

# 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 3<sup>rd</sup> Street, Room 301  
Grand Junction, CO 81501

Re: Permit M2008012  
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 Last Chance #3 & #4 M2008012– 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

## Last Chance #3 & #4 M2008012 – 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 Last Chance #3 & #4 DMO M2008012, the Division of Reclamation, Mining and Safety (DRMS) included one PB response to inspection topics (recommendation to file for Temporary Cessation).

Nuvmco was surprised and respectfully disagrees with the initial DRMS staff recommendation to file for Temporary Cessation for the Monogram Mines Permit. Nuvmco 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.** The work on the Last Chance #3 & #4 DMO permit was started in 2008 but was not approved by both the DRMS and the federal Bureau of Land Management (BLM) until March 22, 2011.<sup>1</sup> This DMO notably goes beyond basic extraction/production to include other mining activities specific to the development of the permit area and its ore bodies, including developmental drilling.

**DRMS Inspections – Historical Perspective.** Nuvmco 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 21<sup>st</sup> Century mining practices. The chart following summarizes such DRMS inspections.<sup>2</sup>

DMO Permit M2008012				
DRMS INSPECTIONS	11/12/2014	5/18/2016	12/2/2017	4/17/2019
(AR) RECORDS	Y	Y	Y	PB
(FN) FINANCIAL WARRANTY	Y	Y	Y	Y
(RD) ROADS	N	Y	N	N
(HB) HYDROLOGIC BALANCE	Y	Y	Y	Y
(BG) BACKFILL & GRADING	N	y	N	N
(EX) EXPLOSIVES	N	N	N	N
(PW) PROCESSING WASTE/TAILING	N	N	N	N
(SF) PROCESSING FACILITIES	N	Y	N	N
(TS) TOPSOIL	N	y	Y	N
(MP) GENL MINE PLAN COMPLIANCE	Y	Y	Y	Y
(FW) FISH & WILDLIFE	N	N	Y	N
(RV) REVEGETATION	N	N	N	N
(SM) SIGNS AND MARKERS	Y	Y	Y	Y
(SP) STORM WATER MGT PLAN	N	N	N	N
(RS) RECL PLAN/COMP	N	N	N	N
(ES) OVERBURDEN/DEV. WASTE	N	N	N	N
(SC) EROSION/SEDIMENTATION	Y	Y	Y	Y
(ST) STIPULATIONS	N	N	N	N
(AT) ACID OR TOXIC MATERIALS	N	N	Y	N
(OD) OFF-SITE DAMAGE	N	N	N	N
(SB) COMPLETE INSP	Y	Y	*	*

**Temporary Cessation – Historical Perspective.** The summary chart above shows that previous DRMS inspections found that (AR) Records were “Inspected and found in compliance.” Nuvmco believes these DRMS findings include the conclusions that active status resulted from Nuvmco activities under

<sup>1</sup> See attached letter from Loretta E. Pineda, Division Director

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

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 and has 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.<sup>3</sup>

**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 March 22, 2011.

**Other Relevant Factors.** In addition to its continuation of mining activities, Nuvemco believes other relevant factors are present supportive of a continuation of the Last Chance #3 & #4 DMO 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.

1. a functioning environmental protection plan,
2. no stockpiled material,
3. not producing water or acid mine drainage, and
4. part of a historic mining district with activities going back to the 1950's.

**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-

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<sup>3</sup> 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)

20-101, which Nuvemco would characterize as collaboratively promoting 21<sup>st</sup> 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 21<sup>st</sup> 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 utilizing historical information obtained and advanced technology underground to delineate ore bodies is not 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 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.

Nuvmco has highlighted its work on this DMO permit for the traditional minerals of uranium and vanadium and for rare earth elements. Nuvmco has also been involved in the discovery of new minerals<sup>4</sup>, one of which was recently recognized and formally named “Okieite” after Nuvmco’s own

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<sup>4</sup> The International Mineralogical Association recognizes approximately 5,500 official mineral species that have been discovered by man.

Craig “Okie” Howell in recognition of his efforts in identifying multiple new minerals from Colorado and Utah.<sup>5</sup> 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.**

Nuvmco 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.

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<sup>5</sup> <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:**

- (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, permitted activities which “...will be exploratory in nature.” This specifically includes “exploration boreholes (drilling)”and evaluation of permit amendments “to include any additional surface or underground mining plans.”
      - 1. Nuvmco has drilled over 4 traditional drill holes as provided for in this DMO permit. Such drill holes have been reclaimed and preliminary analysis and resource computations completed.
      - 2. Subsequent to permit approval, Nuvmco was able to obtain result of historical drilling conducted on 25-foot centers, largely eliminating the planned confirmatory drilling planned for that particular part of the permit area. Analysis continues to incorporate additional geologic information from other activities and drilling and mining alternatives are

evaluated, particularly in the ground open to the south and west of existing working with historical ore holes yet to be mined and fault controlled secondary ore potential. Future drilling will proceed in progressively determined locations as indicated by continued analysis and as allowed by the DMO permit. It is possible that a technical revision will be proposed to modify permit boundaries to incorporate historically identified ore bodies currently outside of permit boundaries.

3. Activities have taken place underground as part of a larger development plan to delineate ore bodies
  - 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 areas 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.

**Nuvmco Assessment – Meets:**

- (1) there have been personnel working at the site;
- (2) *ibid*;
- (3) *ibid*;
- (4) Nuvmco 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



March 22, 2011

Mr. Henry M. Carter  
Nuvemco, LLC  
10771 3200 Road  
Hotchkiss, CO 81419

John W. Hickenlooper  
Governor

Mike King  
Executive Director

Loretta E. Pineda  
Director

**Re: Last Chance #3 & #4, M-2008-012, Permit Issuance - Hard Rock Mining Operation**

Dear Mr. Carter:

On March 22, 2011 the Division of Reclamation, Mining and Safety found Nuvemco, LLC to have satisfied the applicable requirements of C.R.S. 34-32-101 et seq. for obtaining a mining and reclamation permit. Therefore, a permit is being issued. Two signed originals of the permit have been executed. We have kept one copy for our files and are enclosing one copy for your use. It is your responsibility to comply with all of the terms of the permit.

1. All of the original application materials, as amended and supplemented, are an integral part of your permit. They have been incorporated into the permit by reference. We presume that you have a copy of all of these materials; therefore, none have been enclosed with this mailing. We suggest that you keep a copy of the permit and the permit application at the mining operation as a reference for operating personnel, to help ensure compliance with the terms of the permit.

2. Changes in the mining and reclamation operations that differ from those described in the permit may require a modification to the permit. We suggest consulting the Hard Rock/Metal Mining Rules and Regulations and/or contacting us to determine if a revision to the permit is necessary. Rule 1.10 pertains to Amendments, Rule 1.9 to Technical Revisions, and Rule 1.11 to Conversions.

3. On your permit anniversary date each year, March 22, you must submit an annual fee and an annual report to us. The annual fee for this permit is \$1,150.00. Please consult the Act, Rules and Regulations, and your permit for specific annual report requirements applicable to your mine.

If you have any questions, please contact the Division.

Sincerely,

A handwritten signature in black ink, appearing to read "Loretta E. Pineda".

Loretta E. Pineda  
Division Director

Enclosure

# 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



### MINING AND RECLAMATION PERMIT HARD ROCK/METAL MINING OPERATIONS

Permit Number: M-2008-012  
Type of Permit: 112d-1  
  
Permit Date: March 22, 2011  
(Anniversary date for  
annual report and fees  
purposes)

THIS PERMIT is issued by the Mined Land Reclamation Board, Department of Natural Resources, State of Colorado.

### RECITALS

A. The Permittee, Nuvemco, LLC desires to conduct a mining operation known as Last Chance #3 & #4, for the purpose of extracting Uranium and vanadium. Unless the permit is modified or a separate permit is issued to cover the mining and/or recovery of other minerals or extractive products, the Permittee will not mine any other commodities at this site.

B. On June 9, 2010 the Mined Land Reclamation Board (the "Board") approved the Permittee's application for this permit, fixed the amount of the financial warranty and directed that this permit be issued upon the filing with the Division of Reclamation, Mining and Safety (the "Division") of performance warranty and financial warranty (or warranties) in the amount so fixed in form and substance approved by the Division. Said warranties have been filed with the Division.

C. If the Permittee desires to extract materials other than those listed in (A), a separate permit or a permit modification may be required.

D. On June 9, 2010 the Board made the following findings:

1. The application for this permit complies with the requirements of the Colorado Mined Land Reclamation Act, C.R.S. 34-32-101 et seq., as amended, and with all applicable local, state and federal laws;

2. The operation will not adversely affect the stability of any significant, valuable, and permanent man-made structure located within two hundred feet of the Affected Land, except where there is an agreement between the Operator and the persons having an interest in the structure that damage

to the structure is to be compensated for by the Permittee or if such an agreement cannot be reached, an engineering analysis establishes no damage will occur to the structure to the satisfaction of the Division and;

3. The proposed mining and reclamation operations can be carried out in conformance with the requirements of the Act, and the Hard Rock/Metal Mining Rules and Regulations.

E. The Permittee has made a showing satisfactory to the Board: 1) that it will employ, during and after its underground mining and/or surface operations, procedures designed to minimize environmental disturbance from such operation; 2) that it will provide for reclamation of the Affected Lands appropriate to the subsequent beneficial use of such lands; and 3) that, in the event of the failure of its proposed reclamation plan, it will take whatever measures may be necessary to assure the success of reclamation of the lands affected by such operations in accordance with the Act.

F. A copy of the Permittee's application, as amended and supplemented, has been approved by the Board and is, by this reference, incorporated herein.

G. The issuance of this permit does not relieve the Permittee from having to comply with all applicable Federal, State and County statutes, including State water law.

#### GRANTS, CONDITIONS AND AGREEMENTS

The Board, in reliance upon the representations and promises made in the permit application, as amended and supplemented, and the performance warranty, hereby issues a life of the mine permit to the Permittee, to engage in the operations described in the application on certain lands lying in the County of Montrose, State of Colorado. These lands are described in the permit application, as amended and supplemented, and are referred to herein as the "Affected Lands".

This permit is issued subject to the following conditions and agreements:

1) The Permittee will be bound by all applicable requirements of the Act, and all applicable rules and regulations of the Board, as amended from time to time, the terms of the permit application, the terms of the performance warranty, and the terms of the financial warranty filed with the Division.

2) The Permittee will file with the Division its annual report and fees on each anniversary date of this permit.

3) If analyses of the mining and reclamation operation and the data collected through monitoring and experimentation by the Permittee or monitoring by the Division indicate that the operation will not be able to comply with the requirements of the Act and applicable rules and regulations of the Board, the Permittee hereby agrees to exercise its best efforts, after consulting with the Division, to modify the plans to correct such deficiencies in the future. Such modifications may require technical revisions or amendments to the permit.

4) The Board, or its authorized representative may enter upon the lands of the permitted operation at all reasonable times for the purpose of inspection to determine whether the provisions of the Act, Rules and Regulations, and permit have been complied with pursuant to C.R.S. 34-32-121.

5) This permit may be revoked or suspended for non-compliance with the Act or applicable rules or regulations promulgated by the Board, the permit, or by violation of a Board Order.

6) a) Pursuant to 34-32-118(5) of the Act, the Board has a right of entry to reclaim the lands affected by the operation, or to respond to an emergency where the Division determines that any of the conditions of C.R.S. 34-32-124.5. exist

b) The Board will enter the lands to perform reclamation only if the Board has determined:

i. that reclamation required by the permit, statute, or regulations to be performed upon such lands has not been performed, or

ii. that financial warranty forfeiture proceedings described in the Act or similar provisions of subsequent laws, if any, have been initiated.

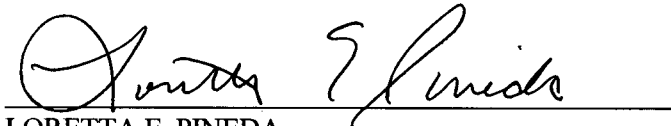
c) The Division, acting for the Board, will enter lands to respond to an emergency only where the Division determines that any of the conditions of Construction Material Rule 8.4.2. exist.

7) The additional conditions set forth in the attached rider, if any, are incorporated herein by reference.

/\_\_\_\_/ a) Rider is attached.

/ XX / b) No rider is attached.

MINED LAND RECLAMATION BOARD  
COLORADO DEPARTMENT OF NATURAL RESOURCES

A handwritten signature in black ink, appearing to read 'Loretta E. Pineda', is written over a horizontal line.

LORETTA E. PINEDA  
Division Director