

***Wyoming Department of Environmental Quality – Air Quality Division***  
***Upper Green River Basin Ozone Strategy***  
***March 11, 2013***

The Upper Green River Basin (UGRB) area was designated by the EPA as “Marginal” nonattainment for the 8-hour ozone NAAQS of 0.075 ppm on July 20, 2012. There has been much work done to address this ozone nonattainment status prior to this designation. Some of this work includes the creation of policy, increased monitoring, and detailed emission inventories by the Wyoming Department of Environmental Quality (WDEQ). It also includes stakeholder involvement since 2006 and the formation of the UGRB Air Quality Citizens Advisory Task Force (Task Force) in early 2012. The final ten recommendations by the Task Force were submitted to the WDEQ Air Quality Division (AQD) in September 2012 for consideration in the nonattainment planning process.

The AQD has reviewed the Task Force recommendations and included them in the nonattainment plan where appropriate to do so. So far, no recommendation has been excluded and as you will see, there are many other elements of the plan that describe DEQ’s overall ozone reduction strategy. On January 10, 2013, the AQD presented to the public in Pinedale the first outline of the ozone reduction strategy, to include voluntary and regulatory measures that were already in place or would need to be established in the future. An implementation timeline was also presented with near term, longer term, and long term categories established.

To carry this strategy further, this document will now go into more detail for activities that are targeted to be completed in the next six months (March-August 2013). We will also describe those activities that are targeted to get started in the next six months, but will not be completed, as they are longer term to create and implement. Lastly, we will describe to you those elements of the plan that are ongoing. This strategy does not describe those activities that may get started after August 2013 and as such are long term. Please keep in mind that the strategy as described will evolve and thus, this document will evolve too.

It is equally important to tell you how the WDEQ-AQD plans to improve communication as part of the ozone strategy. First, a primary point of contact will be announced soon. This point of contact will be located in Cheyenne, but will serve as your initial contact when it comes to questions and/or concerns as we move forward with our ozone strategy. Next, we are also evaluating the overall communication strategy when it comes to the methods used, such as public meetings, press releases, and stakeholder involvement in the future. Finally, we will continue our efforts to improve public access to information, especially when it comes to resources located on our WDEQ website.

The WDEQ-AQD has identified nine (9) activities that are targeted to be **accomplished in the six month time frame from March 2013 through August 2013**. Those activities are summarized below.

1. General Conformity State Implementation Plan (SIP) revision  
General Conformity is a federally required rule that requires federal activities to conform to the WDEQ-AQD's plans for nonattainment.
  - Submitted to EPA by the WDEQ-AQD on December 26, 2012
  - WDEQ-AQD is awaiting EPA approval of the SIP revision.
2. Forecasting for the winter ozone season for 2013
  - January 2, 2013 - March 29, 2013
  - Daily winter ozone updates via winterozone.org website, hotline, and email list serve
  - Ozone action day notifications are communicated to those with ozone contingency plans via auto call and email and are also posted on the winterozone.org website
  - Fulfills aspects of Task Force Recommendation #9
3. Analyses of past monitoring data to evaluate the complex chemistry involved with ozone formation at the Boulder station
  - WDEQ-AQD contract with Meteorological Solutions Inc. and the University of Houston
  - Work was initiated in September 2012 and a final report is anticipated in May 2013
  - These analyses will inform regulatory modeling as well as control strategies
  - Fulfills aspects of Task Force Recommendation #9
4. Upper Green Winter Ozone Study (UGWOS)
  - January 15, 2013 - March 31, 2013 monitoring
  - WDEQ-AQD 2013 focus on regulatory monitoring of ozone, oxides of nitrogen and volatile organic compounds at long term stations as well as selected additional locations to aid in the understanding of ozone formation
  - The data will be finalized by the end of May 2013 with a final report anticipated in September 2013
  - Fulfills aspects of Task Force Recommendation #9
5. Mobile Monitoring Assessment of Methane and Ozone Precursors in the Pinedale Anticline Project Area during Winter 2012/2013
  - WDEQ-AQD has provided funding and is providing contract management for the University of Wyoming
  - Non-regulatory monitoring to be conducted in the months of February and March 2013 with finalized data by the end of May 2013 with a final report by the end of August 2013
  - Fulfills aspects of Task Force Recommendation #9a
6. Promote the expansion of short-term emissions reduction measures to be implemented on ozone action days by governmental entities and the public
  - WDEQ-AQD send letters out in February 2013 and flyers distributed to local businesses
  - Listed as Task Force Recommendation #3

7. WDEQ-AQD Ozone Advance path forward letter  
Ozone Advance is a voluntary and collaborative effort by EPA, states, and local governments to encourage ozone reduction.
  - WDEQ-AQD will prepare and submit letter to EPA by mid-April 2013
  - Describe measures sought through stakeholder involvement that will be implemented in the near term, as well as describing programs already in place
8. WDEQ-AQD staffing evaluation
  - Evaluation to include consideration of current resources directed toward the UGRB ozone nonattainment, throughout the year as well as during winter ozone season
  - Evaluation will include consideration of the time-limited positions, frozen positions, level of expertise and potential ramifications of the loss of expertise
  - Evaluation will be completed by June 2013
  - Listed as Task Force Recommendation #11
9. Update the Oil & Gas Best Available Control Technology (BACT) Guidance
  - Expand Jonah-Pinedale Development Area (JPDA) requirements to the entire UGRB nonattainment area
  - Update will be completed at an Air Quality Advisory Board meeting in early summer 2013.

The WDEQ-AQD has identified five (5) activities that are targeted to be **accomplished in the first six month time frame, from March 2013 through August 2013, and are ongoing** beyond the six month time frame. Those WDEQ-AQD activities are summarized below.

1. Continue to work to improve the processes for regulatory ambient monitoring, annual and winter emissions inventories, and regulatory modeling. (Listed as Task Force Recommendation #9.)
2. Continue to communicate how to access information such as ambient monitoring and emissions inventory data. (Fulfills aspects of Task Force Recommendation #9.)
3. Implement Nonattainment New Source Review permitting for applications, which are subject to these permitting requirements (i.e., new major sources and major source modifications).
4. Continue to actively collaborate with the BLM, USFS, EPA and industry representatives to implement the federally required General Conformity Rule for areas in nonattainment of the NAAQS.
5. Continue to collaborate with the WYDOT to successfully meet the requirements of the Transportation Conformity rule as it pertains to nonattainment of the NAAQS.

The WDEQ-AQD has identified six (6) activities that are targeted to **start in the first six month time frame, from March 2013 through August 2013, and go into subsequent time periods.** Those WDEQ-AQD activities are summarized below.

1. Develop Oil & Gas Guidance revisions to incorporate leak detection and repair (LDAR) for new and modified upstream sources. (Listed as Task Force Recommendation #6.)
2. Develop a plan to research for incorporation into a State of Wyoming request for proposals to quantify emissions from produced water and storage activities in the UGRB. (Listed as Task Force Recommendation #7.)
3. Reconcile the Oil & Gas Guidance with New Source Performance Standard Subpart OOOO for new and modified sources.
4. Review and evaluate data collected in the 2011 and 2012 EPA Office of Research and Development mobile monitoring studies in the UGRB for potential relevant information in regard to monitoring, emissions inventories, modeling, and control strategies.
5. Develop a plan to assess the control effectiveness of combustors in the UGRB, which may be incorporated into a State of Wyoming request for proposals. (May fulfill aspects of Task Force Recommendation #9.)
6. Evaluate new ambient monitoring requirements upon EPA release of the reengineered Photochemical Assessment Monitoring System (PAMS) network, which is required for some ozone nonattainment areas.

The WDEQ-AQD has identified five (5) **rulemaking subject areas** that are targeted to **start in the first six month time frame, from March 2013 through August 2013, and go into subsequent time periods.** The WDEQ-AQD will develop rules to address oxides of nitrogen and volatile organic compounds in the UGRB including, but not limited to, the rulemaking subject areas listed below. It should be noted that rulemaking processes may be conducted in parallel.

1. Continue to proceed through the statutory rulemaking process to incorporate New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs) related to the oil and gas industry into the Wyoming Air Quality Standards and Regulations (WAQSR). This rulemaking is anticipated to be complete in the autumn of 2013.
2. Develop an Emissions Statement Rule, required by the Clean Air Act for ozone nonattainment areas, requiring all sources operating in ozone nonattainment areas to report actual emissions of oxides of nitrogen and volatile organic compounds from those sources.
3. Gather and evaluate information (e.g., emission inventory, relevant permitting actions, relevant field studies, compliance information and research) to evaluate control strategies in a group reasonably achievable control technology (RACT)-like process including rulemaking for existing upstream and midstream oil and gas sources. (Listed as Task Force recommendations #1, #2, and #6.)
4. Involve industry in meetings to gather information on how an incentive program could be coordinated with a rulemaking process to achieve early emission reductions in the UGRB nonattainment area. The WDEQ-AQD will then determine the viability of incorporating an incentive program into the rulemaking processes for existing upstream and midstream oil and gas sources. (Listed as Task Force Recommendation #10.)

5. To address new growth the WDEQ-AQD will evaluate regulatory options or more permanent mechanisms that will function effectively and preserve the current New Source Review permitting processes of WAQSR Chapter 6, Section 2.

The WDEQ-AQD has identified 13 **activities, studies and projects that are ongoing**. Those activities, studies and projects are summarized below.

1. Continue to utilize compliance inspections at production sites, compressor stations, etc. to confirm ongoing compliance with applicable permit requirements, Wyoming rules and regulations, as well as Federal rules and regulations.
2. Continue to require measurement of source emissions via stack testing to confirm ongoing compliance with applicable permit requirements, rules and regulations.
3. Continue to utilize the notice of violation process for sources determined to be in noncompliance.
4. Continue to issue daily weather forecasts for conditions conducive to elevated ozone from the beginning of January through the end of March.
5. Continue UGWOS monitoring, as appropriate, to aid in the understanding of ozone formation support nonattainment planning.
6. Continue to improve actual emission inventories to support nonattainment planning including but not limited to modeling and demonstration of emission reductions.
7. Continue the WDEQ-AQD Statewide Engine Study contract, as appropriate, for source tests via stack testing to verify achievement of best available control technology control effectiveness and improvement of maintenance practices. (May fulfill aspects of Task Force Recommendation #9b.)
8. Continue WDEQ-AQD contract, as appropriate, to evaluate photochemical grid modeling performance to replicate elevated winter ozone formation, which will be utilized by the WDEQ-AQD if reasonable to evaluate control strategies in the UGRB.
9. Continue to collaborate on the regional efforts (i.e., WEST Jump and 3-State), which includes a data warehouse, monitoring, and modeling that may be beneficial in a weight of evidence approach to nonattainment planning.
10. Continue to improve communication strategies including, but not limited to, updates to the Air Quality Advisory Board, press releases, public meetings, and stakeholder involvement.
11. Continue to explore community projects (e.g., diesel emissions reduction act (DERA), wood burning, school bus retrofits) to utilize Jonah Infill Office funding allocated to air quality projects.
12. Continue to comply with the Governor's Sage Grouse Executive Order during the New Source Review permitting process and when siting new monitoring stations.
13. Continue to work cooperatively with State and Federal agencies to address wildlife concerns when siting new monitoring stations.