

Powder River Basin Air Quality Task Group
Conference call notes
12 January 2005

Attendees

Darla Potter WDEQ-AQD
Gene Onacko BIA
Jay Littlewolf Northern Cheyenne
Joe Delwiche EPA
Liana Reilly NPS
Mary Bloom BLM
Robert Mitchell BLM
Paul Beels BLM
David Breisch BLM
Susan Caplan BLM

AQ Monitoring Maps: Status of Agency Review

NPS: Staff is still reviewing maps

BIA: Need to improve involvement of tribes. Northern Cheyenne have recently elected a new president. Crow have been negotiating with CBM developers. EPA should have access to Northern Cheyenne visibility data.

Montana BLM: ROD listed the addition of AQ monitors (visibility, PM10 and NO_x) in Ashland and Birney. New power plant new Hardin may provide AQ monitoring and dispersion analysis.

EPA:

1. Input from regulatory air monitoring community. I recommend that we get input from the people involved with regulatory air monitoring. In the case of EPA Region 8, I intend to ask the air monitoring contacts for Wyoming (Ken Distler) and Montana (Dee Rothery) to review and comment.
2. Monitoring proposed in Montana DEQ's Record of Decision. The Montana Department of Environmental Quality, Record of Decision for Montana Statewide Oil and Gas Environmental Impact Statement, August 7, 2003, included a statement that at least one new air monitoring station would be established and maintained (see page 10 of the document at

http://bogc.dnrc.state.mt.us/PDF/RODAug7_03.pdf).

The Ashland/Birney area was a "likely location" for the site of the station. We should confirm that Montana DEQ still supports this concept.

3. Air quality related values. We should not emphasize regulatory monitoring at the expense of monitoring for air quality related values (such as visibility, precipitation chemistry, and deposition).
4. Coarse particulate matter. Fugitive dust sources such as unpaved roadways and other disturbed soil surfaces, mines, and dry reservoirs can emit coarse particulate matter. There are already several PM-10 monitoring stations in the Powder River Basin. In making recommendations on air monitoring, we should keep in mind the possibility of a future standard for coarse particulate matter (particulate matter with an aerodynamic diameter between 2.5 and 10 micrometers). Because there is not yet a PMcoarse standard, there is no reference or equivalent method. As Darla Potter pointed out, where existing stations have both PM-10 and PM-2.5 monitors, PMcoarse can be estimated as the difference between the two concentrations.
5. Gaseous air pollutants. The maps show air monitoring stations where sulfur dioxide, nitrogen dioxide, and ozone are monitored. Nitrogen dioxide (and other oxides of nitrogen) and ozone are probably the most significant. The group should get general information on the monitoring objectives of and impacts observed at the stations involved. For example, Darla gave a brief overview of the NO₂ monitoring network in Wyoming's portion of the PRB. The station north of Gillette sees essentially background. Another station (south of Gillette) evidently captures some influence from coalbed methane development. The three remaining stations are affected to varying degrees by episodes of NO₂ that occur during blasting. The group should consider information such as this in making recommendations on air monitoring.

Note: At the encouragement of the National Academy of Sciences and other advisory groups, EPA has developed a national air monitoring strategy. This strategy is not binding on the Task Group, however we should realize that the regulatory air monitoring community might be influenced by the strategy.

<http://www.epa.gov/ttn/amtic/monstratdoc.html>

WDEQ-AQD response to EPA suggestions

1. AQTG should consider this
2. WDEQ-AQD could not respond at this time, as this item is in regard to monitoring in Montana and not Wyoming.
3. WDEQ has added two stations to the IMPROVE network (Cloud Peak and Thunder Basin), does not anticipate adding more in the near future. WDEQ-AQD may consider additional scene monitoring (visibility cameras) elsewhere in the State, but no additional scene monitoring is being planned in northeast Wyoming..
4. EPA hasn't proposed and adopted a coarse PM standard, hard to justify monitoring without a standard. Coarse PM can be roughly calculated by co-locating PM₁₀ and PM_{2.5} monitoring stations.
5. There are five NO₂ stations in the Wyoming PRB area. The station north of Gillette sees essentially background. Another station (south of Gillette) evidently captures

some influence from coalbed methane development. The three remaining stations are affected to varying degrees by episodes of NO₂ that occur during blasting.

Northern Cheyenne: Jay mentioned several features missing from the Montana maps:

- Roads
 - Lame Deer south to reservation
 - Busby to Sheridan
 - Along eastern border of reservation to Ashland
- East/West scale: may be off due to shape file error or “print to fit”

Possible Topics for Future Discussions

Paul:

- AQTG should assemble a complete Monitoring Plan including: Maps, Monitor Information (responsible party, monitoring objective, etc.), Monitoring Costs, General Recommendations
- AQTG should consider identifying the mechanism to prepare an annual AQ monitoring report

Joe & Paul: AQTG define scope for Recommendations (i.e., network design or general recommendations to be passed on to the Regulatory agencies)

Joe: AQTG should update time table

Darla: AQTG should designate lead for GIS/map products (if significant changes need to be made to the maps, this is due to WDEQ-AQD staffing shortage and reassignment of Cara Casten)

Paul:

- AQTG should determine the degree of information from each mapped site summarized (i.e., reason for the site, collection parameters, responsible person/agency, maintenance costs).
- AQTG should designate task group member responsible for drafting monitoring plan and recommendations.

Action Items

- Joe
 - Check accessibility to Northern Cheyenne visibility data (Badger Peak, Morningstar); Consult with Mike Copeland and Jay Littlewolf
 - Draft 5 EPA suggestions for inclusion in call notes
 - Distribute AQTG schedule to group members
 - Serve as keeper of the AQTG schedule
- Dave Klemp: Provide AQTG with AQ monitoring and dispersion modeling for new power plant near Hardin, Montana.
- Darla
 - Completed: see E-mail from 12 January 2:53 PM

- MT BLM question on inclusion of RAWs sites in the met. map. Answer: unless they were part of the WARMS data provided by BLM, no. No RAWs data was specifically provided in response to the survey.
 - Question on whether or not data provided for the monitoring sites should be sent back out to the group for review in addition to the maps. Answer: this was previously considered by Dave and Cara but the unknown was how much data was enough/too much to send back out to the group. So, the focus became completion of the maps and distribution for review.
 - EPA question on latest version of timeline. Answer: the version Joe has is the latest version and Joe indicated that he would send it out to the group in preparation for the next conference call.
- Susan: draft call notes
 - AQTG: review draft notes, return corrections to Susan by Friday 14 January
 - MT BLM: provide shape files for Montana
 - Jay: provide shape files for reservation boundaries to Paul Beels

Upcoming Events

Inter-Agency Coordinating Committee

27 January 2005

Sheridan, Wyoming

Inter-Agency Working Group

March 2005

Next AQTG call

20 January 2005

10³⁰ – 11³⁰ AM

406-896-5344

update AQTG work schedule