

NUVEMCO, LLC

Via U.S. Mail and Email

June 21, 2019

Mr. Dustin Czapla
Division of Reclamation, Mining and Safety
Grand Junction Field Office
101 South 3rd Street, Room 301
Grand Junction, CO 81501

Re: Permit M1978222UG
Response to Inspection Report of April 17, 2019

Dear Mr. Czapla:

Nuvmco appreciates the opportunity to provide additional information and justification DRMS has requested with respect to this DMO permit. The accompanying document and its attachments were prepared for this purpose. The document is titled Monogram Mines M1978222UG – Nuvmco Response to DRMS Inspection Topics – June 21, 2019.

In the process of preparing this response, we were struck by both how much work has been done by all parties and by how many ways we might improve communications between us to keep us on the same page with the same understandings. You have our commitment to work on improving clarity and mutual understanding on our end.

For now, both Okie and I look forward to your review of our response and look forward to discussing this permit further with you and the DRMS team.

Sincerely,

PGSzilagyi

Nuvmco, LLC
By: Paul G. Szilagyi, Its Manager

Enclosure as stated

cc (via email):
Mr. G. Russell Means
Mr. Craig Howell

Monogram Mines M1978222UG – Nuvemco Response to DRMS Inspection Topics – June 21, 2019

2019 DRMS Inspection Topics. In its Minerals Program Inspection Report dated April 23, 2019, for the Monogram Mines DMO M1978222UG, the Division of Reclamation, Mining and Safety (DRMS) listed two inspection topics, an increase to financial warranty and availability of records (recommendation to file for Temporary Cessation). Nuvemco, LLC (Nuvemco) has reviewed the increase to financial warranty and is processing the increased cash on deposit with the Colorado State Treasurer and related DRMS forms as of this writing. Nuvemco believes the financial warranty is more than sufficient to cover the cost to complete reclamation. However, Nuvemco was surprised and respectfully disagrees with the initial DRMS staff recommendation to file for Temporary Cessation for the Monogram Mines Permit. Nuvemco appreciates the invitation for another opportunity to provide the additional information and justification requested by DRMS to facilitate common understanding of facts, respectful conversation on opinions, and appropriate mutual conclusions under the Act.

Background. Approved May 22, 2009,¹ The Monogram Mines DMO permit was borne of collaborative problem solving and addressed issues and inconsistencies developed between DRMS and prior operators for two historic mining permits. This process was described by DRMS as that of obtaining a new permit. The Monogram Mines DMO notably goes beyond basic extraction/production to permit other mining activities specific to the development of the area and its ore bodies, including developmental drilling and reopened portals, inclusive of old mine working investigations via these reopened portals.

DRMS Inspections – Historical Perspective. Nuvemco has worked hard to comply with provisions of the Act and believe the Annual Reports filed and DRMS periodic inspections document solid performance and a sincere desire for not only compliance, but 21st Century mining practices. The chart following summarizes such DRMS inspections.²

DMO Permit M1978222UG						
DRMS INSPECTIONS	11/2/2011	10/30/2012	11/12/2014	5/18/2016	12/2/2017	4/17/2019
(AR) RECORDS	Y	Y	Y	Y	Y	PB
(FN) FINANCIAL WARRANTY	Y	N	N	Y	Y	PB
(RD) ROADS	Y	N	Y	Y	Y	Y
(HB) HYDROLOGIC BALANCE	N	N	Y	Y	Y	Y
(BG) BACKFILL & GRADING	Y	Y	N	N	N	N
(EX) EXPLOSIVES	N	N	N	N	N	N
(PW) PROCESSING WASTE/TAILING	N	N	N	N	N	N
(SF) PROCESSING FACILITIES	N	N	N	Y	N	N
(TS) TOPSOIL	Y	N	N	N	N	N
(MP) GENL MINE PLAN COMPLIANCE	Y	Y	Y	Y	Y	Y
(FW) FISH & WILDLIFE	N	N	N	N	Y	N
(RV) REVEGETATION	N	N	N	N	N	N
(SM) SIGNS AND MARKERS	Y	Y	Y	Y	Y	Y
(SP) STORM WATER MGT PLAN	N	N	N	N	N	N
(RS) RECL PLAN/COMP	N	Y	N	N	N	N
(ES) OVERBURDEN/DEV. WASTE	N	N	N	N	N	N
(SC) EROSION/SEDIMENTATION	PB	Y	Y	Y	Y	N
(ST) STIPULATIONS	N	N	N	N	N	N
(AT) ACID OR TOXIC MATERIALS	Y	Y	N	Y	Y	N
(OD) OFF-SITE DAMAGE	N	N	N	N	N	N
(SB) COMPLETE INSP	N	N	Y	Y	*	*
No mining, no ore/waste rock	Noted	Noted	Noted	Noted	Noted	Noted

¹ See letter attached

² DRMS Legend (Y = Inspected and Found in Compliance, N = Not inspected, PB = Problem Cited, * = dropped category)

Temporary Cessation – Historical Perspective. As stated in its October 2012 inspection, DRMS has always made clear that “should the drilling project not proceed or other activities move forward on an annual basis the permit will be required to go into Temporary Cessation. At this time mining activities constitute development and characterization of the ore body.” This was consistent with Nuvemco’s conclusion that Monogram Mines were not eligible for Temporary Cessation for reasons set forth in Nuvemco’s letter of September 5, 2012 and other factors.³ These factors included personnel working at the site, developmental drilling, and the fact production of ore under the DMO permit had not commenced. Since then, until the April 2019 report, every DRMS inspection found that (AR) Records were “Inspected and found in compliance.” Nuvemco believes this DRMS determination includes a conclusion that active status resulted from Nuvemco activities under the DMO permit and that it was and proper, prudent and reasonable for such to be relied on by Nuvemco.

Temporary Cessation – Current Determination.

Rule 1.13.1. Nuvemco believes it continues to meet the requirements of Rule 1.13.1 (1), General Provisions for a permit to continue in effect. Exhibit A covers the reasons for this conclusion in more detail. The short version is that while the extraction of minerals has not yet commenced under this DMO permit, Nuvemco has continued to engage in the other mining operation and development activities allowed by the permit, complied with the provisions of the Act. Mineral resources are shown by Nuvemco (the operator) to remain in the mining operation, as required to confidentially report in February 2019 to the U.S. Department of Commerce.⁴

Rule 1.13.2. Exhibit B covers further reasons Nuvemco believes temporary cessation is not appropriate at this time related to factors set forth in Rule 1.13.2. In short, this conclusion reflects that the majority of factors cited in Rule 1.13.2 indicating temporary cessation have not occurred and that there has been no sale, movement, or excavation of material under this DMO permit.

Rule 1.13.3. Importantly and clearly, Nuvemco believes the two cited indications against temporary cessation of Rule 1.13.3 are present. Pursuant to Rule 1.13.3(1), this permit has remaining mineral resources. Pursuant to Rule 1.13.3(2), the extraction of minerals not commenced under this DMO permit approved May 22, 2009. The fact that extraction of minerals has not commenced has been documented by DRMS at each of its inspections of this DMO Permit.

Other Relevant Factors. In addition to its continuation of mining activities, Nuvemco believes other relevant factors are present supportive of a continuation of the Monogram Mines Permit. While not an exhaustive list or complete discussion, such factors include site risk assessment, operator pattern of behavior, operator approach to mining and development, social license, critical and strategic minerals, Section 232 uranium petition, mineral discoveries old and new, and commitment.

Site Risk Assessment. Rule 1.13.2 embraces a concept of site-specific determinations. Nuvemco believes a site risk assessment is an important component of such determinations and offers the following facts in support of an assessment of low risk for this DMO permit.

³ See letter attached

⁴ Confidential response, U.S. Department of Commerce, Bureau of Industry and Security, Office of Technology Evaluation, survey of U.S. uranium mining, milling, conversion, enrichment, and fuel fabrication sectors, (aka Section 232 Investigation: The Effect of Imports of Uranium on U.S. National Security; Front End Survey)

1. a functioning environmental protection plan,
2. no stockpiled material,
3. not producing water or acid mine drainage,
4. part of a historic mining district with activities going back to the 1950's,
5. land characterized as "combination rockland and pinyon-juniper woodland..." and "...considered essentially a wasteland, unproductive as rangeland"
6. entirely on private land (with a close and trusted relationship with property owner), and
7. access by a private road with no trespassing signs posted to prevent unintentional or unlawful entry.

Pattern of Behavior. Nuvemco has worked hard every day to earn the respect and trust of industry colleagues, the local community, and regulators. Nuvemco professionals serve on industry associations promoting responsible mining practices and other leading roles such as certified MSHA safety instructors (U.S. Department of Labor, Mine Safety and Health Administration, Federal Mine Safety and Health Act of 1977). Nuvemco believes this is the right way to mine and the type of behavior the Mined Land Reclamation Board should consider as part of meeting the statutory legislative declaration of C.R.S. 34-20-101, which Nuvemco would characterize as collaboratively promoting 21st century mining practices. Similarly, Nuvemco believes this is a pattern of behavior that "encourages the development of minerals in the state" as such is called for in C.R.S. 34-20-103.

Approach to Mining and Development. Nuvemco is proud of its 21st century approach to mining that utilizes increasingly sophisticated technology, techniques, and information sharing to maximize worker safety and minimize environmental impacts. It seems counter-intuitive in today's world to suggest a conventional surface drilling program delineating ore bodies is unquestionably an active mining operation while the less environmentally impactful methods of acquiring and utilizing historical information obtained and advanced technology underground to delineate ore bodies would not be considered active mining (such as XRF devices (X-Ray Fluorescence), chemical assays, information obtained from U.S. Department of Energy, Uranium Leasing Program, information obtained from miners and maps who historically worked the area, sophisticated 3D modeling of ore bodies, etc.).

Social License. Nuvemco is proud of its collaborative and cooperative work with both the DRMS and the BLM to identify, evaluate, and appropriately close dozens of abandoned mines on nearby public and private lands. In advance of mine closures, Nuvemco actions included review and comment of recommended closure methods, identification and location of mines and mine features, underground evaluations, consideration of current and future miner safety, suitability for bat habitat, safety of the public, and potential environmental impacts. As closures progressed, Nuvemco was an offered and available resource for whatever was needed. Nuvemco's simple hope is protect the environment, keep people reasonably safe, and promote mining.

Critical and Strategic Minerals. The two primary minerals under this DMO permit are vanadium and uranium. Both have been identified by the U.S. as critical and strategic to the American way of life. Both are increasingly imported. Nuvemco has also identified eleven rare earth elements in its program of chemical assays and is working with available information to assess these rare earth element trends.

Section 232 Petition. Two U.S. uranium producers filed what is commonly referred to as a Section 232 petition seeking relief from unfair trade practices and requesting a quota system mandating that 25% of U.S. consumption of uranium be provided by domestic sources. A determination by the President is

expected within a month. The impact of the decision, whatever that decision may be, is projected by industry analysts to have major implications on the uranium markets.

Mineral Discoveries, Old and New. There have been notable discoveries and life altering developments from minerals found in this mining country. Perhaps the most famous was the Carnotite used to provide radium Madame Curie used in the development of x-rays. The current value of uranium for baseload carbon free electricity production, powering the U.S. Navy, or nuclear medicine applications cannot be overstated. The potential of vanadium to move beyond its traditional use as a premier alloy for steel to the holy grail of renewable energy storage excites many.

Nuvemco has highlighted its work on this DMO permit for the traditional minerals of uranium and vanadium and for rare earth elements. Nuvemco has also been involved in the discovery of new minerals⁵, one of which was recently recognized and formally named “Okieite” after Nuvemco’s own Craig “Okie” Howell in recognition of his efforts in identifying multiple new minerals from Colorado and Utah.⁶ While it remains to be seen if this mineral ever becomes valuable or uniquely useful to mankind, it does speak to the unique level of Nuvemco work products and geologic understanding of the area. It indicates nature is not done in this area with a couple of exclamation points. It is indescribably cool to be a part of.

Commitment.

Nuvemco has always been committed to work with DRMS to ensure it remains in compliance with the laws and rules of Colorado. We would be pleased to discuss this permit further with DRMS and look to keep this DMO permit in active status.

⁵ The International Mineralogical Association recognizes approximately 5,500 official mineral species that have been discovered by man.

⁶ <https://www.mindat.org/locentry-1260083.html>

Exhibit A – Rule 1.13.1(1) General Provisions

Rule Extract:

- (1) A permit granted pursuant to these Rules shall continue in effect as long as:
 - a) an Operator continues to engage in the extraction of minerals and/or the mining operation and complies with the provisions of the Act; and
 - b) mineral reserves are shown by the Operator to remain in the mining operation.

Nuvmco Assessment – Meets Active Permit Status:

- (1) This DMO permit should continue since:
 - a) Nuvmco has continued to engage in the mining operation and has complied with the provisions of the Act.
 - i. Nuvmco has not begun to engage in the extraction of minerals under the permit due to poor commodity prices and the absence of a mill to any produce ore and minerals. Considerations include:
 - 1. The current Section 232 petition is instructive as to the reasons for poor commodity prices (allegations include the result of unfair trade practices of foreign governments and unacceptable (to the U.S.) mining practices not protecting the environment, not providing worker safety, and not providing living wages.
 - 2. The only operating uranium and vanadium mill in the U.S. is not accepting ore from mines outside its control.
 - 3. CDPHE (Colorado Department of Public Health and Environment) recently revoked the license of the previously approved Pinon Ridge Mill, sited within sight of this DMO permit.
 - 4. The injunction against activity on the U.S. Department of Energy, Uranium Leasing Program, on lands adjacent and nearby this DMO permit, was just lifted after years of legal filings to challenge the no significant impact finding of its exhaustive environmental assessment.
 - ii. Nuvmco has continued to engage in the range of activities set forth in the Mining Plan approved as part of this DMO permit. These activities extend beyond basic extraction(production) to include activities appropriate for the development of the permit area described in the Mining Plan. Specifically, the second phase of operations for the permit which “...will be exploratory in nature.” This specifically includes “the evaluation of old workings,” “exploration boreholes (drilling)” and evaluation of permit amendments “to include any additional surface or underground mining plans.”
 - 1. Nuvmco has drilled over 100 traditional drill holes as provided for in this DMO permit. Such drill holes have been reclaimed and preliminary analysis and resource computations completed. Analysis continues as further geologic information from other activities and mining alternatives are evaluated. Future drilling will proceed in progressively determined locations as indicated by continued analysis and as allowed by the DMO permit.

2. Nuvemco has entered open mines and reopened portals (with new gates installed for access), with a portal opened in 2018 and work currently underway on the Greenback portal in 2019.
3. Via these open and reopened portals, several activities have taken place as part of a larger development plan
 - a. Radiometric surveys utilizing a RS 125 gamma-ray spectrometer/scintillometer (“a state-of-the-art portable hand-held radiation survey search device for the geophysical industry”) were taken to identify area to sample
 - b. Select samples were taken for chemical assays by independent laboratories.
 - c. Select samples were analyzed for rare earth elements and for subsequent analysis / identification of mineral and geologic markers favorable for ore bodies.
 - d. Sampling procedures were followed to enable utilization of such samples in delineation of ore bodies and computation of reserves, as if it were a drill hole.
 - e. Actual current mine workings were compared to recently obtained working maps (from DOE and from private sources) for computation of ore resources and development of mining plans.
 - f. 3D models of ore bodies have been developed using geologic software and data gathered.
 - g. Use of XRF, or x-ray fluorescence technology, has been experimented with, although has not demonstrated a level of repeatability and precision to yet integrate these readings into resource calculations or ore body delineation.
4. Nuvemco has been evaluating ore and mine workings to a level beyond basic grade and thickness. It has been evaluating geologic controls of this highly faulted and fractured permit area using both a technical approach with consulting geologists and the old-time miner’s approach to following ore underground. Both recognize that ore can be deposited in a primary fashion (e.g., old stream channel), be relocated by faulting, or be secondarily deposited by geochemical cells. Nuvemco has been evaluating faults and their impact on this mining district overall, with a hope for locating the “missing pieces” of primary ore, just as the old-time miner’s did on a smaller scale to locate large ore deposits underground.

Exhibit B – Rule 1.13.1(2) General Provisions

Rule Extract:

- (1) there are no personnel working at the site for one hundred eighty (180) consecutive days;
- (2) there are only security personnel at the site;
- (3) there are personnel other than security people at the site, but they are engaged in activities which can be described as maintenance or housekeeping, or related activity;
- (4) there are personnel at the site, but they are engaged in activities which are not significantly moving the site towards completion of the mining operation. The Board will judge these activities in relation to the size of the operation, the nature of the ore body and other facts;
- (5) there is no sale or processing of material or movement of stockpiled material;
- (6) there is only minimal or token excavation of mineral or other material; or
- (7) mine development has ceased and mining has not recommenced.

Nuvemco Assessment – Meets Active Permit Status:

- (1) there have been personnel working at the site;
- (2) *ibid*;
- (3) *ibid*;
- (4) Nuvemco has systematically, scientifically, and methodically performing activities set forth in its DMO permit and has relied on past DRMS determinations that such activities met the requirements for an active permit;
- (5) true, but mining has not commenced;
- (6) true, but mining has not commenced;
- (7) false, development continues and mining has not commenced.

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

Phone: (303) 866-3567

FAX: (303) 832-8106



May 22, 2009

Tom Cavanaugh
O&G Environmental Consulting LLC
11 Inverness Way South
Englewood, Colorado 80112

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Ronald W. Cattany
Division Director
Natural Resource Trustee

Re: Monogram Mine, File No. M-1978-222, Approval of Conversion of a 110(2) permit to a 112d(1) Designated Mining Operation of less than 50 acres.

Dear Mr. Cavanaugh:

The Division of Reclamation Mining and Safety (DRMS) has finished the review of the Monogram Mine conversion application from a 110(2) to a 112d(1) Designated Mining Operation. A DRMS staff team reviewed the application to ensure that the Monogram Mine mining and reclamation plans meet the minimum requirements of the Act and Rules in regard to Designated Mining Operation classification. Through the review process Nuvemco appears to have clarified and corrected all issues noted by the review team. Therefore, DRMS is pleased to inform Nuvemco and O&G Environmental that the conversion application is approved.

Nuvmco has accepted the reclamation liability estimate of \$46,450.00. In order for the conversion to become active Nuvmco must post a bond in that amount or a rider to the existing bond of \$3,105.00. The bond documents should be sent to the Denver Office, Attention: Elizabeth Taliaferro. Any questions regarding the bond should be directed to Miss Taliaferro at 303.866.3567, Ext. 8148.

As a reminder all stormwater structures within areas of immediate anticipated activity must be constructed prior to any other disturbances. A change from a five foot to an eight foot fence around the retention pond is noted. DRMS staff should be notified 10 days ahead of any construction on site so that QA/QC inspections, if deemed necessary, can be scheduled. Nuvmco has also deferred the design of the stormwater containment structure for the ore bin structure. The structure cannot be built until a Technical Revision is approved at a later date and no ore is permitted to be stored in the area until approval of the structure.

Sincerely,

G. Russell Means
EPS II, Grand Junction Field Office

Cc: Sue Carter, Nuvmco, LLC
David Berry, Division Supervisor (e-mail)
Steve Shuey, Senior Environmental Protection Specialist, North Team Supervisor. (e-mail)
Allen Sorenson, DRMS Staff Engineer (e-mail)
David Bird, DRMS Geochemist (e-mail)
Kate Pickford, DRMS Hydrology (e-mail)
Elizabeth Taliaferro, DRMS Administrative Assistant (e-mail)

NUVEMCO, LLC

VIA CERTIFIED MAIL 7011 2970 0001 8848 7098

September 27, 2012

Division of Reclamation, Mining and Safety
Department of Natural Resources
State of Colorado
1313 Sherman St., Room 215
Denver, Colorado 80203

Attn: G. Russell Means

Re: Permit M-1978-222-UG
Monogram Mines
Environmental Protection Plan and Permit Status Review

Dear Mr. Means:

In response to your letter of September 5, 2012, with respect to the referenced Monogram Mines permit, Nuvemco has determined that the Monogram Mines are not eligible for Temporary Cessation. Specifically, we have had personnel working at the site conducting developmental drilling to guide future mining as reported in the most recent Annual Report of March 2012. Further, as specifically referenced as an indication against Temporary Cessation, the mining operation has not commenced. The primary reason for this is the absence of an economic buy schedule from an uranium and vanadium mill, inclusive of both the current market conditions for these minerals and the delay incurred by the State of Colorado in licensing the proposed Piñon Ridge Mill.

With respect to the Environmental Protection Plan ("EPP"), Nuvemco understands its EPP as filed to be satisfactory to DRMS, with the caveat that a ore storage pad remains to be constructed. As we have discussed, the final site of this ore storage pad is to be determined after 1) an economic buy schedule is obtained and 2) a final site can be determined (which could be the original site as filed) that maximizes the use of information garnered from developmental drilling to ensure the best mine productivity, highest levels of worker safety and minimizes surface and environmental disturbances.

We understand DRMS's requirements pursuant to the Rules and Regulations and look forward to the upcoming DRMS inspections. As always, we would be happy to discuss this permit at your convenience.

Sincerely,



Nuvemco, LLC

By: EMSU, LLC, Its Manager

By: Paul G. Szilagyi, Its Manager

cc: Messrs. Burnett, Cavanaugh, Eisel and Means (via emails)