

## **Battlement Mesa Oil and Gas Committee Minutes of November 10, 2009 Regular Meeting**

**O&G Members present:** Chairman Bill Nelson, Mary Ellen Denomy, Chuck Hall, Robert McCurdy, Don Mumma, Frances Rose

**Garfield County Environmental Health Department Members:** Environmental Health Manager Jim Rada, Environmental Health Specialist Paul Reaser

**Others present:** Four members of the community

**Meeting Topic:** Air Quality and Monitoring

Bill Nelson stated that many members of the community are concerned about the potential decline in air quality within the community if gas drilling proceeds. More monitoring is wanted by area residents.

Jim Rada and Paul Reaser explained that air quality monitoring has been done in Parachute since before 2000. A 24-hour sample is taken every three months. (GarCo pays the \$350 per analysis – not the state.) In 2008 a modified program for monitoring reduced the number of sites from 14 to 4 sites. These sites are in Parachute, Rifle, Grass Meadow and Dry Hollow. (The State has provided a grant for this monitoring.) There are seven monitors in the county; the highest volumes of particulates are found in Rifle and Parachute. There is also an ozone monitor in the Rifle Environmental Health Office. Meteorological sampling equipment is in Rifle since it is the largest urban area in the western end of Garfield County.

Monitoring long-term in Battlement Mesa was not encouraged by Rada and Reaser since it is costly and the monitoring is already being done in Parachute. Battlement Mesa's air quality is/will not be worse than Parachute's, where, although the air quality, is decreasing, it does not violate federal standards and is not even at 50% of what is allowed in the standards. What the two men suggested is that monitoring could be done for a week before the drilling starts, for a week during drilling and for one week after completion to determine the sources and concentrations of the pollutants. Monitoring has relevance in providing binding strategies during mitigation. This would give information on short-term acute exposure rather than long-term chronic exposure.

The monitoring equipment in Parachute and Rifle checks for 78 different compounds, but not all are found in the samples. In 2008, different methodology was used (TL15) which checks for 40 compounds (more common in the area) to narrow down the items to be analyzed and to analyze more frequently. The 2008 Annual Report on Air Quality will soon be released and will be posted on the GarCo Web Site.

Because of growth in communities and of gas and oil production, the state agreed to fund the monitoring, which helps keep track of the meteorological conditions. The information is transmitted to contractors in Ft. Collins, then is transmitted to the Environmental Health Office. The monitoring will be looking for seasonal trends - a longer term of more

that a year or two is needed to see development of patterns. Examples of how changes in the West or in the area can affect air quality; there was a stagnant mass of air hanging over the area when there were large fires in California, Utah and other western states. When looking at the air quality, it is important to check out the meteorological conditions. VOC's move with the air. Heavier than air pollutants go into the valleys. Stagnant air keeps pollutants closer in to the source. Windy conditions cause faster dispersion of the pollutants. Moving away from the valleys and the highway allows for better air quality.

Mitigation on the causes of poorer air quality would help the area better than long-term monitoring. Examples for mitigation would be to stabilize the conditions of the roads by graveling or paving the roads into the drilling areas; use of electrical power wherever possible; use of covers on water areas and on condensate take-outs; reduction in the amount of traffic; minimization of diesel emissions through increased infrastructure; deciding on whether there would be less impact on the community by building the infrastructure all at once rather than incrementally.

The GarCo Public Health Department will meet with Antero to look at a 50-years model for both chronic and acute exposure.

GarCo Planning Department may need to be included with the future Antero meetings on the impact of the infrastructure building.