

# **EXHIBIT N**



State of Utah

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Governor

GREG BELL  
Lieutenant Governor

Department of  
Environmental Quality

Amanda Smith  
Executive Director

DIVISION OF AIR QUALITY  
Cheryl Heying  
Director

DAQE-MN0112050018-10

MEMORANDUM

TO: Denison White Mesa Source File

THROUGH: Reginald Olsen, Permitting Branch Manager *RO 2/24/11*

THROUGH: Tim Andrus, NSR Section Manager *us 2/24/11*

FROM: Maung Maung, NSR Engineer *MA 2/24/11*

DATE: Feb 24, 2011

SUBJECT: Response to comments on DAQE-IN0112050018-10

An Approval Order (AO) for the Denison Mines White Mesa Mill was proposed with a public comment period from September 29 to October 29, 2010. The proposed AO allows a modification to add a baghouse, to allow the use of either propane or liquefied natural gas (LNG) fuel, and to document work practice standards to control fugitive dust for the White Mesa Mill. Written comments were received. Each comment was considered before final issuance of the AO.

The written comments received are identified below along with the Utah Division of Air Quality's (DAQ) response to the comment.

- Comment:** The DAQ should conduct compliance testing more often than every 5 years. The mill circuit has gone through a number of operational changes, and testing at least every 2 years should be required. Denison Mines (USA) Corporation (Denison), the White Mesa Mill owner and operator, has a history of not complying with health, safety, and environmental regulations. As explained in the application documents, Denison operated the baghouse for who knows how long, without DAQ approval. The Mine Safety and Health Administration cited Denison or its contractors for 28 health and safety violations for two inspections of the Mill in 2010. The August inspection cited the Mill for some of the same violations that were found during the January inspection.

**DAQ response:** The stack-testing interval is reviewed and determined based on the permitted quantity of emissions released. At the levels in the permit (PM10 = 10.95 tpy on vanadium scrubbers, 1.75 tpy on yellowcake dryer scrubbers), a five-year interval was determined to be appropriate in 2006 and has not been changed in this modification. DAQ also considered the fact

that the Division of Radiation Control requires substantial stack testing for radionuclides under State of Utah Radioactive Materials License No. UT 1900479. Based on this information, no changes will be made to the approval order.

2. **Comment:** The DAQ should request that Denison conduct modeling of the dispersion of the pollutants from the Mill stacks, because such modeling has never occurred and because the Mill is close to the communities of White Mesa and Blanding in San Juan County. The DAQ and the communities should know how well the gases and particulates from the Mill are being dispersed and the direction of that dispersal.

**DAQ response:** To date, Denison White Mesa has not triggered the modeling thresholds in UAC R307-410, so there is no requirement for the source to perform air dispersion modeling. Accordingly, no changes will be made to the approval order.

3. **Comment:** The DAQ should justify the consumption limits in the amount of liquefied natural gas in section II.B.1.b, 2) and 3).

**DAQ response:** Liquefied natural gas has approximately 91% of the heating energy that propane (LPG) contains. In this condition, the source is allowed to use the same heating value using either fuel. The condition is being revised to limit the total heat content used. Each allowed fuel will have a heat content per gallon listed in the AO, and the total heat content will be determined by multiplying the quantity of each fuel by the respective heat content factor, then summed. It will be verified at each inspection by DAQ.

4. **Comment:** Denison should be required to identify the other sources at the Mill that are venting to the stack that is connected to the baghouse. The January 2009 Denison submittal (Form 2) references an attachment that supplies that information, but that attachment appears to be missing.

**DAQ response:** The DAQ apologizes for overlooking the inclusion of the attachment in the information provided to the commenter. Upon review, the DAQ determined that this information does not affect the proposed approval order, but lists the sources here for completeness: a 4 x 6 inch jaw crusher, a cone crusher, a bowl crusher for final grinding and the sample blending area.

5. **Comment:** Section I.3 of the draft AO states, "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." The purpose of retaining records is so that the DAQ staff can review those records at the Mill during an inspection. However, the DAQ usually inspects the Mill about every 3 years. Therefore, some of the relevant compliance documents might not be available if Denison does not have to retain them between inspections. Therefore, all records referenced in the AO should be retained for at least 5 years.

**DAQ response:** The two-year interval is the standard interval for minor sources in Utah and the DAQ Compliance staff has experienced no problems obtaining the needed information required for inspections. If a federal standard or requirement called for a longer retention period, Denison would have to comply with that standard or requirement. No changes will be made to the approval order.

6. **Comment:** When the Mill is operating, the DAQ should conduct unannounced inspections of the Mill operation at least every year. Although not regulated by the DAQ (and not mentioned in the AO), most of the dust and particulates generated by the Mill operation contain uranium and uranium progeny. So, the dust and particulates regulated by the DAQ are both hazardous and radioactive—and pose a hazard to the health of the public and the Mill workers. Therefore, it is in

the interest of the public and Mill workers that dust and particulate releases are kept to a minimum. The way to assure that such emissions are kept to a minimum is for the DAQ to conduct more frequent inspections.

**DAQ response:** This comment addresses our inspection procedures and does not address the proposed approval order. Under UAC 19-2-107(2)(d), DAQ staff can inspect a source at any time. No changes will be made to the approval order.

7. **Comment:** In Section III, Applicable Federal Requirements, the AO should also list: 40 C.F.R. Part 190 and 10 C.F.R. Part 40, Appendix A, Criterion 8.

**DAQ response:** These two citations are for programs for which the DAQ does not have the authority to implement. No changes will be made to the approval order.

8. **Comment:** The final Approval Order should indicate the expiration date of the current Air Quality Permit.

**DAQ response:** Under Utah air quality rules, approval orders do not expire. No changes will be made to the approval order.

9. **Comment:** The Ute Mountain Ute Tribe believes that the language in II.B.4.f is insufficient to prevent fugitive dust. Tribal members and Tribal employees have frequently observed dust that appears to be coming from the ore piles. Please see attached photographs. The tribe has expressed previous concerns about fugitive dust to your office, and found the lack of substantial data made it difficult to resolve the issue. There is no infrastructure available on the ore pads for watering except for the roads, and it is generally very dry at the mill location. The tribe would urge the Secretary to require watering of ore pads on a routine and specified time frame, installation of a sprinkling or other watering system, and submission of water records to your office on a monthly basis. The tribe also believes that it would be in the public interest to make these watering records publicly available on the UDWR's website. These actions would provide objective and verifiable data to evaluate any fugitive dust issues, and would help alleviate the Tribe's concerns about fugitive dust.

**DAQ response:** The approval order requires the source to activate a water-spray whenever the situation exists that the opacity may exceed 20%. To require a fixed schedule without regard to weather or material conditions could have detrimental effects (such as water being applied during freezing conditions). No changes will be made to the approval order.

10. **Comment:** Regarding Section II.B.4.h, Tribal staff have observed that when unloading, ore hauling trucks create a large cloud of dust which could cause off-site migration of uranium laden dust. This leads the Tribe to believe one of two things. Either the standard of 4% moisture by weight is not stringent enough, or it is not being properly implemented. The Tribe would like to offer additional comment on this issue. However, in order to do so the Tribe needs additional information about the implementation. The Tribe has reviewed multiple documents available on the UDWR's website and has not been able to obtain how this information on how this standard of 4% moisture is implemented. The Tribe now requests that your office provide the Tribe with information on how this standard is implemented, and offer an opportunity for additional comment on this issue.

The Tribe's Environmental Programs Department has been working with the U.S. EPA and the U.S. Geologic Survey, among other partners, on a Scientific Investigations Report concerning environmental conditions around White Mesa that is currently in peer review and will likely be

published in January of 2011. There are parts of that report that we think the Utah Air Quality Division will find informative regarding particulate transport, and deposit and off-site migration of these deposits. The Tribe believes that the report will help in designing an air monitoring program and refining the current water quality program to enhance the protection of human health and safety. The Tribe therefore respectfully requests that the decision-making process regarding this permit and the related fugitive dust requirements be extended to January 31, 2011 to allow your agency time to review the report and incorporate its information into your decision.

#### Scientific Investigations Report (underlying data)

1. Both the USGS sage sampling and the sediment sampling indicate off-site migration of uranium and vanadium laden particulate has occurred. Accordingly, either the monitoring program is not detecting the migration, or the monitoring results are not triggering an appropriate response. Either way, the failure to address migration of uranium and vanadium laden particulate matter does not engender confidence that the air program in place at the facility is sufficient to protect the environment, or human health and safety. The Division of Air Quality should conduct a comprehensive review of the air program to assess whether there is a failure in monitoring or responsiveness, and redesign the air program accordingly.

2. Financial Costs and Cleanup

The evidence of off-site and on-site migration means there is more financial liability associated with this facility. Specifically, the onsite migration means that closure costs are likely to be higher than previously estimated, since closure costs were based on on-site migration. Additionally, the appropriate regulatory agency should require Denison to pay for costs associated with clean up of areas outside of the property, such as on adjacent public lands, with elevated uranium readings.

3. Sediment Sampling

The scientific Investigations sediment sampling demonstrates a need for continued sediment sampling. The Division of Air Quality should require sediment sampling, and monitor to ensure that uranium and vanadium levels are decreasing.

4. Vegetative sampling not robust enough

The detection of uranium and vanadium in the sagebrush indicates that a broader variety and range of vegetative sampling must be required. Based on the Tribe's review of previous semi-annual effluent reports it is not clear what vegetative is being sampled, or whether the vegetation sampling being conducted is taking into consideration the physical properties of the plant species being sampled, and its value in measuring chemical constituents. As noted in the Scientific Investigations Reports, sagebrush was chosen in part because of its historical use in establishing geochemical baselines, its extensive root system which can accumulate trace chemical constituents from soil and groundwater containing mobile ions associated with ore deposits, and the rough surface texture and resins on the leaf structure which have been found to be efficient at trapping dust. The Division of Air Quality should identify target species for vegetative sampling, and should also require random sampling of non-target species to ensure that the target species are adequate indicators.

5. Quality control

As a general issue, the Scientific Investigations Report demonstrates a definite need for quality control in regards to the monitoring and regulation of the Denison White Mesa Uranium Mill. We have two immediate suggestions for quality control; (1) The Division of Air Quality should require outside external review for all permits and approved orders associated with this facility. This type of external review is common in the industry, and in some cases is required by law, and, (2) An employee of the Division of Air Quality told our environmental staff that the Division of Air Quality does not have a copy of the Mill's quality assurance program plan, or standard operating procedures, and that the state generally requires the Mill to retain these documents. The Division of Air Quality should be regularly reviewing these documents to ensure that they are being implemented.

**DAQ response:** The 4% moisture content of the ore is no longer a condition of this approval order. This approval order continues to prohibit opacities from any source above 20%. As long as the fugitive dust opacity is below 20%, the source is in compliance. The method of determining compliance is contained in the proposed approval order. There is no additional information from DAQ to comment on at this time.

As of 2/24/11, DAQ had not seen or received this report. The particulate in the air below 20% opacity may migrate. However, it is not within the jurisdiction of DAQ to require water, soil or vegetation sampling. It is also not within the jurisdiction of DAQ to address financial responsibility for remediation work due to contamination.

With regard to the concern over quality control, there is no provision in the statutes or rules for the NSR program to require or allow external review of approval orders beyond the scope of the public comment process in UAC R307-401-7. The compliance staff inspects against this approval order. DAQ does not have the authority to monitor or modify a source's daily operations beyond compliance with the terms of this approval order. No changes will be made to the approval order.

The comments were noted. As no technical issues were raised with respect to the conditions of the Intent to Approve, no changes were made to the Approval Order as a result of these comments. However, the fuel limit and monitoring have been modified to eliminate any confusion regarding separate limits on propane and LNG by converting those limits to a single heat-input limit as described in the response to comment #3. This was not a relaxation of the limit.

**Multiple comments were also received during the public comment period regarding the public comment process:**

11. **Comment:** The commenter never received notice from DAQ regarding the Intent to Approve and public comment period, despite the fact that DAQ is well aware of the commenter's long-standing interest in this issue and desire to receive notices so we can submit comments. It is our understanding that residents living on the White Mesa Ute Community reservation that is immediately adjacent to the White Mesa Uranium Mill may not have received any notice of the proposed DAQ action or of their ability to provide comment to DAQ.

In addition, relevant documents were not readily available for review by the people most impacted by emissions from the Uranium Mill – White Mesa Ute Community residents who mostly do not have computers.

As a result of DAQ's failure to provide notice as described above, DAQ must reopen the public comment period and provide meaningful and direct notice to people and organizations that have expressed interest in this issue as well as to the people living next to the Uranium Mill. We request a new 60 day comment period be noticed and widely publicized.

**DAQ response:** All requirements of the public notification process in UAC R307-401-7 were met for this project. Notice of this project was published in the San Juan Record on September 29, 2010. Additionally, our web site identified this project as being available for public review during the review period. All documents are public information and are available if requested as provided in the notice. DAQ will not reopen the public comment period for this project. DAQ NSR management is unaware of any standing requests from this commenter to be notified of every permitting action. The commenter is welcome to contact DAQ with such a request and that information was emailed to the commenter.

12. **Comment:** DAQ should not approve any facility emitting uranium next to where people live. In fact, most tribal members do not even know and have never been told by DAQ or other agencies that uranium, particulates and other pollutants are emitted from the stacks. No human being should be exposed to uranium and toxic and particulate emissions without being informed of this reality, and DAQ and other agencies have violated the human and civil rights of White Mesa residents by failing to inform them of the serious pollutants being emitted right next to their community.

While DAQ may try to claim they are not responsible for regulating the radioactive emissions, the truth is that the dust and particulates regulated by the DAQ are likely both hazardous and radioactive—and poses a hazard to the health of the public and the Mill workers. DAQ thus has a responsibility to disclose, evaluate and regulate all the emissions and contaminants associated with the dust and particulates.

**DAQ response:** The Division of Radiation monitors and regulates the White Mesa Mill for the pollutants described in this comment. In addition, the Occupational Safety and Health Administration and/or the Mine Safety and Health Administration have jurisdiction over worker safety. The public has access to the records retained by those organizations. Radioactive emissions are not an "air contaminant" under UAC R307-401. No changes will be made to the approval order.

13. **Comment:** Denison Mines (USA) Corporation, the White Mesa Mill owner and operator, has a history of not complying with health, safety, and environmental regulations. Denison apparently operated the bag-house without DAQ approval. The Mine Safety and Health Administration cited Denison or its contractors for 28 health and safety violations during two inspections of the Mill in 2010. The August inspection cited the Mill for some of the same violations that were found during the January inspection.

As there has never been a modeling of the dispersion of the pollutants from the Mill stacks, and because the Mill is close to the communities of White Mesa and Blanding in San Juan County, no further emissions should be allowed at a minimum until there has been thorough scientific analysis that can show that the emissions are safe. The DAQ and the communities should know how the gases and particulates from the Mill are being dispersed, the direction of that dispersal and the true nature and quantity of the emissions.

**DAQ response:** DAQ Compliance staff found two violations in 2008 and both have been addressed and corrected. The results of inspections from other agencies with other regulatory authorities are not typically made available to DAQ, and would not be considered as DAQ has no

authority over other agencies' regulations. With regard to dispersion modeling, please see the response to Comment #2.

**14. Comment:** DAQ's Violation of Title VI of the US Civil Rights Act of 1964

As a recipient of federal funding, the DAQ is subject to the requirements of Title VI of the United States Civil Rights Act of 1964. Title VI prohibits recipients of federal funding to take actions that have a discriminatory and/or disproportionate impact on low-income and people of color, such as the residents of the White Mesa Ute Community and nearby Navajo communities.

In addition to polluting the air of residents, emissions contaminate and desecrate the sacred and culturally significant sites at White Mesa including burials and ceremonial and archaeological sites.

By failing to provide notice to these nearby residents, and by allowing continued operation of a polluting uranium mill that contaminates the air and environment and desecrates Native American sacred and culturally significant sites, the DAQ is violating Title VI and must therefore cease permitting of the equipment at the Uranium Mill that emits pollutants into the air.

**DAQ response:** The White Mesa Mill has been in its current location since 1979. Information regarding its location and initial permitting can be found at the following link:

[http://www.radiationcontrol.utah.gov/Uranium\\_Mills/IUC/Denison\\_IUC/UGW\\_renewal.html](http://www.radiationcontrol.utah.gov/Uranium_Mills/IUC/Denison_IUC/UGW_renewal.html).

In this document, local impacts were evaluated, and the findings can be found in the document entitled: "Final Environmental Statement Related to Operation of White Mesa Uranium Project Energy Fuels Nuclear, Inc., 1979."

This permitting action is not for initial construction, but for an amendment to a current permit that already allows White Mesa to operate. The question of whether the facility has a right to exist as a general matter is not a question that the DAQ has the authority to consider in this permitting action. Sources regulated by the DAQ (such as White Mesa), are subject to compliance actions if they fail to comply with the terms and conditions of their approval orders. However, DAQ does not prohibit sources from engaging in lawful activities. It is DAQ's opinion that White Mesa Mill has complied with the requirements to receive the amendment to its approval order. Therefore, any questions regarding White Mesa's compliance status should be directed to the Compliance Section of the DAQ, as such questions are not the subject of this permitting action.

The DAQ makes every effort to follow applicable law in all its permitting decisions. With respect to the notice provided to the public in this action, the DAQ believes it has followed all applicable rules for providing notice to the public of this permitting action (see Response to Comment #11). DAQ's permitting rules have been approved by EPA, thus EPA is satisfied that DAQ's actions in compliance with those rules satisfy all legal requirements.

Accordingly, the commenter should direct any complaints, comments, or questions regarding Title VI compliance to the appropriate authorities at EPA Region 8. Contacts for the EPA Region 8 environmental justice program can be found at this link:

<http://www.epa.gov/region8/ej/contacts.html>.

**15. Comment:** We also, again, request to be notified of the opportunity to comment on any and all DAQ actions regarding the White Mesa Uranium Mill.

**DAQ response:** DAQ is required to publish notices of any intents-to-approve and accept public comments in accordance with UAC R307-401-7. DAQ NSR management is unaware of any standing requests from this commenter to be notified of every permitting action. Any member of the public is welcome to contact DAQ with such a request.

16. **Comment:** When the DAQ posts a public notice on its website or publishes a notice in a local newspaper of an opportunity for the public to comment on a proposed agency action, the DAQ should also post the application (Notice of Intent), additional information, and associated documents on the DAQ website. For a public notice on a proposed agency action related to the White Mesa Mill, the DAQ should also place a copy of the application documents and draft Approval Order in Blanding Public Library.

There are a number of people who are impacted by the operation of the Mill and the emissions from that Mill who do not use computers or do not have easy access to computers. An interested member of the public should not have to submit a Government Records Access and Management Act (GRAMA) request in order to have access to those documents or travel to Salt Lake City to view the pertinent records. During a public comment period a person should not be expected to bring forward all the issues that may later become the subject of a Request for Agency Action—if the pertinent documents are not readily available.

**DAQ response:** Presently, DAQ is not required to publish documents related to the application as the commenter as requested. However, as a note, the DAQ is currently reviewing its web procedures for possible modifications to possibly include the posting of project-related information as resources allow.

17. **Comment:** A 30-day comment period is not sufficient time for a person to have to request the records and have the DAQ respond to those requests, before making comments.

If the DAQ does not want to make the application and related documents readily available to the public, then it should provide an extra 15 days to give a member of the public time to submit a GRAMA request and receive a response to that request.

**DAQ response:** The 30-day comment period is specified in rule at UAC R307-401-7. However, DAQ has been responsive to requests for information and has allowed for additional time to provide comments, as was the case with this project when DAQ continued to accept comments until November 4 instead of closing the comment period on October 29. Extensions of the comment period such as this are made upon request and approval of DAQ management in consideration of the circumstances. Extending the public comment period beyond the 30 days in the rule is not typically necessary, and mandating such an extension would cause additional delays to many projects that are not necessary.

18. **Comment:** The DAQ should place a copy of the final AO and response to comments in the Blanding Public Library.

**DAQ response:** Copies of Notices of Intent, public comments and Approval Orders are public information and open for public review. Copies are available on request. It is not currently feasible to make all copies available for the public libraries. However, DAQ has noted the concern and will consider it during the current procedural review, as noted in the response to comment #16.

The additional comments were noted. As no technical issues were raised with respect to the Intent to Approve (ITA), no additional changes will be made to the Approval Order.