



San Juan Citizens Alliance

A voice for environmental, social, and economic justice in the San Juan Basin of southwest Colorado and northwest New Mexico

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October 14, 2009

Mr. Terry Warnell
New Mexico Oil and Conservation Division
Engineering and Geological Services Bureau
Santa Fe, New Mexico

RE: Comments on NMOCD Case 14329, October 15, 2009: Application of Anadarko Petroleum Corporation for approval of an acid gas injection well, San Juan County, New Mexico

Dear Mr. Warnell:

Please accept these comments concerning Case 14329: Application of Anadarko Petroleum Corporation (Anadarko) for approval of an acid gas injection well, San Juan County, New Mexico to be heard before the New Mexico Oil Conservation Division (NMOCD) on October 15, 2009. San Juan Citizens Alliance (SJCA) is unable to attend the hearing and respectfully requests that these comments be entered as testimony in the record for this case.

Hydrogen Sulfide (H₂S) represents a significant public health risk and appears to be increasing in volume and concentrations in the San Juan Basin as a result of natural gas drilling and operations. While understanding that the San Juan Gas Plant has been operation for many years, SJCA is very concerned that NMOCD regulations/policies are not sufficient for public information/involvement when cases such as Case 14329 with H₂S are presented.

SJCA became aware of this application when local citizens in Kirtland received letters informing them of the case. Local citizens raised the point that schools, churches and residences are within direct proximity of the San Juan Gas Plant. In our quest to gather information, it became apparent that NMOCD did not plan on any local San Juan County hearings for the case and

advised local citizens that they should plan on appearing at the Santa Fe hearing with an attorney. Many citizens affected by this case cannot attend examiner hearings in Santa Fe during the workweek and/or do not have the means to afford legal representation. NMOCD should reconsider this issue and hold a hearing on this case in San Juan County, before rendering a decision. NMOCD and Anadarko representatives should explain how the H₂S is currently managed, what the injection process consists of, and how the company/NMOCD intend to protect the community with contingency/emergency planning. With all indications that H₂S is becoming a big problem in the San Juan Basin (volumes and concentrations), SJCA sees Case 14329 as precedent setting in injection of H₂S and raises significant concerns on NMOCD responsibilities to include the public in decision-making processes and information sharing.

The docket for NMOCD Case 14329 refers to the project as pertaining to acid gas injection which is confusing and fails to mention H₂S. This should be corrected in all future NMOCD applications pertaining to H₂S.

The application put forth by Anadarko states that 50 million cubic feet of gas would be processed per day (50MMCFD) with 6,000 ppm of H₂S content, extracting 3.8 million cubic feet per day (3.8MMCFD) of H₂S. Injection of the H₂S and associated carbon dioxide (CO₂) into the Entrada Formation presents several significant unknown factors. The application states that the liquefied gas (CO₂ vapor pressure about 860 psi, H₂S vapor pressure is about 260 psi) pumped into the Entrada Formation (sandstone) will cover 47 acres (low estimate) to 141 acres (high estimate) in Kirtland by the end of the 30-year life of this injection well. Calculations of an 800 foot radius (47 acres) to a 1,400 foot radius (141 acres) around the well and place the equivalent of 30 feet of liquid gas in all of that area (the porosity of the 160 vertical feet of the Entrada Formation here is estimated at 19%, which means it can hold 30 feet of liquid in that 160 feet of porous sandstone.) However, the liquid would probably migrate much further than 1,400 feet because it would not stop in a "wall." It is quite possible that the H₂S and CO₂ could migrate south to the San Juan River corridor. There is no guarantee that injected H₂S and CO₂ could be permanently sequestered.

In addition, there are several other industrial sources in the region that are considering sequestration in the Entrada Formation, including proposals from coal facilities. Has NMOCD evaluated the potential cumulative impacts in the region in interaction with the proposed injection project at the San Juan Gas Plant? A project of this magnitude warrants consultation with Environmental Protection Agency, and other agencies responsible for multi-jurisdictional oversight in the region, as well as the nearby Navajo Nation. Significant changes at the San Juan Gas Plant as proposed with the injection project could trigger National Environmental Policy Act requirements.

In evaluating the costs/benefits of injection versus the existing Claus sulfur recovery unit currently in operation for H₂S at the San Juan Gas Plant, this application has raised the profile on the bottom line to insure the health and safety of citizens potentially exposed to H₂S in the San Juan Basin.

“Sour gas”, “acid gas”, and H₂S are significant problems that are increasing throughout the San Juan Basin natural gas fields requiring more NMOCD oversight and decision-making. SJCA requests that NMOCD prioritize public health and safety in Case 14329, ~~and in all cases including H₂S, with increased public notification, public hearings in affected communities, consultations with cooperating agencies, and strict adherence to insuring that the health of citizens of Northwest New Mexico is protected.~~

Thank you for the opportunity to submit these comments.

Sincerely,

s/Mike Eisenfeld

Mike Eisenfeld
New Mexico Energy Coordinator