

## **Off-Site Impacts in Wyoming (EY2011)**

For the purpose of oversight, an off-site impact is defined as anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on people, land, water, or structures outside the permit area. The State program must regulate or control either the mining or reclamation activity, or the resulting off-site impact. In addition, the impact on the resource must be substantiated and be related to mining and reclamation activity. It must be outside the area authorized by the permit for conducting mining and reclamation activities. As a part of this oversight, WDEQ and CFO evaluate and document the effectiveness of the Wyoming program in protecting the environment and the public from negative off-site impacts resulting from mining operations in Wyoming.

Several sources of information have been selected for identifying off-site impacts. These include but are not limited to: State and OSM inspection reports, enforcement actions, civil penalty assessments, citizens' complaints, special studies and information from other environmental agencies. If an off-site impact is identified, the sources of information and the basis used to identify and report these impacts will be clearly recorded. Field evaluations for off-site impacts are conducted during routine inspections (or in response to Citizens' complaint) by WDEQ and CFO.

The State of Wyoming has a total of 36 inspectable units. Of these 36, there was 1 associated with an off-site impact. Accordingly, 35 of the inspectable units (97 percent) were free of off-site impacts. The one off-site impact was related to blasting, and was categorized as minor, affecting people.

The off-site impact consisted of NO<sub>x</sub> fumes (cloud) impacting a resident approximately 11.5 miles from the site of two cast blasts, and was reported to WDEQ-LQD as a citizen complaint by the impacted resident. The blasts occurred at the Cordero-Rojo Mine, on May 18, 2011. The WDEQ-LQD subsequently issued a Notice Of Violation (NOV) to Cloud Peak Energy (owner of the mine), which describes the nature of the violation as follows: "The Cordero-Rojo Mine had two cast blasts on May 18, 2011 at 2:13 PM and 2:19 PM that produced a large NO<sub>x</sub> cloud that drifted off-site and settled over a citizen's house approximately 11.5 miles to the southeast of the mine. The Citizen could smell the NO<sub>x</sub> gas and had irritation in her nose and throat. The Citizen submitted pictures to LQD showing the intensity of the NO<sub>x</sub> fumes in and around her house."

As a result of the incident, the Remedial Action Required (as described in the NOV) was that the mine was required to submit a plan that would be used in the future to prevent NO<sub>x</sub> from blasts impacting people both on the permit and off the permit. In addition, the mine was required to submit a permit revision that incorporates the operational controls used for preventing NO<sub>x</sub> fumes from blasts from impacting people into the permit blasting plan. LQD approval of the operational control plans was required before they were submitted as a permit revision.

This appeared to be an isolated incident at the mine, due in part to climatic conditions on the day of the blasts. However, the permit blasting plan did not incorporate/include operational controls for preventing NOx fumes from drifting off-permit and impacting people. The requirement in the NOV for the company to submit a revised blasting plan and permit revision to address this issue appears to correct the problem. There were no deficiencies or inadequacies noted or cited in the State program. Cordero-Rojo has contested the NOV, and an informal conference regarding the matter has occurred between the WDEQ Director and the Company on July 28, 2011. The results of the informal conference are pending.