

DIRECTOR'S FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION

This matter came before the Director of the Department of Environmental Quality pursuant to a request by Cloud Peak Energy, Cordero Rojo Mine for an Informal Conference as provided in W.S. 35-11-901(c), W.S. 35-11-437(c)(i) and Chapter VI of the Wyoming Department of Environmental Quality Rules of Practice and Procedure.

At issue are Notice of Violation (NOV) No. 100565, Docket No. 4845-11, and the associated civil penalties stemming from a blasting incident that occurred on May 18, 2011. This NOV was issued on May 27, 2011 by Doug Emme, designated representative of the Department of Environmental Quality, based on a citizen's complaint and his review of the circumstances. The informal conference was conducted on July 28, 2011 in the Cheyenne office of the Director of the Department of Environmental Quality.

Cloud Peak Energy was represented by Bob Green, Darryl Maunder, Brad Brown and Brian Wenig. The Land Quality Division of the Department of Environmental Quality was represented by Nancy Nuttbrock and Doug Emme. All of the above named individuals participated in the conference. After reviewing the record and being fully advised of the premises, the Director hereby makes his Findings of Fact, Conclusions of Law, and Decision.

FINDINGS OF FACT

1. Cordero conducted three blasts on May 18, 2011. One of these was a coal shot that is not the subject of the proceedings.
2. Two "cast-blast" shots were fired on May 18, 2011 at Cordero Rojo. One at 2:13 PM and another at 2:19 PM.
3. One cast blast was also shot at 4:09 PM at Thunder Basin Coal Company's Coal Creek Mine.
4. A resident (Mrs. Edwards) called Doug Emme at approximately 5 PM on May 18, 2011 to complain of a NO_x cloud passing over and near her house.
5. Cell phone records show that the resident's husband called her at 4:19 PM to warn her of an orange-brown cloud moving towards their residence.

6. Shortly afterwards, the resident took photos of the clouds from her house. The photos indicate that the cloud was both higher in altitude and more dilute to the West and lower in altitude and denser to the East and South.
7. At 4:40 PM, the resident called her husband to report that the clouds had passed their house.
8. Brown-orange clouds contain high concentrations of NO_x that is hazardous to human health.
9. The Cordero mine is located approximately 11.5 miles north-northwest of the residence.
10. The Coal Creek Mine is located 3.5 miles north-northeast of the residence.
11. The blast at Cordero Rojo produced fumes as evidenced in photos provided by the mine.
12. The blast at Coal Creek produced fumes as reported in their Informal Conference.
13. Blasting operations were conducted in accordance with published and approved procedures.
14. Mine personnel undertook additional precautions during the day by observing weather conditions, delaying the shots until the weather pattern lifted, and following internal blasting procedures.
15. Weather conditions were unsettled for most of the day, as indicated by the ceiling chart in Gillette, Wyoming. At 10 AM, the ceiling was very low, at less than 200 ft. and then around noon, the weather began to break, and the ceiling rose and fell between 2500 ft and 4500 ft. until 6 PM.
16. Cordero-Rojo presented a chart showing wind speeds and directions for the afternoon of May 28, 2011. However, the chart below is based on data retrieved from the stations at both Cordero-Rojo and Coal Creek by DEQ personnel. Wind speeds and direction are important facts in this matter, and the data from DEQ files is shown below.

Wind Speed and Direction at Cordero-Rojo and Coal Creek

<u>Time of Day</u>	<u>Cordero-Rojo</u>		<u>Coal Creek</u>	
	Speed	Direction	Speed	Direction
2 PM MDT	14.6 mph	Out of the North, 339°	18.5 mph	Out of the North, 350°
3 PM MDT	13.3 mph	Out of the North, 354°	11.2 mph	Out of the North, 344°
4 PM MDT	4.7 mph	Out of the	11.9 mph	Out of the

		Southeast, 146°		North, 358°
5 PM MDT	11.8 mph	Out of the Northeast, 19°	14.8 mph	Out of the Northeast, 23°

CONCLUSIONS OF LAW

The Director has jurisdiction over the subject matter and of the parties to this proceeding pursuant to W.S. § 35-11-902(c) and W.S. § 35-11-437(b)(i) of the Wyoming Environmental Quality Act and the Rules of Practice and Procedure, Chapter VI of the Wyoming Department of Environmental Quality.

DECISION

Diligence was exhibited by mine personnel as shown by their decision to delay the shots on that day. Additionally, the level of attention paid by their personnel in ensuring that blasts were conducted in a safe manner is appropriate.

On the day in question weather conditions were variable. Photographs taken by mine personnel indicate that the weather was lifting at the time of the blasts.

There is an incident where the results of blasting had affected a resident who is located south of the permit boundary. There are two potential sources of this pollution, Cordero-Rojo's blasts at around 2:15 PM, and Coal Creek's shot at 4:09 PM.

The location of the Cordero-Rojo shots is 11.5 miles north and west of the residence. Wind speed and direction during the hour of the shot, as measured at Cordero-Rojo's station, indicate that the NOx cloud was moving in a southeasterly direction towards the residence. At the Informal Conference, Cordero-Rojo representatives postulated that given wind speeds and distance from their mine to the residence, the cloud noted in Mrs. Edwards photos could not have been theirs. However, for at least one hour during the interval between the shot and the incident, the wind direction was out of the southeast at a much lower speed, 4.7 mph, as reported at the Cordero station. This would suggest that the actual speed of the cloud cannot be accurately ascertained. It is possible that their cloud is the cloud shown in the west facing photos taken by Mrs. Edwards as it appears to be higher and more dilute.

The shot at Coal Creek mine was closer in both time and distance. Wind speeds and direction suggest that the cloud emanating from Coal Creek would in fact have been

the cloud shown in the photos taken facing toward the east. These fumes were essentially at ground level, and very dense.

I find that the shots fired at Cordero-Rojo did result in a cloud of NO_x that left the permit boundary and affected a private residence, and therefore uphold the NOV.

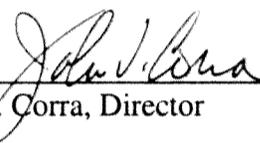
However, I find that mine personnel did exercise diligence during the day in question and that the weather was in fact lifting at the time of the shots. The penalty for seriousness of \$5,000 is reduced to \$2,500. The penalty for inability to comply is reduced to zero.

The NOV is upheld, and the penalty is \$5,000.

I also find that the remedial action as described in the NOV to be appropriate, and set a deadline for submittal of plans to LQD by November 1, 2011.

ORDERED THIS 19TH DAY OF SEPTEMBER, 2011

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY



John V. Corra, Director

This decision may be appealed to the Environmental Council for a period of 15 days after the date the parties receive the decision. Appeals shall be directed to:

Chairman
Environmental Quality Council
122 W. 25th Street, Room 1714
Cheyenne, WY 82002