

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

1595 Wynkoop Street DENVER, CO 80202-1129 Phone 800-227-8917 http://www.epa.gov/region08

AUG 1 7 2010

Ref: 8ENF-L

CERTIFIED MAIL RETURN RECEIPT REQUESTED

David C. Frydenlund Vice President, Regulatory Affairs and Counsel Denison Mines (USA) Corp. 1050 17th Street, Suite 950 Denver, CO 80265

Re: Notice of Violation

Dear Mr. Frydenlund:

The United States Environmental Protection Agency (EPA) is issuing the enclosed Notice of Violation (NOV) to Denison Mines Corp. (Denison Mines or you) pursuant to section 113 (a)(3) of the Clean Air Act (the Act), 42 U.S.C. § 7413 (a)(3). EPA finds that Denision Mines has violated the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for underground uranium mines, 40 C.F.R. Part 61, Subpart B, at is facility near La Sal, Utah.

Section 113 of the Act gives EPA several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action. The option(s) we select may depend on, among other things, the length of time you take to achieve and demonstrate continuous compliance with the requirements cited in the NOV.

We are offering Denison Mines an opportunity to confer with EPA about the violations alleged in the NOV. If you choose to have such a conference, you may present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations.

If you request a conference, please plan for your Facility's technical and management personnel to attend to discuss compliance measures and commitments. You may have an attorney represent you at this conference if you choose.

The contacts in this matter are Joshua Rickard, Environmental Scientist, and Linda Kato, Air Enforcement Attorney. You may call Ms. Kato at (303) 312-6852, or e-mail her at kato.linda@epa.gov, to request a conference. You should make the request as soon as possible, but no later than 10 calendar days after you receive this letter. We will endeavor to hold any conference within 30 calendar days of your receipt of this letter.

Sincerely,

Sharen I Kerch Andrew M. Gaydosh

Assistant Regional Administrator

Office of Enforcement, Compliance and

Environmental Justice

Cheryl Heying, Utah Department of Environmental Quality cc: Rusty Ruby, Utah Department of Environmental Quality

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 17 AM 9: 36 REGION 8

EPA REGION VIII HEARING CLERK

In the Matter of:

Denison Mines Corp. La Sal Mines La Sal, Utah

Proceeding Under Section 113(a), Clean Air Act Docket No. CAA-08-2010-0016

Notice of Violation

This Finding and Notice of Violation (NOV) is issued to Denison Mines Corp. (Denison Mines) for violations of the Clean Air Act (CAA, or Act) as amended, 42 U.S.C. § 7401-7671, at its La Sal mines, a complex of underground uranium mines located near La Sal, San Juan County, Utah. This NOV is issued under the delegated authority of the undersigned EPA official.

STATUTORY AND REGULATORY BACKGROUND

- Congress has enacted Section 112 of the CAA to require EPA to regulate sources of hazardous air pollutants (HAPs) and to establish National Emission Standards for Hazardous Air Pollutants (NESHAPs). 42 U.S.C. § 7412.
- Pursuant to Section 112(c)(1), 42 U.S.C. § 7412(c)(1), EPA is required to publish a list of all categories and subcategories of major sources and area sources of HAPs.
- EPA has designated underground uranium mines as a category subject to the requirements of Section 112 of the CAA.

- Section 112(d) of the CAA, 42 U.S.C. § 7412(d), requires EPA to establish NESHAPs for each category or subcategory of major sources and area sources of HAPs.
- On December 15, 1989, EPA promulgated 40 C.F.R. Part 61, Subpart B, "National Emission Standards for Radon Emissions from Underground Uranium Mines." 54 Fed. Reg. 51654, 51694.
- 6. Subpart B applies to owners and/or operators of active underground uranium mines that are designed to mine over 100,000 tons of ore during the life of the mine or 10,000 tons of ore annually (unless it can be demonstrated to EPA that the mine will not exceed total ore production of 100,000 tons during the life of the mine.) 40 C.F.R. § 61.20.
- 7. Section 61.21(a) of Subpart B defines an "active" underground uranium mine as one that is "being ventilated to allow workers to enter the mine for any purpose." 40 C.F.R. § 61.21(a).
- 8. Section 61.22 of Subpart B provides that "emissions of radon-222 to the ambient air from an underground uranium mine shall not exceed those amounts that would cause any member of the public to receive in any year an effective dose equivalent of 10 mrem/y" (millirem per year).
- 9. Section 61.23(a) of Subpart B provides that compliance with the standard in 40 C.F.R.
 § 61.22 "shall be determined and the effective dose equivalent calculated by the EPA computer code COMPLY-R." Section 61.23 further provides that "an underground uranium mine owner or operator shall calculate the source terms to be used for input into COMPLY-R by conducting testing in accordance with the procedures described in appendix B, Method 115."

- 10. Section 1.1.1(a) to Method 115, found in Appendix B to 40 C.F.R. Part 61, provides that "the radon-222 concentration shall be continuously measured at each mine vent whenever the mine ventilation system is operational."
- 11. Section 1.2.3 to Method 115 provides that "Test Methods A-6 or A-7 of appendix B, Method 114 to part 61 shall be used for the analysis of radon-222. Use of Method A-7 requires prior approval of EPA based on the conditions described in appendix B."
- 12. Section 61.23(b) of Subpart B provides that compliance with the emission standard may be demonstrated "through the use of computer models that are equivalent to COMPLY-R provided that the model has received prior approval from EPA headquarters."
- 13. Section 61.24(a) of Subpart B provides that "the mine owner or operator shall annually calculate and report the results of the compliance calculations in § 61.23 and the input parameters used in making the calculations" and submit the report to EPA by March 31 of the following year.
- 14. Section 61.24(b) of Subpart B provides that "if the facility is not in compliance with the emission standard of § 61.22 in the calendar year covered by the report, the facility must then commence reporting to (EPA) on a monthly basis." These reports must contain the information listed in Section 61.24(a).

RESPONDENT

15. Respondent Denison Mines is a Colorado Limited Liability Corporation that owns and operates the underground La Sal Mines located near La Sal, San Juan County, Utah. Denison removes raw uranium ore from the underground mines and delivers it to the surface to be transported away.

- 16. Respondent is a "person" as defined in Section 302(3) of the Clean Air Act, 42 U.S.C. § 7602(e), and the federal and state regulations promulgated pursuant to the CAA.
- 17. Underground uranium mining by the Respondent results in emissions of radon-222 to the outside air. The primary sources of these emissions are vents from the underground mine to the surface.

FINDINGS OF FACT

- 18. The La Sal Mines operation is an "active underground uranium mine" subject to the requirements of the NESHAPs for Radon Emissions for Underground Uranium Mines found at 40 C.F.R. Part 61, Subpart B.
- 19. In March 2010, Denison Mines submitted the Annual Compliance Report for 2009 to EPA as required under Section 61.24(a).
- 20. The Annual Compliance Report demonstrated that in 2009, the following receptors received an effective dose of radon-222 exceeding the emission standard of 10 mrem/yr:

Annual Report Receptor #	Description	Dose (mrem/yr)
R1	La Sal School	10.3
R4	Church	14.3
R5	Maintenance Shed	17.0
R6	House 3	11.0
R7	House 2	18.7
R8	House 1	31.8

- 21. Denison Mines has not submitted monthly reports to EPA pursuant to Section 61.24(b).
- 22. On April 27, 2010, EPA staff inspected the La Sal mines. EPA has also reviewed records received from Denison Mines regarding the La Sal mines operations.

- 23. During the inspection, Vent 1350 was observed to be venting to the atmosphere without monitoring. Records show that the vent was venting from April 18 - 27, 2010 without monitoring.
- 24. Records show that Vent 1350 was also venting to the atmosphere without a monitor on January 12 through February 15, 2010; and March 31 through April 8, 2010.
- 25. The vents named Pandora 3, Pandora 7, and Pandora 12 are naturally venting shafts that vent in or out based on atmospheric and mine conditions. Records show that the vents did not have monitors from January through April, 2010.
- 26. Denison Mines has been using Test Method A-7 for the analysis of radon-222 since approximately January 2009. Denison Mines has not received approval from EPA to use Test Method A-7 in lieu of Test Method A-6.
- 27. On March 30, 2010, Denison Mines requested approval from EPA to use the AERMOD computer model in lieu of COMPLY-R to demonstrate compliance with the emission standard at the La Sal mines.
- 28. On April 26, 2010, Denison Mines requested approval from EPA to use Method A-7 to measure radon from the vents at the La Sal mines.
- 29. On July 21, 2010, EPA denied Denison Mines' request to use Method A-7 for measuring radon emissions because it failed to submit any Method A-6 data as required by the regulations and therefore failed to demonstrate that the Alpha Track Detectors used by Denison mines applying Method A-7 produce data comparable to Method A-6.

30. On July 21, 2010, EPA also denied Denison Mines' request to use the AERMOD computer model to demonstrate compliance with the emission standard due to concerns regarding the accuracy of the input data used for the direct comparison the AERMOD and COMPLY-R computer models.

FINDING OF VIOLATIONS

- Emissions of radon-222 from the La Sal mines during 2009 exceeded the emission standards for six receptors, in violation of 40 C.F.R. § 61.22 and Section 112 of the CAA.
- 32. Denison Mines has not submitted monthly reports following the emissions exceedances of radon-222 for the year 2009, in violation of 40 C.F.R. § 61.24(b) and Section 112 of the CAA
- 33. Emissions of radon-222 from Vent 1350, Pandora 3, Pandora 7, and Pandora 12 have not been continuously measured, in violation of 40 C.F.R. § 61.23(a) and Method 115, and Section 112 of the CAA.
- 34. Test Method A-7 has been used to analyze radon-222 in lieu of Test Method A-6 at the La Sal mines, without prior approval from EPA, in violation of 40 C.F.R. § 61.23(a) and Method 115, and Section 112 of the CAA.

NOTICE OF VIOLATIONS

Notice is given to Denison Mines (USA) Corp. that the Administrator of the United States Environmental Protection Agency, by authority duly delegated to the undersigned, finds that Denison Mines (USA) Corp. is in violation of Section 112 of the CAA and its implementing regulations, as set forth in the Finding of Violations.

ENFORCEMENT

Section 113(a)(3) of the CAA provides that when any person has violated any requirement or prohibition of Subchapter I of the CAA, including Section 112, the Administrator of EPA may:

- (A) issue an administrative penalty order in accordance with Section 113(d);
- (B) issue an order requiring such person to comply with such requirement or prohibition;
- (C) bring a civil action in accordance with Section 113(b); or
- (D) request the Attorney General to commence a criminal action in accordance with Section 113(c).

Under Section 306(a) of the Act, the regulations promulgated thereunder (40 C.F.R. Part 15), and Executive Order 11738, facilities to be used in federal contracts, grants, and loans must be in full compliance with the Act and all regulations promulgated pursuant to it. Violations of the Act may result in the facility being declared ineligible for participation in any federal contract, grant, or loan.

PENALTY ASSESSMENT CRITERIA

Section 113(e)(1) of the CAA states that the Administrator or the court, as appropriate, shall, in determining the amount of any penalty to be assessed, take into consideration (in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

Section 113(e)(2) of the CAA allows the Administrator or the court to assess a penalty for each day of violation. For the purposes of determining the number of days of violation, where the EPA makes a prima facie showing that the conduct or events giving rise to this violation are likely to have continued or recurred past the date of this NOV, the days of violation shall be presumed to include the date of this NOV and each and every day thereafter until the violator establishes that continuous compliance has been achieved, except to the extent that the violator can prove by the preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature.

OPPORTUNITY FOR CONFERENCE

Denison Mines Corp. may, upon request, confer with EPA. The conference will enable Denison Mines Corp. to present evidence bearing on the finding of violation, the nature of the violations, and any efforts it may have taken or proposes to take to achieve compliance. Denison Mines Corp. has the right to be represented by counsel. A written request for a conference with EPA must be made within ten (10) working days of receipt of this NOV. The request for a conference should be made in writing to:

Linda Kato Legal Enforcement (ENF-L) U.S. Environmental Protection Agency Region 8 1595 Wynkoop St. Denver, CO 80202 (303) 312-6852

By offering the opportunity for a conference or participating in one, EPA does not waive or limit its right to any remedy available under the Act.

EFFECTIVE DATE

This NOV shall be effective immediately upon receipt.

Date Issued: August 17, 2010 Sharon & Keiche Andrew M. Gaydosh Assistant Regional Administrator Office of Enforcement, Compliance and

Environmental Justice

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the original and a copy of the NOTICE OF VIOLATION with all Exhibits were hand-carried to the Regional Hearing Clerk, EPA, Region 8, 1595

Wynkoop Street, Denver, Colorado, and that a true copy of the same was sent to the following by CERTIFIED MAIL/RETURN RECEIPT REQUESTED to the following:

David C. Frydenlund Vice President, Regulatory Affairs and Counsel Denison Mines (USA) Corp. 1050 17th Street, Suite 950 Denver, CO 80265

Certified mail, return receipt requested

No. 7009 3410 0000 2591 9725

Date: 8/17/10 By: Combre Read

Andrea Reed