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## **Nevada Division of Minerals**

### **November 14, 2023**

### **Strategic Plan (FY 24-28)**

#### ***Vision:***

To foster responsible mineral, oil, natural gas, and geothermal energy development essential to the state's economy and safeguard the public from dangerous legacy abandoned mines.

#### ***Mission Statement:***

To encourage and assist in the responsible exploration for and the production of minerals, oil, natural gas, and geothermal energy which are economically beneficial to the State, to provide for public safety by identifying, ranking, and securing dangerous conditions at mines that are no longer operating, and collecting and disseminating information on mineral exploration, production, and related topics.

#### ***Agency Background:***

The Nevada Division of Minerals (the Division) is part of the Commission on Mineral Resources (the Commission), a seven-member body appointed by the Governor who are each chosen for their knowledge of a specific facet of Nevada's mineral industry. The Commission serves to advise the Governor on mineral-related issues and to guide the Division. The agency is almost entirely fee-funded and receives no monies from the State's general fund.

The Commission and Division's history can be traced back to 1943, when the Nevada Legislature, in its 41<sup>st</sup> session, established the Advisory Mining Board, then as now, its members appointed by the Governor. The purpose of this board was to: 1) study ways and means of furthering the mining industry of the state; 2) further explore and develop the oil and gas industry; 3) report results of such studies to the governor; and 4) call upon the Nevada Bureau of Mines and its analytical laboratory in furthering the objectives and purpose of the legislative act.

In 1977, the Legislature combined the Oil and Gas Commission with the Advisory Mining Board to serve in an advisory capacity to the newly created Division of Minerals under the Department of

Conservation and Natural Resources (DCNR). It was the responsibility of this office to study the means of furthering the mining industry, develop the oil and gas industry, evaluate relevant federal policies, and administer the Oil and Gas Conservation Law. In 1983, the agency left DCNR when the Legislature created the Department of Minerals, supervised by the Commission on Mineral Resources, with all the authority and duties remaining much the same today. In 1987, the Legislature added the Abandoned Mine Lands (AML) program to NRS 513, requiring the inventory, notification of potential owners, and securing of dangerous conditions created by abandonment of mines.

Sweeping departmental changes occurred in 1993 and the Department was changed to the Division of Minerals within the newly created Department of Business and Industry. This only lasted for six years when the Legislature, in recognition of the importance of the mining, oil and gas, and geothermal industry to Nevada, moved the Division for the last time where it became a stand-alone, non-cabinet executive branch agency consisting of the Commission on Mineral Resources and the Division of Minerals.

### **NDOM Statutes:**

- NRS 513: Commission on Mineral Resources
- NRS 517: Mining Claims, Mill Sites and Tunnel Rights
- NRS 519A: Reclamation of Land
- NRS 522: Oil and Gas
- NRS 534A: Geothermal Resources
- NRS 534B: Dissolved Mineral Resources

### **Existing Environment, Challenges, and Opportunities:**

Nevada is the nation's leader in production of gold, lithium, barite, magnesite, and a current producer of several other minerals, including three minerals deemed critical by the federal government. We are at the forefront of our nation's current and future domestic supply of lithium. Nevada's diverse mineral endowment, strong mining history, and stable regulatory environment uniquely position us to supply our nation with vital minerals from a domestic, well-regulated source. Over the past decade, Nevada has ranked in the top five jurisdictions in the world and is currently number one for investment attractiveness based on the most current Survey of Mining Companies Investment Attractiveness Index, published annually by the Fraser Institute.

In 2022, the U.S. Department of Interior released an updated list of 50 mineral commodities critical to the U.S. economy and national security. Minerals on this list are integral to the function of our society and have been identified as having a supply chain vulnerable to disruption. Further, global decarbonization initiatives are driving rapid growth in energy minerals vital to electric vehicle and grid storage battery manufacturing, solar panel production, and energy infrastructure expansion. At current, eight critical minerals are either actively being explored for, developed, or have been produced here in the past.

There have been various challenges to mineral development in Nevada, but permitting has always been a point of contention. Recent national permitting policy reforms, rules, and guidance have the potential to drastically impact mineral development and infrastructure projects. Proposals from the Bureau of Land Management (BLM) to change conservation leasing, the Department of the Interior (DOI) report from the Interagency Working Group (IWG) on Federal Mining Law Reform to change the 1872 Mining Law, the Council of Environmental Quality's (CEQ) proposed National Environmental Policy Act (NEPA) reform, among other potential changes, all bring uncertainty to U.S. and Nevada mineral development. Continuous changes in rules that govern the permitting of mineral development and infrastructure projects deter investment into Nevada and may result in increased litigation, further delaying important projects.

Methods of reducing uncertainty and shortening the time it takes to permit a mine have been identified by both political parties, but the variance on how to achieve these reforms are drastic. However, Nevada leads by example in both permitting and development by taking a holistic approach to mineral development; this starts with a strong, collaborative relationship between industry and regulatory agencies.

Approximately 86% of Nevada's land is managed by the federal government. In total, over 17 million acres or 28% of the state's land has been effectively or completely withdrawn from mineral entry. In the last 20 years, nearly 7-million acres of land within Nevada has been withdrawn from mineral entry. In the past two years, key areas such as the Avi Kwa Ame National Monument and the Navy's Fallon Range Training Complex Modernization have withdrawn land from mineral entry; both of which include areas that are known to have some of the highest critical mineral potential in the state. Continual land withdrawals from mineral entry will limit the potential of our state's mineral resource endowment, removing the ability to uncover and develop useful mineral deposits that may be vital to future technologies. Providing information on proposed land withdrawals and working with State partners and stakeholders is critical to informing policy makers when making balanced land-use decisions.

Existing and proposed solar and wind leases are also impacting lands available for mineral development. The 2013 Segregation of Lands-Renewable Energy Rule enabled the segregation of lands from mineral entry for two years while evaluating wind or solar lease right-of-way (ROW) applications. Once a ROW is approved, the land becomes subject to the authorized ROW use which effectively precludes mineral development. One point to emphasize is that mineral and geothermal resources are "where they are," and do not have the potential to be relocated like a solar field or wind farm. Opportunities for the Division to work with and provide data to stakeholders and working groups may eliminate potential conflicts and keep mineral resources available for development in the future.

Nevada has many opportunities to further the responsible production of minerals, including vital critical minerals within the state, and lead the U.S. in lithium production. The 2023 strategic plan put forth by

the Nevada Governor’s Office of Economic Development (GOED) identified Nevada’s ability to become a “major player in the EV supply chain” as Nevada may be the only location in the world with a complete, vertically integrated lithium supply chain.

Nevada is also the United States’ second leading producer of geothermal energy – a carbon free and baseload energy supply. We have seen strong growth in the geothermal energy sector across the state in recent years and expect the industry to continue to expand. However, Nevada’s current transmission line infrastructure restricts the potential locations of new geothermal power plants. Current permitting constraints for both the geothermal power plant and new transmission line infrastructure can pose significant challenges or delays to future development.

The Division prides itself for their constant pursuit of efficiency and improving program processes. Over the past decade, the Division has substantially expanded its largest program, the AML program, and drastically changed how it presents mining claim, permitting, and mineral production data to the public. Further, the agency has developed both hydraulic fracturing and dissolved mineral exploration regulations used by companies across the state. The Division is also known by industry, non-government organizations (NGOs), media, and other state agencies, including the Governor’s Office, as the key point of contact for mining or mineral related topics. The Division plans to maintain and build new relationships over the next five years.

### Existing Performance Measures

Activity	Performance Measure	Description	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Forecast	FY 2025 Forecast
AML Public Safety Program	Percent of Hazardous Abandoned Mine Openings Secured	Percent of Inventoried Abandoned Mine Land Openings Which Are Currently Secured (Goal: Secured vs. Inventoried > 70%)	81%	83%	83%	83%	83%
K-12 Education Programs and Services	Minerals Education and AML Presentations per Employee	Number of Minerals Education and Public Safety (Abandoned Mine Land) Presentations Provided to Schools, Civic and Trade Groups Per Employee (Goal: ≥ 24 per Employee)	36	31	30	24	24
Well Inspections	Percent of Oil, Gas, and Geothermal Wells Inspected per Year	Percent of Active Oil, Gas, and Geothermal Wells Inspected (Goal: ≥ 33%)	66%	50%	35%	50%	50%

## *Strategic Goals*

This Strategic plan has identified five goals to meet the mission and vision of the Division. Each goal has multiple objectives, each with an identified benchmark for success. The goals and objectives are not ordered by prioritization.

### **Goal 1: Continue to explore opportunities to encourage and assist the economic development of responsible exploration for and production of minerals, oil, gas, and geothermal energy.**

With the inception of the Advisory Mining Board in 1943, the Nevada Legislature identified the importance of furthering responsible mining, oil and gas, and providing industry information to the public, stakeholders, and Governor's office. The mining industry continues to be one of the largest contributors to Nevada's economy and in most rural counties it is the largest contributor. Responsible production of minerals is vital to both the Nevada and the world economies, and the Division of Minerals aims to continue to provide the public, stakeholders, NGOs, and Government agencies the most reliable data on mineral exploration and production in Nevada. The Division works collaboratively with federal and state regulators to administer the annual Nevada Excellence in Reclamation awards, a program that seeks to share innovative, industry-leading reclamation activities with mining companies across the state.

**Objective 1:** Continue to build upon Nevada's strong presence at industry trade events.

Attendance at industry events allows the Division to promulgate Nevada mining and fluid minerals statistics and information with all stakeholders and learn about new emerging technologies and business that would affect the mining industry in Nevada. The Division also utilized these events and other AML specific conferences to educate about the dangers of legacy abandoned mines, as mandated in NRS 513, to respective key audiences. Networking with regulators, companies, NGOs and individuals from other states, the federal government and international partners has been greatly beneficial in broadening Division staff's institutional knowledge and has driven innovation in the Division's AML program.

**Success benchmark:**

- Success will be measured by the number of events attended and the number of interactions with individuals before, during and after each event.

**Objective 2:** Continue to enhance the Division's open-data website in the following ways:

- Provide additional education on responsible mineral, oil, natural gas and geothermal energy exploration and production within the state;
- Provide publicly available datasets available for free download and use;
- Expand map-based platforms in ways that may assist executive branch agencies and the Nevada legislature in making policy decisions based on publicly available data and science.

The Division’s open-data website is a publicly available platform where users can interact with geospatial and table data in an interactive format. The Division began this service in 2017 and we have since expanded the number of datasets and tools significantly. Regulators from federal and state agencies, as well as members of private companies and the public, have made use of our open data website and consistently provide positive feedback.

**Success benchmark:**

- Success will be measured by at least one new online mapping software launched a year and an increase of the open data site usage by a 10% average each year over the next five years.

**Objective 3:** Assist in the production of Nevada-specific, industry-related reports and studies, on an annual CMR approval basis, with the Nevada Bureau of Mines and Geology (NBMG) or another institute to include:

- Bi-annual Mineral Exploration Survey
- Annual Mineral Industry Report (MI Report)
- Major Mines and associated maps
- Other Commission approved special reports

The Division produces several annual or biannual reports as prescribed by NRS 513. These reports seek to educate and inform on industry specific statistics, such as production and exploration, or gauge future investment and development. The Commission has directed the Division to conduct special reports in the past, the most recent being a 2018 report titled “Opportunities for Precious Metals Toll Milling and Copper Concentrate Processing in Nevada”. This report stemmed, in part, from a lack of capacity in the state and U.S. to refine copper produced in Nevada. Much of this copper is currently shipped overseas to China for processing.

**Success benchmark:**

- Success will be measured by the timely production of regular reports made available to the public in a free downloadable format or in hard copy.

**Objective 4:** Provide mineral education presentations and activities in Nevada classrooms and seek to expand our audiences.

Currently the Division follows a performance measure of mineral education and AML related presentations or activities per FTE per year. This performance measure has been surpassed every year since 2013. In addition, the Division has found unique ways of reaching various audiences, including the creation of web-hosted video content, educational applications, and an online, do-at-your-own-pace course titled “All About Mining: Mining for a STEM Education”; this virtual course was created alongside the Nevada and Colorado Mining Associations and provides Contact Unit credits to Nevada’s K-12 educators.

**Success benchmark:**

- Success will be measured by continuing to meet the existing performance measure standard of 24 presentations per FTE and developing one new classroom activity per year.

**Objective 5:** Monitor federal, State, and local legislation and policy changes that may affect the minerals industry and provide this information to the Governor’s Office or related regulatory authorities.

Division staff review news periodicals and websites, receive emails from the State clearinghouse distribution list, and attend industry functions, among other avenues to fulfill this objective. In addition, the Division is currently pursuing membership to the Interstate Mining Compact Commission (IMCC) -- a commission made up of representatives from U.S. mineral-producing states’ regulatory agencies -- that collaborate to share insight on legislation and policy changes and have a shared voice in Washington DC centering on the responsible production of minerals. Currently the Division is a contributing member of multiple working groups or committees to provide the mining data and knowledge for policy decisions.

**Success benchmark:**

- Success will be measured by the Division remaining as the point of contact in mineral related questions or policy decision with industry, NGOs, stakeholders, and other government agencies.

**Goal 2: Expand the Division’s Abandoned Mine Lands Program**

The Division’s AML physical safety program is one of the largest hardrock (non-coal) programs in the nation. While the Division has made tremendous progress in the inventory of nearly 25,000 physically dangerous abandoned mines statewide, there are still decades of work at current and forecasted funding levels. An internal estimate showed that at current funding levels it would take over 100 years to complete the goal of the program.

County mining claim filing fees provide nearly 80% of the Division’s funding; this source can be difficult to forecast in the long term due to volatility in commodity prices and potential state or federal policy changes affecting mining. The AML program currently consumes approximately 50% of the agency budget. At present, it appears that the mining industry is stable or experiencing growth, allowing the Division to reasonably project near-term funding. The Division is also successful in securing additional funding through federal partnerships and will continue to pursue additional funding mechanisms.

**Objective 1:** Continue to build on the foundational relationships with our federal, state, and local partners. Currently, federal partners see the Division’s AML program as a success and have steadily increased annual assistance funding for work on the lands they manage.

**Success benchmark:**

- Success will be measured by maintaining existing partnerships and securing additional federal funding for the Division’s AML program. The Division will seek a 33% increase in funding from current levels over FY 23 to FY 29 and one additional state or federal partner would be considered a success.

**Objective 2:** Prepare for, and work with the Office of Environmental Policy and Compliance (OEPC) new national hardrock AML program. The new program was created under Section 40704 of the Bipartisan Infrastructure Law (BIL) and is the first of its kind for hardrock AML. Since the passage of the BIL, the Division has been working with OEPC to give a state perspective on the new program.

**Success benchmark:**

- Success will be measured by being an annual recipient of OEPC’s AML grants and continuing our existing relationship in development and implementation of the program.

**Objective 3:** Continue Nevada’s presence at the National Association of Abandoned Mine Lands Programs (NAAML) and pursue membership at the Interstate Mining Compact Commission (IMCC) to help develop the new national hardrock AML program, stay up to date on ongoing mining and AML related topics, and coordinate with other state, tribal, and federal AML programs to improve efficiencies in our own program.

**Success benchmark:**

- Success will be measured by active engagement with both NAAML and IMCC to further the Nations Hardrock AML program to be prepared for any changes that could affect the Divisions program. Nevada becoming a full member of IMCC would also be considered a success.

**Objective 4:** Rebranding and developing new AML Stay Out, Stay Alive (SOSA) educational materials and activities. In FY23 the Division initiated a new SOSA campaign using online ad purchases with short one minute to 15 second videos. These videos were used to target the more common digital audience such as YouTube, Instagram, Facebook, and other platforms and received more video views in a few weeks than materials presented during the previous few years. Now the Division needs to revamp all AML SOSA materials, find additional ways to get the message to the public, and continue the new digital ad campaign.

**Success benchmark:**

- Success will be measured by the development of a new AML SOSA campaign and updated content.

**Objective 5:** Build the AML program staff and enhance personnel and technological capabilities to shorten the overall timeline to complete inventory and securing AML hazards. Nevada’s hardrock AML

problem will take decades if not a full century to mitigate at the current funding rate. If long-term funding solutions in objectives 1 and 2 are met, additional staff will help shorten the AML mitigation timeline.

**Success benchmark:**

- Success will be measured by an increase of at least one AML staff member and ability to perform additional AML remediation work.

**Goal 3: Continue to regulate the drilling for oil, gas, geothermal, and dissolved mineral exploration, while adapting to new and emerging technologies.**

Although the oil and gas production in Nevada is near an all-time low, monitoring new extractive technologies will allow the agency to better prepare for growth within the industry. The U.S. energy transition to renewables is incentivizing every state to look for opportunities to build their renewable portfolios. Neighboring states are looking at Nevada’s geothermal potential for their renewable portfolios and monitoring proposed technological advances in the industry. Nevada is the second largest geothermal energy producing state in the country and is on track to become the largest producer in the country. Exploration and new development plans are on the rise and various new technologies from the oil and gas industry are now being tested to help enhance existing geothermal production as well as identify new geothermal resources.

Nevada is the only state in the nation to produce lithium carbonate from extracted brines and has seen a major influx in exploration efforts and exploration expenditures (141% from 2021 to 2022) for the delineation of lithium resources. The national spotlight has been placed on Nevada for the enormous potential of not only primary lithium production, but also for downstream manufacturing and recycling. The Division of Minerals helps in the process of lithium brine exploration. The Dissolved Mineral Resource Exploration regulation, NRS 534B, allows exploration companies to pump and test up to 5-acre feet of water per project to further refine potential lithium resources providing a key step in the exploration phase.

**Objective 1:** Continue to regulate the drilling for oil, gas, geothermal, and dissolved mineral resources while continuously monitoring rapidly changing technologies to prevent degradation of the waters of the state. If warranted update the Nevada Administrative Codes (NACs) to meet the demands of new and emerging technologies.

**Success benchmark:**

- Success will be measured by efficiently and effectively permitting new drilling operations within the state that include proposed new technologies that will increase mineral resources.

**Objective 2:** With an anticipated increase in geothermal and dissolved minerals, the Division will closely evaluate the workload and then build the Fluid Minerals program staff (if warranted) and capabilities to meet increased drilling permits, underground injection control (UIC) permit approvals, and projects applications. This objective will require that the workload and long-term revenue from permit fees justify additional staff members.

**Success benchmark:**

- Success will be measured by an increase of one Fluids Mineral staff member and ability to perform additional drilling permitting (if warranted).

**Goal 4: Improve the public and stakeholders' ability to input data to and receive data from Division.**

**Objective 1:** Improve the ability to receive and report mineral production data required under NRS 513.073 Sec. 3. The Division is mandated to be the repository of all mineral production data which is used to correlate and validate the Nevada Department of Taxation Net Proceeds of Minerals Tax. This tax has provided over \$2.4 billion in tax revenue since 2002. Half of these taxes go to the producing County and the remaining half to the State General Fund. In 2021 the Nevada Legislature approved an additional 0.75% - 1.1% tax increase depending on the amount of gross revenue reported to specific gold and/or silver producers, that is dedicated towards funding k-12 education.

**Success benchmark:**

- Success will be measured by a 20% reduction in time processing and performing QAQC on the submitted data and improving coordination with the Department of Taxation.

**Objective 2:** Create an online interface for Fluids Minerals operators to enter required applications, forms, and data. This platform would be similar to North Dakota's [NorthSTAR](#) program or California's [CalGEMs](#). The application could be a cloud-based application designed to help manage information by streamlining operations, simplifying processes, and providing a better way for operators and the Division to collaborate, collect, and analyze data.

**Success benchmark:**

- Success will be measured by implementing an online interface that will reduce overall time spent processing the submitted data as well as a better more direct communication path with the Division's Oil & Gas, Geothermal, and Dissolved Minerals databases.

**Objective 3:** Digitize the Division's Reclamation Performance Bond Pool program.

The Division administers the Nevada Reclamation Performance Bond Pool through which, mine or exploration operators may apply for bond coverage to satisfy the bond requirements of the regulating

agency, either the Bureau of Land Management or the Nevada Division of Environmental Protection. The program is designed to reduce the financial burden of, and timeframe for, obtaining a reclamation bond for small operators. Currently the Bond Pool is mostly in paper format with an incomplete Microsoft Access Database and accompanying Excel tables.

**Success benchmark:**

- Success will be measured by implementing a streamlined digital process for the Bond Pool program and a completed database.

**Goal 5: Maintain existing Performance Measures**

Activity	Performance Measure	Description	Goal
AML Public Safety Program	Percent of Hazardous Abandoned Mine Openings Secured	Percent of Inventoried Abandoned Mine Land Openings Which Are Currently Secured	Secured/Inventoried > 70%
K-12 Education Programs and Services	Minerals Education and AML Presentations per Employee	Number of Minerals Education and Public Safety (Abandoned Mine Land) Presentations Provided to Schools, Civic and Trade Groups	≥ 24 per Employee
Well Inspections	Percent of Oil, Gas, and Geothermal Wells Inspected per Year	Percent of Active Oil, Gas, and Geothermal Wells Inspected	≥ 33%

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