

**BEFORE THE ENVIRONMENTAL APPEALS BOARD  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.**

In re:	)	
	)	
	)	
Anadarko Uintah Midstream, LLC,	)	Appeal No. NSR 18-01
	)	
Archie Bench Compressor Station,	)	
Permit No. SMNSR-UO-000817-2016.001	)	
	)	
Bitter Creek Compressor Station	)	
Permit No. SMNSR-UO-000818-2016.001	)	
	)	
East Bench Compressor Station,	)	
Permit No. SMNSR-UO-000824-2016.001	)	
	)	
North Compressor Station,	)	
Permit No. SMNSR-UO-000071-2016.001	)	
	)	
North East Compressor Station,	)	
Permit No. SMNSR-UO-001874-2016.001	)	
	)	
Sage Grouse Compressor Station,	)	
Permit No. SMNSR-UO-001875-2016.001	)	
	)	

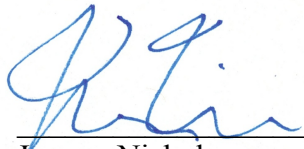
**NOTICE OF ERRATA**

On July 7, 2018, WildEarth Guardians filed its Petition for Review in this matter. In filing the Petition, we inadvertently failed to file two exhibits that were cited in support of the Petition. These exhibits include the following:

- Exhibit 1: Utah State University, “Fact Sheet: Air Quality in the Uintah Basin” (June 2017), available online at <https://binghamresearch.usu.edu/files/2-pagehandoutUBairquality.pdf> (last accessed July 2, 2018).
- Exhibit 2: E-mail from Eric Wortman to WildEarth Guardians (June 7, 2018).

These exhibits are hereby attached and filed with the Environmental Appeals Board.

Respectfully submitted this 10<sup>th</sup> day of July 2018



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Jeremy Nichols  
Climate and Energy Program Director  
WildEarth Guardians  
2590 Walnut St.  
Denver, CO 80205  
(303) 437-7663  
[jnichols@wildearthguardians.org](mailto:jnichols@wildearthguardians.org)

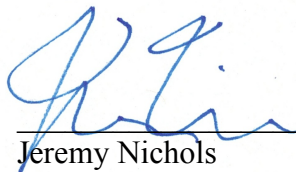
## **CERTIFICATE OF SERVICE**

I certify that on July 10, 2018, I served this Notice of Errata electronically via the Environmental Appeals Board's eFiling system. This Notice will also be served by priority U.S. mail within one business day to:

U.S. Environmental Protection Agency  
Clerk of the Board, Environmental Appeals Board  
1200 Pennsylvania Ave., NW  
Washington, D.C. 20460

Anadarko Uintah Midstream, LLC  
PO Box 173779  
Denver, CO 80202

Doug Benevento  
Region 8 Administrator  
U.S. Environmental Protection Agency  
1595 Wynkoop  
Denver, CO 80202

  
\_\_\_\_\_  
Jeremy Nichols

# Exhibit 1

Utah State University, “Fact Sheet: Air Quality in the Uintah Basin” (June 2017), available online at <https://binghamresearch.usu.edu/files/2-pagehandoutUBairquality.pdf> (last accessed July 2, 2018).



## FACT SHEET: AIR QUALITY IN THE UINTAH BASIN

### BACKGROUND INFORMATION

- Because of its impacts on health (see below), EPA regulates ozone in ambient air. Current EPA standards limit ambient ozone to 70 ppb (calculated as the daily maximum 8-hour average).
- Ozone concentrations have exceeded the EPA standard during some winters in the Uintah Basin. The number of ozone exceedance days and concentrations of ozone that occur each year are closely tied to meteorology. Years with persistent snow cover and high barometric pressure tend to have more days with strong winter inversions and high ozone.
- During inversion episodes, ozone concentrations tend to be higher at lower elevations where inversion conditions are stronger and last longer. For example, during an inversion episode in February 2017, Ouray (4803 ft. above sea level) registered 10 exceedance days and up to 111 ppb of ozone, while Vernal (5268 ft. above sea level) had no exceedance days and a maximum of 69 ppb.
- Ozone is formed from chemical reactions involving pollutants emitted to the atmosphere. Winter inversions are extremely effective at trapping locally emitted pollution within the Uintah Basin, making external sources of pollution less important. The Basin has about 10,000 oil and gas wells, and the oil and gas industry is the largest local contributor of ozone-forming emissions.
- The Uintah Basin's oil and gas industry does not emit ozone-forming pollutants more heavily than the average of other oil and gas producing basins in the United States. Instead, the Basin's uniquely strong and long wintertime inversions allow an average level of emitted pollution to lead to high levels of ozone. In the absence of winter inversions, ozone concentrations in the Basin are similar to those in other rural, high-elevation locations around the western United States.
- Portions of the Uintah Basin are likely to be declared in non-attainment of the EPA ozone standard, leading to increased regulation and emissions controls. The timeline for this is uncertain.
- Exceedances of the EPA standard for particulate matter (i.e., PM<sub>2.5</sub>) have occasionally been observed in the Uintah Basin during winter inversions. Particulate matter exceedances are infrequent enough, however, that the region is not in danger of becoming a non-attainment area for particulate matter.

### AIR QUALITY AND HEALTH

- Ozone negatively impacts respiratory health, especially for those with lung diseases. Children, the elderly, and those with respiratory diseases are most vulnerable. For detailed information about the health impacts of impaired air quality, see <http://www.epa.gov/groundlevelozone/health.html> and <http://www.epa.gov/airquality/particulatematter/health.html>.
- USU and other groups have measured concentrations of organic compounds in the Uintah Basin atmosphere for several years. Oil and natural gas consist of organic compounds, and volatile organic compounds are emitted into the air during processes related to oil and gas exploration and

production. Concentrations of many organic compounds in the Basin are higher than in areas distant from oil and gas activity.

- Benzene, toluene, ethylbenzene, and xylenes are toxic organic compounds. Concentrations of these compounds are higher in the Basin than in remote environments. Concentrations of benzene in the Uintah Basin, including in some populated areas, are higher than EPA's one-in-a-million benchmark for elevated cancer risk, which means that the risk of a resident contracting cancer as the result of benzene exposure is greater than one in a million. For perspective, the level of cancer risk from benzene in the Uintah Basin is similar to some large urban areas in the United States.
- The Utah Department of Health conducted a study of stillbirths and infant mortality in the Uintah Basin. This study found that the rates of several adverse birth outcomes in the Uintah Basin were not different from the rest of the state and were lower than the national rate. The study also stated that "the low amount of [adverse birth outcome] risk that can be attributed to air pollution exposure, compared to intrinsic, extrinsic, and medical risk factors suggests that these environmental risk factors are not likely to be very important to overall community health with respect to [adverse birth outcome] rates."

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## NEED FOR AIR QUALITY RESEARCH

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- Wintertime ozone in rural areas like the Uintah Basin has only been known to science since 2006, and the Uintah Basin is one of only two areas in the world where wintertime ozone is known to occur (the other is Wyoming's Upper Green River Basin). Because of this, many aspects of the meteorology, chemistry, and emissions that allow ozone to form during winter are still poorly understood.
- Federal and state agencies are required by law to promulgate regulations that reduce ozone-forming emissions in the Uintah Basin. These regulations will mostly target the local oil and gas industry, which is the basis for the majority of the Basin's economy.
- Scientific research to better elucidate the causes and characteristics of winter ozone formation can help industry and regulators craft emissions reductions that maximize effectiveness and minimize costs to the local industry and economy.

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## WHAT IS BEING DONE

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- Utah State University is carrying out a comprehensive research program to understand and provide solutions for the Basin's air quality problems. This is a cooperative effort with Uintah and Duchesne Counties, local industry, the Utah Department of Environmental Quality and Division of Air Quality, the Ute Indian Tribe, the TriCounty Health Department, research teams at other Utah universities and around the nation, and several federal agencies (BLM, EPA, DOE).
- Government agencies and industry have enacted a number of science-based environmental controls to reduce the amount of air pollution in the Uintah Basin. These include:
  - New regulations by the Utah Division of Air Quality and EPA to reduce emissions from the oil and gas industry.
  - Increased focus on air quality in oil and gas permitting processes carried out by land management agencies.
  - Increased focus on air quality by the Ute Indian Tribe.
  - Voluntary efforts by industry to install equipment and adopt practices that reduce emissions to the atmosphere.

# **Exhibit 2**

E-mail from Eric Wortman to WildEarth Guardians (June 7, 2018).



Jeremy Nichols <jnichols@wildearthguardians.org>

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## Response to Comments and Final Minor New Source Review Permits - Email 1 of 2

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**Wortman, Eric** <Wortman.Eric@epa.gov>

Thu, Jun 7, 2018 at 1:49 PM

To: "jnichols@wildearthguardians.org" <jnichols@wildearthguardians.org>

Cc: "Fallon, Gail" <fallon.gail@epa.gov>

Dear Mr. Nichols,

The U.S. Environmental Protection Agency Region 8 is issuing final minor new source review permits pursuant to the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR part 49 for six (6) facilities located on Indian country lands within the Uintah and Ouray Indian Reservation, in Uintah County, Utah. The facilities are listed below.

- East Bench Compressor Station - Permit # SMNSR-UO-000824-2016.001;
- Sage Grouse Compressor Station - Permit # SMNSR-UO-001875-2016.001;
- North East Compressor Station - Permit # SMNSR-UO-001874-2016.001;
- North Compressor Station - Permit # SMNSR-UO-000071-2016.001;
- Archie Bench Compressor Station - Permit # SMNSR-UO-000817-2016.001; and
- Bitter Creek Compressor Station - Permit # SMNSR-UO-000818-2016.001.

The EPA received comments from you, representing WildEarth Guardians, on February 7, 2018. No other comments were received during the public comment period. The EPA's responses to your comments are enclosed with the attached letter. No changes were made to the attached permits based on your comments. The final permits will be effective on July 7, 2018.

Pursuant to 40 CFR 49.159, within 30 days after the final permit decision has been issued, any person who commented on the specific terms and conditions of the draft permit may petition the Environmental Appeals Board to review any term or condition of the permit. Any person who failed to comment on the specific terms and conditions of this permit may petition for administrative review only to the extent that the changes from the draft to the final permit or other new grounds were not reasonably ascertainable during the public comment period. The 30-day period within which a person may request review begins with this dated notice of the final permit decision. If an administrative review of the final permit is requested, the specific terms and conditions of the permit that are the subject of the request for review must be stayed.

Please note that due to file size restrictions, I will be sending a second email with the remaining attachments.

Thank you.

Eric

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Eric Wortman



U.S. Environmental Protection Agency

1595 Wynkoop Street (8P-AR)

Denver, Colorado 80202

Telephone: (617) 918-1624 | Email: [wortman.eric@epa.gov](mailto:wortman.eric@epa.gov)

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**4 attachments**



**Anadarko East Bench CS Final Permit SMNSR-UO-000824-2016.001.pdf**  
8164K



**Anadarko Multiple Facilities Final SMNSR Permits\_WEG Letter\_RTC 6-7-18.pdf**  
158K



**Anadarko Archie Bench CS Final Permit SMNSR-UO-000817-2016.001.pdf**  
8164K



**Anadarko Bitter Creek CS Final Permit SMNSR-UO-000818-2016.001.pdf**  
8340K