Matthew H. Mead, Governor

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Todd Parfitt, Director



May 12, 2016

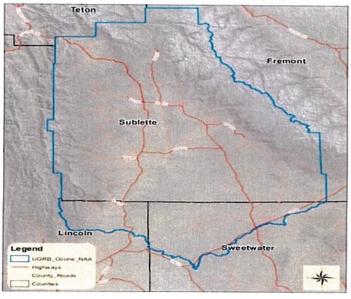
Ozone Advance c/o Laura Bunte, Mail Code C304-01 109 TW Alexander Dr. RTP, NC 27711

Wyoming Department of Environmental Quality – Air Quality Division's Ozone RE: Advance Annual Update

Dear Ms. Bunte:

On April 12, 2012, the Wyoming Department of Environmental Quality - Air Quality Division (AQD or Division) signed up to participate in the Environmental Protection Agency's (EPA) Ozone Advance Program as a proactive measure intended to encourage and identify early emission reductions in ozone attainment areas in order to help maintain the 2008 National Ambient Air Quality Standards (NAAQS) for ozone. On July 20, 2012, the Upper Green River Basin (UGRB) in southwest Wyoming was designated nonattainment for the 2008 8-hour ozone standard (Figure A).

Figure A Ozone Nonattainment Area Boundary



While the State is aware that participation in the program does not relieve the State of its obligations under nonattainment regulations, it is understood that participation in the program can better position the State to comply with the requirements associated with such a designation. The AQD has been working to understand the unique wintertime ozone episodes since 2005, and has already instituted a number of control measures in the UGRB. The State appreciates EPA's establishment of an Ozone Advance Program that will provide incentives for areas that achieve early emission reductions.

On April 8, 2013, Wyoming submitted to EPA a "path forward letter" describing measures and/or programs the State would implement in the UGRB ozone nonattainment area. As the Ozone Advance Guidance instructs, a participating area should briefly and informally summarize the status of each of the area's measures and programs implemented under Ozone Advance. An update on those programs is provided below:

Table 1 shows the running year-to-date emissions reductions in the UGRB (as of March 31, 2016) that have been achieved through the implementation of the *Interim Policy on Demonstration of Compliance with Wyoming Air Quality Standards and Regulations (WAQSR), Chapter 6, Section 2(c)(ii) for Sources in Sublette County* (Interim Policy) from the permitting baseline of April 1, 2008. Controlled emission reductions in the UGRB have been achieved through, but are not limited to, the installation of controls on storage tanks, installation of low bleed/no bleed pneumatic controllers, installation of controls on drill rig engines, and the installation of centralized gathering facilities.

Table 1. Running Year-to-Date Emissions Reductions (tpy)

	Volatile Organic Compounds (VOCs)	Nitrogen Oxides (NOx)
2008	-196.6	-33.6
2008-2009	-1322.1	-606.7
2008-2010	-2302.2	-1695.2
2008-2011	-3555.1	-1545.7
2008-2012	-3926.9	-1457.2
2008-2013	-5129.9	-1537.0
2008-2014	-5455.4	-1857.6
2008-2015	-6104.8	-1810.7
2008-2016*	-6153.8	-1862.3

^{*} Through March 31, 2016

The AQD requires operators to obtain an air quality permit to conduct well completion/re-completion activities in the UGRB. "Green" completion requirements have expanded over the years – from the Jonah/Pinedale Anticline Development Area (JPDA) in 2005 to encompassing the entire UGRB in 2010. Table 2 summarizes the emissions from reports provided by operators and compares what emissions could have resulted by not having the "green" completion permit requirement in place.

Table 2. Completion Emissions Summary (VOCs tpv) 1

	Reported	Uncontrolled	Emissions offset by
	(Controlled) Emissions ³	Emissions 4	AQD Permits
2005	122	1220	-1098
2006	203	2033	-1830
2007	144	1443	-1299
2008	130	1304	-1174
2009	67	665	-598
2010	57	569	-512
2011	19	194	-175
2012	8	84	-76
2013	4	40	-36
2014	21	211	-190
2015 ²	29	290	-261

¹ Emissions rounded to the nearest ton.

The implementation of the Interim Policy and "green" completion permits are ongoing programs that address emissions of NOx and VOCs in the UGRB.

The 2016 UGRB Winter Ozone Update/Ozone Action Day program ran from January 4 to March 31, 2016. The Winter Ozone Update is a daily weather-based forecast geared towards increasing public health awareness of high ground level ozone potential. Winter Ozone Updates were made available to the public on the Wyoming Department of Environmental Quality (WDEQ) website, through a toll-free phone number, via email and a daily radio broadcast from the KPINE radio station in Pinedale, Wyoming. In previous years, on days when forecasters have issued an Ozone Action Day (OAD), everyone is encouraged to implement an Ozone Contingency Plan (OCP). OCPs are voluntary, short-term emission reduction plans that can be implemented with 24-hour notice of an OAD. As of the conclusion of the 2016 Winter Ozone Update/Ozone Action Day season, no Ozone Action Days were issued and preliminary data indicates that no episodes of elevated ozone exceeding the NAAQS of 70 ppb were monitored. The number of participants developing OCPs was 35 in 2016. The Division will continue to encourage increased participation into future years by all stakeholders.

The Division has committed to working collaboratively with EPA in developing a State regulation that is consistent with 40 CFR 51.165. On November 6, 2015 a SIP was

² Based on all reports received through March 31, 2016.

³ Total reported emissions from all operators in the JPDA.

⁴ Assuming the 90% VOC emissions reductions included in BACT section for the AQD's permits.

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submitted, for approval, to EPA containing the WAQSR Chapter 6, Section 13, Nonattainment new source review permit requirements. The Division anticipates final action, by EPA, in May 2016.

To help further address emissions of uncontrolled VOCs in the UGRB, the Division developed a State regulation that established requirements for existing oil and gas production facilities, and compressor stations, located in the ozone NAA. The WAQSR Chapter 8, Section 6, Upper Green River Basin permit by rule for existing sources was state effective June 20, 2015. The control implementation date is January 1, 2017.

On May 4, 2016, the EPA issued a final Determination of Attainment for the 2008 Ozone NAAQS in the UGRB. The implementation of Wyoming's Ozone Advance measures and programs have played an important role in building the foundation to help bring the UGRB back into ozone attainment with the 2008 Ozone NAAQS, and the AQD will continue to investigate additional solutions to further reduce ozone levels in the UGRB. The AQD considers participation in the Ozone Advance Program to be a benefit; however, the State still has concerns about moving forward without affirmed modeling tools that are appropriate for rural and wintertime ozone areas. The EPA has offered assistance to States participating in Ozone Advance, and this is an area where the State of Wyoming would greatly appreciate this assistance.

The State of Wyoming looks forward to continuing to work with the EPA as a participant in the Ozone Advance Program.

Sincerely.

Nancy E. Vehr

Air Quality Administrator

cc:

Amber Potts, AQD

Jody Ostendorf, EPA R8