agency relied heavily, if not entirely, on the

⁴⁵ Under the Clean Air Act, the definition of "major stationary source" includes "any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant" except as otherwise "expressly provided" by the Act. Because the CAA does not expressly provide an exemption to oil and gas operations under NSR PSD permitting requirements, regulations addressing NSR and PSD permitting requirements must apply to oil and gas operations as equally as any other industrial sector.

⁴⁶ Letter from Callie A. Videtich, Region VIII Leader, Air Technical Assistance Unit, to Roland Hea, Unit Leader, Construction Permit Program, Air Pollution Control Division, Department of Public Health and Environment (October 18, 2004). This letter is attached as Exhibit 12 to Exhibit 8 of this petition.
 ⁴⁷ Id.

inappropriate and illegal guidance of the Wehrum memo. Consequently, the Division's flawed analysis and failure to aggregate interrelated pollutant emitting activities with the Frederick Compressor Station is contrary to the CAA and the Administrator must object.⁴⁸

Assuming however, that the Division did not rely heavily, if not entirely, on the Wehrum memo in the TRD Addendum, the Division's rationale for refusing to aggregate Anadarko's interrelated and connected natural gas well and associated equipment with the Frederick Compressor Station continues to be flawed.

As already explained, it has long been accepted that the determination of whether or not aggregate pollutant emitting activities is largely dependent upon the common sense notion of a source. In the case of the Frederick Compressor Station, it cannot be denied that the oil and gas wells that feed the compressor station serve as support facilities and therefore should be considered adjacent and/or contiguous, and aggregated with the Compressor Station as a single source.

Indeed, as already explained, the natural gas wells that feed the Frederick Compressor Station serve only one purpose: to provide natural gas to the compressor station. In fact, it would be confusing, to say the least, to determine where Anadarko's Frederick Compressor Station would obtain the natural gas it needed to process if it was not connected with oil and gas

⁴⁸ Procedurally, the Wehrum memo is also flawed because it has not followed proper rulemaking procedures in accordance with the Administrative Procedure Act, 5 USC § 553. As noted earlier in this petition, the Wehrum memo is substantive in nature in that it changes nearly 30 years of established EPA policy. Furthermore, although the Wehrum memo claims to provide only "guidance," to permitting authorities, the guidance is in fact substantive direction that permitting authorities are now forced to adhere by. The memo is much more than a general statement of policy, but rather establishes a new regulatory definition that dramatically changes the administration of NSR permitting programs. Finally, the memo itself is substantive in nature in that it does not provide clarification with regards to an existing statutory or regulatory definition, but rather provides a new definition of what constitutes a major source under NSR.

Before the Wehrum memo can have any semblance of validity and be relied upon by any permitting authority, it must be subject to public notice and comment requirements under 5 USC § 553. The Division therefore erred in relying on the memo in the TRD Addendum to respond to Rocky Mountain Clean Air Action's comments.

wells. Like any "source," the Frederick Compressor Station processes a product. That product comes from nearby natural gas wells. Considering the "common sense notion" of a source, it is reasonable to conclude that the oil and gas wells that feed the compressor station should be aggregated with the Frederick Compressor Station. Notwithstanding this, the Division did not even address whether Anadarko's natural gas wells must be aggregated based on the common sense notion of a source.

Although the Division may believe that distance between the Frederick Compressor Station and the gas wells that feed the station should be the sole, or at least primary, determining factor in assessing whether or not to aggregate pollutant emitting activities, the Division did not even articulate a reasonable distance upon which to gauge whether interrelated and connected natural gas wells should be aggregated. Indeed, the Division seems to imply in its TRD Addendum that sources 7.2 miles away or further should not be aggregated with the Frederick Compressor Station.⁴⁹ Nowhere does the Division provide a rationale for relying on this distance to reject aggregating interrelated pollutant emitting activities.⁵⁰

Yet as the EPA has already explained, distance is not an overriding factor in prior direction to permitting authorities. As the EPA has directed, "Distance between the operations is not nearly as important in determining if the operations are part of the same source as the possible support that one operation provides for another."⁵¹ As the EPA has stated,

[A]ny evaluation of what is "adjacent" must relate to the guiding principle of a common sense notion of "source." (The phrase "common sense notion" appears on page 52695 of the August 7, 1980 PSD preamble, with regard to how to define "source.") Hence, a

⁴⁹ See Exhibit 1 at 9.

⁵⁰ See Exhibit 13 attached to Exhibit 8 of this petition. The EPA has in fact indicated a wide range of distances that would constitute "adjacent" under the Clean Air Act NSR permitting requirements, and therefore as single sources. This variability is tied to the fact that distance is not the overriding factor in determining whether pollutant emitting activities should be aggregated. Rather, source determinations need to be made on a case-by-case basis, taking into consideration the interrelatedness of pollutant emitting activities.

⁵¹ See Exhibit 2 attached to Exhibit 8 of this petition.

determination of "adjacent" should include an evaluation of whether the distance between two facilities is sufficiently small that it enables them to operate as a single "source."⁵²

In the case of the Frederick Compressor Station, the Division failed to at the least provide an evaluation of whether the distance between the Compressor Station and the gas wells that feed the Compressor Station are "sufficiently small that it enables them to operate as a single 'source.'" The Division cannot simply assert, as it did, that the gas wells that feed the Frederick Compressor Station are not "adjacent" because they are not in close "proximity."

The Division finally seems to assert in the TRD Addendum that since prior EPA and Division determinations failed to aggregate Anadarko's interrelated and connected natural gas wells with the Frederick Compressor Station, that it is appropriate to reject aggregating such pollutant emitting activities. This rationale defies logic. Simply because prior EPA and Division permitting determinations were contrary to the CAA does not, by extension, make them valid or any less in violation of the CAA.

3. Natural Gas Wells Owned or Controlled by Anadarko Constitute Pollutant **Emitting Activities that are Contiguous or Adjacent to the Frederick Compressor Station**

Finally, Anadarko's natural gas wells are part of the same major industrial grouping as the Frederick Station. According to the Standard Industrial Classification Manual, producing natural gas wells fall under Major Group 13, or "Oil and Gas Extraction."⁵³ The most recent TRD for the Frederick Station identifies the pollutant emitting activity as falling under SIC "1311."⁵⁴

Natural Gas Wells Owned or Controlled by Anadarko Constitute Pollutant 4.

 ⁵² See Exhibit 1 attached to Exhibit 8 of this petition.
 ⁵³ See <u>http://www.osha.gov/oshstats/sicser.html</u>.

⁵⁴ Exhibit 2 at 1.

Emitting Activities that are Contiguous or Adjacent to the Frederick Compressor Station

Together with the Frederick Compressor Station, the natural gas wells that supply the compressor station with natural gas comprise a single source under PSD. The natural gas wells are pollutant emitting activities owned and under common control by Anadarko Petroleum Corporation and connected to the Frederick Compressor Station, are interrelated and adjacent to the Frederick Compressor Station, and belong to the same major industrial grouping. Under the CAA, the Frederick Compressor Station and the natural gas wells that supply the station must be aggregated together and considered a single source to assure compliance with PSD. The Division, unfortunately, failed to make such a determination, relying on unsupported and baseless guidance that is contrary to the CAA. The result is that the Division has inappropriately assessed whether PSD review has been triggered and whether Anadarko Petroleum Corporation is currently in compliance with PSD requirements. The Division has thus issued a Title V Permit that fails to assure compliance with the applicable requirements and the Administrator must object to its issuance.

B. A Compliance Schedule May be Necessary

In light of the Division's failure to aggregate emissions from Anadarko's interrelated and connected natural gas wells with the Frederick Compressor Station, the Division has issued a Title V Permit without a required compliance schedule.

Applicable requirements at 42 USC § 7661b(b)(1) and 40 CFR § 70.5(c)(8)(iii)(C) require that if a facility is in violation of an applicable requirement at the time of permit issuance, the facility's permit must include a schedule containing a sequence of actions with milestones, leading to compliance with any applicable requirement. The fact that the Division failed to ensure PSD compliance means that the Frederick Compressor Station may not be in compliance

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with PSD requirements. It is likely that the Title V Permit must include a compliance schedule to bring the facility into compliance with PSD, such as best available control technology and visibility protection requirements, as required under 40 CFR § 51.166 and the Colorado SIP. The Administrator must therefore object to the issuance of the Title V Permit due to the Division's failure to accurately and sufficiently assess whether a compliance schedule is needed to address violations of PSD at the Frederick Station.

II. The Division Failed to Comply with Title V Permitting Requirements

The failure of the Division to aggregate emissions from Anadarko's interrelated and connected natural gas wells that supply the Frederick Compressor Station further renders the Title V Permit in violation of Title V regulations at 40 CFR § 70.

Title V regulations contain the same definition of major stationary source as is found in the PSD regulations at 40 CFR § 51.166 and the Colorado SIP. Title V regulations at 40 CFR § 70 explicitly require all adjacent pollutant emitting activities under common control and belonging to a single major industrial grouping be considered as a single source for Title V permitting purposes.

As already explained, the Division failed to appropriately aggregate emissions from Anadarko's natural gas wells with the Frederick Compressor Station, in defiance of the PSD requirements under CAA. By extension, this means the Division also failed to comply with Title V requirements. The Title V Permit for the Frederick Compressor Station was required to include all interrelated and adjacent pollutant emitting activities together with the Frederick Compressor Station as a single source, and ensure the Title V Permit included all requirements set forth under 40 CFR § 70.6 for all pollutant emitting activities, including interrelated natural gas wells and associated equipment. The Division failed to do so and has thus issued a flawed Title V Permit that fails to comply with 40 CFR § 70.6. The Administrator must therefore object to the issuance of the Title V Permit.

CONCLUSION

For the foregoing reasons, Petitioner requests the Administrator object to the Title V Permit issued by the Division for Anadarko Petroleum Corporation's Frederick Compressor Station. As thoroughly explained, the Title V Permit fails to assure compliance with PSD requirements and fails to comply with Title V Permit requirements. The Administrator thus has a nondiscretionary duty to issue an objection to the Title V Permit within 60 days in accordance with section 505(b)(2) of the CAA. Respectfully submitted this 11th day of August

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EXHIBITS TO PETITION

- 1. April 29, 2008 Addendum to the January 1, 2007 Technical Review Document
- 2. January 1, 2007 TRD
- 3. January 1, 2007 Title V permit
- 4. Administrator's February 7, 2008 decision granting Rocky Mountain Clean Air Action's petition to object
- 5. August 2, 2008 Letter from Callie Videtich, Region 8 Director of Air and Radiation
- 6. September 14, 2006 comments on draft Title V Permit
- 7. December 29, 2006 petition to object to the issuance of the Title V Permit
- 8. March 24, 2008 comments regarding Division's response to EPA objection
- Bar-Ilan, A., J. Grant, R. Friesen, A.K. Pollack, D. Henderer, D. Pring, and K. Sgamma, "Development of baseilne 2006 emissions from oil and gas activity in the Denver-Julesberg Basin," report prepared for Colorado Department of Public Health and Environment at 28 (April 30, 2008).
- 10. Colorado Oil and Gas Review Memorandum at faxed page 7 (January 4, 2005)