State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Department of
Environmental Quality

William J. Sinclair
Acting Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

DAQE-IN0141510002-09

May 28, 2009

Harold R. Roberts
Denison Mines (USA) Corp.
Independence Plaza
1050 17th Street, Suite 950
Denver, CO 80265

Dear Mr. Roberts:

Re: Intent to Approve: Approval Order for an Underground Uranium and Vanadium Mine, San Juan County; CDS B; Attainment Area, NESHAP (Part 61), Title V (Part 70)
Project Number: N014151-0002

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Maung Maung, who may be reached at (801) 536-4153.

Sincerely,

Ty L. Howard, Manager
New Source Review Section

TLH:MM:kw

cc: Southeastern Utah District Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE: Approval Order for an Underground Uranium and Vanadium Mine

Prepared By: Maung Maung, Engineer
Phone: (801) 536-4153
Email: mmaung@utah.gov

INTENT TO APPROVE NUMBER

DAQE-IN0141510002-09

Date: May 28, 2009

La Sal Mine

Source Contact:
Mr. Harold R. Roberts
Phone: (303) 628-7798

Ty L. Howard, Manager
New Source Review Section
Utah Division of Air Quality

ABSTRACT

Denison Mines (USA) Corp. (Denison Mines) has requested to reactivate a complex of underground uranium and vanadium mines that make up the La Sal Mines. The mines are located in the vicinity of La Sal, on the south flank of the La Sal Mountains in San Juan County.

La Sal mines consist of four separate underground mines: Pandora, Beaver Shaft, La Sal and Snowball. Mine production is planned only at the Pandora Mine and the Beaver Shaft, while the other two mine areas will be used for maintenance activities. At the Pandora and Beaver Shaft sites, ore will be loaded onto trucks for transport to off-site processing facilities.

There will be no on-site processing (physical or chemical) of ore at the mines; accordingly, there will be no tailings or reject material (e.g. crusher fines).

San Juan County is an attainment area of the NAAQS for all pollutants. NESHAP 40 CFR parts 61 subpart B (National Emissions Standards for Radon Emissions From Underground Uranium Mines) applies to this source. NSPS and MACT regulations do not apply to this source. Title V of the 1990 Clean Air Act applies to this source as an area source.

The emissions from the operations will result in the following, in tons per year, potential to emit totals: PM_{10} = 9.8, NOX = 0.50, SO_2 = 0.03, CO = 0.11, VOC = 0.04.

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the San Juan Record on June 3, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

Name of Permittee:

Denison Mines (USA) Corp.
Independence Plaza
1050 17th Street, Suite 950
Denver, CO 80265

Permitted Location:

La Sal Mine
Sec11, R24E, T29S
La Sal, UT 84530

UTM coordinates:654,311 m Easting, 4,141,670 m Northing
SIC code:1094 (Uranium-Radium-Vanadium Ores)

Section I: GENERAL PROVISIONS

I.1 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including

associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]

I.2 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

I.3 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]

I.4 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]

I.5 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]

I.6 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]

I.7 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

II.A.1 **La Sal Mines**
Underground uranium and vanadium mines

II.A.2 **Unpaved roads**
0.35 mile for the Pandora mine and 1.51 miles for the Beaver Shaft mine

II.A.3 **Snowball Mine**
Waste Rock pile = 3.3 acres

II.A.4 **Pandora Mine**
Ore stockpile = 0.9 acres, Waste Rock pile = 5.8 acres

II.A.5 **La Sal Mine**
Ore stockpile = 2.4 acres, Waste Rock pile = 2.5 acres, Topsoil stockpile = 0.5 acres

II.A.6 **Beaver Shaft Mine**
Ore stockpile = 2.6 acres, Waste Rock pile = 4.7 acres, Topsoil stockpile = 0.5 acres

II.A.7 **Emergency generator rated at 200 kW**
Fuel by diesel, natural gas or propane

II.A.8 **Front end loaders**
One each at Pandora and Beaver Shaft

II.A.9 **Tracked Dozer**
One rated at 80 hp at Beaver Shaft

II.A.10 **Low profile haul trucks**
Four at Pandora and three at Beaver Shaft

II.A.11 **Highway haul trucks rated at 22 tons capacity**
15 total trucks

II.A.12 **Water truck**
One

II.A.13 **Motor grader rated at 140 hp**
one grader

II.A.14 **Tanker truck**
one truck

II.B Requirements and Limitations

II.B.1 **Requirements and Limitations**

II.B.1.a Denison Mines shall notify the Executive Secretary in writing when the preparation of the mines has been completed and the mines are operational. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the preparation of the mines has not been completed within 18 months from the date of this AO, the Executive Secretary shall be notified in writing on the status. At that time, the Executive Secretary shall require documentation of the continuous preparation of the mines and may revoke the AO. [R307-401-18]

II.B.1.b The following production and/or operating hours limits shall not be exceeded:

1. 120,000 tons of ore produced per rolling 12-month period in Beaver Shaft Mine
2. 72,000 tons of ore produced per rolling 12-month period in Pandora Mine
3. 200 hours of generator operating time per rolling 12-month period

To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production/generator operating time shall be kept for all periods when the plant is in operation. Production limits shall be determined by sales records. The records of

production limit shall be kept on a daily basis. Hours of generator operating time shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401]

II.B.1.c Visible emissions from the following emission points shall not exceed the following values:

1. Haul roads - 15% opacity
2. Operational areas - 20% opacity
3. All diesel engines - 20% opacity
4. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-205]

II.B.1.d Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 15% opacity at any point. Visible emission determinations shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-205]

II.B.1.e The vehicle speed along the haul road shall not exceed 15 miles per hour. The vehicle speed on the haul road shall be posted, at a minimum, on site at the beginning of the haul road so that it is clearly visible from the haul road. [R307-401]

II.B.1.f The owner/operator shall use #1, #2 or a combination of #1 and #2 fuel oil as fuel in the on-site equipment.

The sulfur content of any diesel fuel burned shall not exceed 0.05 percent by weight. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary. Certification of sulfur content shall be either by own testing or test reports from the fuel marketer. [R307-401]

II.B.1.g Denison Mines shall abide by all applicable requirements of R307- 205 for Fugitive Emissions and Fugitive Dust. All regularly traveled unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. The application of water and/or chemical treatment using a magnesium chloride solution, or equivalent, shall be used. If chemical treatment is used, it shall take place two (2) times a year. If water treatment is used, watering shall be initiated daily dependant upon observed dust generation. The opacity shall not exceed 20% during all times the areas are in use unless the temperature of the environment is below freezing. Records of water treatment shall be kept for all periods when the mine is in operation. The records shall include the following items:

1. Date
2. Number of treatments made, dilution ratio, and quantity
3. Rainfall received, if any, and approximate amount
4. Time of day treatments was made

[R307-401]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

NESHAP (Part 61), B: Radon From Underground Uranium Mines

PERMIT HISTORY

The final AO will be based on the following documents:

Incorporates	Additional information dated April 10, 2009
Is Derived From	Additional information dated February 2, 2009
Is Derived From	NOI dated November 26, 2008

ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
ATT	Attainment Area
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds