

**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 95OPWE035
and Environment, Air Pollution Control)
Division)
)
to)
)
Kerr-McGee Gathering LLC)
to operate the Frederick Natural Gas)
Compressor Station in Weld County,)
Colorado)

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**PETITION FOR OBJECTION TO ISSUANCE OF OPERATING PERMIT
FOR KERR-MCGEE FREDERICK COMPRESSOR STATION**

Pursuant to Section 505(b)(2) of the Clean Air Act (“CAA”) and 40 CFR § 70.8(d) and the applicable federal and state regulations, Rocky Mountain Clean Air Action (hereafter “Petitioner”) hereby petitions the Administrator of the U.S. Environmental Protection Agency (“EPA”) to object to the issuance of the Title V operating permit (hereafter “Title V Permit”), dated January 1, 2007 by the Colorado Department of Public Health and Environment, Air Pollution Control Division (“Division”) for Kerr-McGee Gathering LLC (hereafter “Kerr-McGee”) to operate the Frederick Natural Gas Compressor Station, (hereafter “Frederick Station”), Permit Number 95OPWE035, in Weld County, Colorado.¹ Ex. 1.

¹ Kerr-McGee Gathering LLC is also known as Kerr-McGee Oil and Gas Onshore LP, a wholly owned subsidiary of Anadarko Petroleum Corporation.

INTRODUCTION

According to the most recent Technical Review Document (“TRD”) for the Title V Permit, the Frederick Station is a natural gas gathering and compression facility. **Ex. 2.** The primary pollutants of concern include volatile organic compounds (“VOCs”), nitrogen oxides (“NOx”), carbon monoxide (“CO”), and hazardous air pollutants (“HAPs”). VOCs and NOx are of particular concern due to the fact that they react with sunlight to form ozone pollution, also known as smog. The Denver metro area, including Weld County, is currently struggling to meet National Ambient Air Quality Standards (“NAAQS”) for ozone pollution, also known as smog.² According to the Title V Permit, the facility is a major source of air pollution in that it has the potential to release more than 250 tons of NOx. See, Title V Permit at 5. Any modification of the facility that leads to a significant increase in NOx, VOCs, and/or CO may result in the application of Prevention of Significant Deterioration (“PSD”) review requirements under 40 CFR § 51.166 and the Colorado State Implementation Plan (“SIP”)

The Frederick Station collects natural gas for storage and compression from numerous natural gas wells in the Wattenberg natural gas field owned and operated by Kerr-McGee. According to Kerr-McGee, the company “operates over 3,600 active natural gas wells in the Wattenberg field.” **Ex. 3 at 1.** The Frederick Station is one of seven natural gas compressor stations owned and operated by Kerr-McGee in the Wattenberg field “that serves literally thousands of wells, most of which are owned by Kerr-McGee[.]” Id. The Wattenberg field is located north of Denver and is located in the Denver metro 8-hour ozone control region. Oil and gas developments within the 8-hour ozone control region are subject to Early Action Compact requirements and specifically Colorado Air Quality Control Commission (“AQCC”) Regulation No. 7, which limits emissions of VOCs. 70 Fed. Reg. 48652-48654.

² See, <http://denverozone.blogspot.com/2006/12/congratulations-denver-you-have-strong.html>.

The facility consists of three large internal combustion engines for the compression and transmission of natural gas, only one of which has any pollution control device installed. Two engines, both of which are rated at 4670 horsepower, are currently operating with no pollution control devices, despite being required to by Colorado State Implementation Plan (“SIP”) requirements at Air Quality Control Commission Regulation Number 7. These two engines together release 478.4 tons of NOx, 243.4 tons of CO, and 105.2 tons of VOCs annually. Ex. 4. The two engines also release 30,520 pounds of formaldehyde and 1,074 pounds of benzene annually. *Id.* The National Cancer Institute identifies formaldehyde and benzene as known carcinogens, with benzene known to cause leukemia.³ Emissions of VOCs and HAPS also come from one triethylene glycol dehydration unit for the removal of water from natural gas, a condensate storage tank battery for the storage of liquid condensate, and leaking equipment. These sources collectively are allowed to release 92.45 tons of VOCs and over 20 tons of HAPs annually.

In total 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. The amount of NOx released is equivalent to the amount released by over 24,000 cars each driven 12,500 miles a year.⁴

The Division submitted the proposed Title V Permit for EPA review on October 11, 2006. The EPA’s 45 day review period ended on November 25, 2006. Based on Petitioners’ conversations with Region 8 EPA staff, the EPA did not object to the issuance of the Title V Permit for the Frederick Station. Since that time, the Division has issued a final Title V Permit,

³ See, <http://www.cancer.gov/cancertopics/factsheet/Risk/formaldehyde> and <http://www.cancer.gov/cancertopics/factsheet/Benzene>.

⁴ According to the EPA, an average vehicle emits 38.2 pounds of NOx per year. See, www.epa.gov/otaq/consumer/f00013.htm.

dated January 1, 2007. This petition is thus timely filed within 60 days following the conclusion of EPA's review period and failure to raise objections.

This petition is based on objections to the permit raised with reasonable specificity during the public comment period. To the extent the EPA may somehow believe this petition is not based on comments raised with reasonable specificity during the public comment period, Petitioner requests the Administrator also consider this a petition to reopen the Title V Permit for the Frederick Station in accordance with 40 CFR § 70.7(f).⁵ 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. See, 40 CFR § 70.7(f)(1)(iii). As will be discussed in more detail, the Title V Permit for Frederick 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. See, 40 CFR § 70.7(f)(1)(iv). As will be discussed in more detail, the Title V Permit for the Frederick 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

⁵ 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).

Mountain region for the health and sustainability of local communities. On September 14, 2006, Petitioner submitted concerns over the Division's proposal to renew the Title V Permit for the Frederick Station. **Ex. 5.** Petitioner submitted detailed comments on the draft Title V Permit at that time. The objections raised in this petition were raised with reasonable specificity in comments on the draft Title V Permit.

Petitioner requests the EPA object to the issuance of Permit Number 95OPWE035 for the Frederick Station and/or find reopening for cause for the reasons set forth below.

GROUND FOR OBJECTION

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. 42 USC § 7661c(a); 40 CFR § 70.6(a)(1). Applicable requirements include, among other things, 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. 40 CFR § 70.2. 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. 42 USC § 7661b(b); 40 CFR § 70.6(b)(3).

The CAA prevents significant deterioration of air quality to protect human health and welfare and air quality in class I areas. 42 USC § 7470. 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. 42 USC § 7475; 40 CFR §

51.166(a)(7); AQCC Regulation No. 3. In the case of the Frederick 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 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 from Adjacent and Interrelated Pollutant Emitting Activities: Kerr-McGee's Natural Gas Wells*

The Frederick 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. See, Title V Permit at 5. 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.” Id. 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 that supply natural gas to the Frederick 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.” See also, and AQCC Regulation No. 3, Part A, Section I.B.41. 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)[.]” The regulations further state, “Pollutant emitting

activities are considered part of the same industrial grouping if 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[.]” See also, and AQCC Regulation No. 3, Part A, Section I.B.41.

Before issuing the Title V Permit for the Frederick Station, the Division failed to consider and address pollutant emitting activities from the dozens, perhaps hundreds or even thousands, of natural gas wells currently owned and operated by Kerr-McGee that supply the Frederick Station with natural gas. According to Kerr-McGee, 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 Kerr-McGee’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).** Kerr-McGee’s natural gas wells are all pollutant emitting activities related to the production of natural gas in the Wattenberg natural gas field, which is primarily located in Weld County, Colorado.

Indeed, information from the EPA, the Division, and other sources shows that activities related to producing natural gas wells release significant amounts of air pollution. A recent report prepared by Environ for the Western Governors’ Association shows that VOC and NOx emissions are released primarily from seven main pollutant emitting activities at producing natural gas wells: 1) Compressor engines; 2) Heaters; 3) Pneumatic devices; 4) Dehydration; 5) Completion, flaring, and venting; 6) Condensate tanks, uncontrolled; and 7) Condensate tanks, controlled. **Ex. 8 at 3-1.** EPA AP-42 emission factors also report that NOx, CO, and VOCs can be emitted from diesel engines used to operate natural gas wells, from generator engines used to produce electricity to operate wells, and/or from natural gas fired engines used to operate wells

and/or generators.⁶ And as the Division's Title V Permit for the Frederick Station shows, condensate storage tanks can release significant quantities of VOCs. Given the sheer number of wells operated and owned by Kerr-McGee, NOx, CO, and VOC emissions from the company's producing natural gas wells that supply natural gas to the Frederick Station are most likely significant.

Table 1. Sources of Air Pollution at Natural Gas Wells (Environ 2005)

Pollutant Emitting Activity	Pollutants Released
Compressor engines	NOx, VOCs
Heaters	NOx, VOCs
Pneumatic devices	VOCs
Dehydration	NOx, VOCs
Completion, flaring, venting	NOx, VOCs
Condensate tanks uncontrolled	VOCs
Condensate tanks controlled	VOCs

Not only are Kerr-McGee's producing natural gas wells pollutant emitting activities, but together with Kerr-McGee's Frederick Station, they are connected pollutant emitting activities under PSD and thus, a single source. As Kerr-McGee has stated, it owns and operates over 3,600 natural gas wells, including over 2,000 wellhead condensate storage tank batteries, all or some of which have a functional interrelationship with the Frederick Station. The gas wells clearly provide natural gas to the Frederick Station, 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 Kerr-McGee depend upon the Frederick Station for their operations. Without the existence of the Frederick Station, all or some of Kerr-McGee's natural gas wells would cease to operate as

⁶ See e.g., EPA's AP-42 Emission Factors for Natural Gas Processing, Chapter 5.3, available online at www.epa.gov/ttn/chief/ap42/ch05/final/c05s03.pdf and AP-42 Emission Factors for Gasoline and Industrial Engines, Chapter 3.3, available online at <http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf>.

there 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 Kerr-McGee'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. As **Exhibit 5 and 6** show, there are thousands of producing wells owned and operated by Kerr-McGee, 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 Kerr-McGee 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 Kerr-McGee 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 in that they support operations of the compressor station.

Additionally, Kerr-McGee'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."⁷ The most recent TRD for the Frederick Station identifies the pollutant emitting activity as falling under SIC "1311." TRD at 1.

Finally, Kerr-McGee's natural gas wells are considered adjacent for PSD purposes. These pollutant emitting activities are located entirely within the Wattenberg gas field, primarily

⁷ See, <http://www.osha.gov/oshstats/sicser.html>.

located in Weld County, Colorado. Although the EPA has noted that the distance associated with “adjacent” “must be considered on a case-by-case basis,” the agency has noted that two pollutant emitting activities that are interdependent operations under common control can be considered adjacent when they are upwards of 20 miles apart or even greater. **Ex. 11.** EPA noted that in relation to two interdependent facilities in Utah 21.5 miles apart that, “the lengthy distance between the facilities ‘is not an overriding factor that would prevent them from being considered a single source.’” **Ex. 11 at 2.** The fact that Kerr-McGee’s producing wells are all located primarily within Weld County and in the Wattenberg gas field, strongly indicates these pollutant emitting activities are adjacent to the Frederick Station for PSD purposes. At the least, the best available information shows that there are hundreds of wells less than 21.5 miles away from the Frederick Station.

Together with the Frederick 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, are adjacent to the Frederick Station, are interrelated with the Frederick Station, belong to the same major industrial grouping, and are under common control or ownership by Kerr-McGee. **Even Kerr-McGee states that the Frederick Station serves thousands of wells, many of which are owned by Kerr-McGee. Ex. 3 at 1. And even in response to our comments, the Division did not deny that Kerr-McGee’s natural gas wells that supply the Frederick Station are interrelated and adjacent pollutant emitting activities. Ex. 12 at 5.** Under the CAA, the Frederick 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. The result is that the Division has failed to accurately assess whether PSD review has been triggered

and whether Kerr-McGee 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. The Administrator must therefore object to its issuance.

B. A Compliance Schedule May be Necessary

In light of the Division's failure to consider and assess emissions from all adjacent, interrelated pollutant emitting activities with the same major industrial grouping, namely Kerr-McGee's natural gas wells that supply the Frederick Station with natural gas, the Division has likely 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 accurately assess PSD compliance means that the Frederick Station may not be in compliance 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.

C. In the Alternative, the Division Failed to Respond to Significant Comments on this Issue

The EPA has held that "It is a general principle of administrative law that an inherent component of any meaningful notice and opportunity for comment is a response by the regulatory authority to significant comments." See, In the Matter of Onyx Environmental

Services, Petition V-2005-1 (February 1, 2006) at 7. While the Division clearly failed to assure compliance with PSD requirements when issuing the Title V Permit for the Frederick Station, the Division further failed to respond to significant comments on this issue. The result has been one or more deficiencies in the Title V Permit.

Indeed, in commenting on the draft Title V Permit, Rocky Mountain Clean Air Action submitted detailed and specific concerns over the Division's failure to aggregate emissions from interrelated and adjacent producing natural gas wells with the Frederick Station. **Ex. 5.** In response, the Division simply stated:

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

Ex. 12 at 5. This is not a response to our comments. Clearly, the Division avoided responding to our specific concerns. Not only did the Division clearly state that it will address our concerns at some later date and even then only after some potential action is taken by the EPA, but with no explanation or support for its position, the Division simply moved to issue the Title V Permit for the Frederick Station without considering emissions from adjacent and interrelated pollutant emitting activities. **This is not a response to comments, but rather a clear attempt by the Division to dodge responding to very significant concerns over PSD compliance.**

The EPA has further ruled that the failure of a permitting agency to respond to significant comments that may result in one or more deficiencies in a Title V permit is grounds for objection. See, In the Matter of Onyx Environmental Services, Petition V-2005-1 (February 1,

2006) at 7. The failure of the Division to respond to our significant concerns over whether all adjacent and interrelated pollutant emitting activities have been aggregated to assure compliance with PSD did, in fact, result in one or more deficiencies in the Title V Permit. As already explained, the failure to consider the Frederick Station and the natural gas wells owned and operated by Kerr-McGee that supply the Frederick Station as a single source under PSD means that the Title V Permit fails to assure compliance with PSD requirements at 40 CFR § 51.166 and the Colorado SIP. The Administrator must therefore object to the issuance of the Title V Permit.

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

The failure of the Division to consider and address emissions from interrelated and adjacent Kerr-McGee natural gas wells that supply natural gas to the Frederick Station further renders the Title V Permit in violation of Title V regulations at 40 CFR § 70.

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. In fact, the definition of a “major source” under 40 CFR § 70.2 mirrors the definition of a “major source” found at 40 CFR § 51.166.

In relation to oil and gas developments, such as the Frederick Station and the natural gas wells that supply the compressor station, the EPA has explicitly stated that oil and gas pollutant emitting activities cannot be piecemealed in relation to Title V permitting of major sources. In its proposed interim approval of the state of Oklahoma’s operating permit program, the EPA stated, “Nonaggregation of oil and gas units is provided only for the emission of hazardous air pollutants in the Federal rule. 40 CFR 70.2 requires all sources located on contiguous or

adjacent properties, under common control, and belonging to a single major industrial grouping to be considered as the same source.” 60 Fed. Reg. 13088-13095 (emphasis added).

The EPA itself has held that natural gas compressor stations and their associated wells must be considered together as a single source for Title V purposes. In a 1999 memo, the EPA stated:

In the Code of Federal Regulations at 40 CFR 71.2 the definition of “major source” states, in part:

‘Major source means any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties and are under common control of the same person (or persons under common control)), belonging to a single major industrial grouping.....’

We interpret this to mean that each 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.

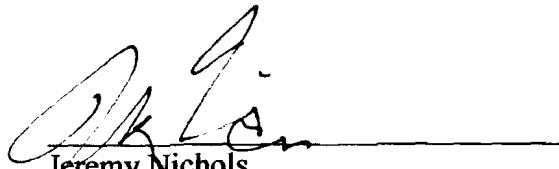
Ex. 13 at 1. The EPA’s position is clearly applicable in the case of the Frederick Station, meaning the Division was required to issue a Title V Permit for the compressor station and the Kerr-McGee natural gas wells that supply the compressor station as a single source.

As stated in our comments on the draft Title V Permit, the Division was required to meet the requirements of 40 CFR § 70 in relation to Kerr-McGee’s interrelated and adjacent natural gas wells that supply the Frederick Station. To this end, the Title V Permit was required to include all interrelated and adjacent pollutant emitting activities together with the Frederick 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. 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 Kerr-McGee'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. To boot, the Division failed to respond to significant comments. 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 29th day of December



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