

BDR 46-590 AB 313

EXECUTIVE AGENCY FISCAL NOTE

AGENCY'S ESTIMATES

Date Prepared: April 3, 2023

Agency Submitting: State Department of Conservation and Natural Resources, Division of Environmental Protection

Items of Revenue or Expense, or Both	Fiscal Year 2022-23	Fiscal Year 2023-24	Fiscal Year 2024-25	Effect on Future Biennia
Personnel Services (Expense)		\$177,290	\$237,022	\$474,044
In-State Travel (Expense)		\$5,192	\$5,192	\$10,384
Operating (Expense)		\$5,625	\$6,547	\$13,094
Equipment (Expense)		\$10,462		
Indirect Cost (Expense)		\$39,004	\$52,145	\$104,290
Information Services (Expense)		\$7,033	\$1,628	\$3,256
Total	0	\$244,606	\$302,534	\$605,068

Explanation

(Use Additional Sheets of Attachments, if required)

AB313 (as introduced) requires an operator of an existing mining operation to submit a revised plan for reclamation to include pit lake backfill when the operating permit is renewed or there is a major modification to a reclamation permit, if the current permit does not address pit lake backfill. The proposed statutes would also require new mines to include backfilling in the reclamation plan for open pits that will be excavated below the pre-mining water table. The Nevada Division of Environmental Protection is charged with regulating the mining industry from exploration and operation through reclamation and closure. As introduced, this bill will have a fiscal impact on the Division. The attached agency explanation details the need for two new positions, an Environmental Scientist III and a Registered Professional Engineer. See Exhibit 1 for the full Agency explanation.

Name Jennifer Carr

Title Administrator

GOVERNOR'S OFFICE OF FINANCE COMMENTS

The agency's response appears reasonable.

Date Friday, March 31, 2023

Name Amy L. Stephenson

Title Director

DESCRIPTION OF FISCAL EFFECT

AB 313/BDR 46-590

Nevada Division of Environmental Protection (NDEP)

The effective date of this Act is not identified; therefore, the fiscal effect is estimated as of October 1, 2023.

NDEP Review and Basis for Estimating the Fiscal Effect:

The Bill establishes that an operator of an existing mining operation submit a revised plan for reclamation if the existing plan for reclamation is: (a) impacted by a renewal or modification; or (b) is inconsistent with the proposed statutes for backfilling a pit to eliminate expression of a pit lake or permanent wetland. The revised plan is triggered when: (a) a renewal of a permit for water pollution control pursuant to NRS 445A is conducted; or (b) if the mining operation requests a major modification of their reclamation permit. The proposed statutes would require new mines to include backfilling in the reclamation plan for open pits that will be excavated below the pre-mining water table.

AB 313 proposes certain exceptions from the above for (a) new mines, major modifications, or NRS 445A permit renewals at existing mines to demonstrate through *“clear and convincing evidence that backfilling the open pit is technically not possible without indefinite long-term management to avoid groundwater degradation”*; or (b) *“by a preponderance of the evidence, that backfilling the open pit would result in undue hardship on the operator.”* However, the Division, *“may not take the economics of the operator into consideration when determining whether to approve or deny the application.”*

Finally, the Bill increases the scope of mining reclamation in 519A through addition of the term *“groundwater”* to legislative findings that *“proper reclamation is necessary to prevent undesirable land, surface water [and groundwater] conditions detrimental to the ecology and to the general health, welfare, safety and property rights of the residents of this state.”* The Bill proposes to include numerous additions of *“surface water and groundwater”* to the 519A laws.

BMRR Program Baseline

The NDEP Bureau of Mining Regulation and Reclamation (BMRR) has four technical Branches that work in concert.

- The Regulation Branch has responsibility for protecting waters of the State under the Water Pollution Control Law (WPCL) in NRS 445A.300 through 445A.730 and administered through NAC 445A.350 through 445A.447. The Branch issues Water Pollution Control Permits (WPCP) to an operator prior to the construction of any mining, milling, or other beneficiation process activity. The Regulation Branch maintains 154 permitted facilities; when staffed to currently authorized levels, each

technical FTE position in the Regulation Branch averages 39 permits. The current total of 180 permitted facilities in Regulation and Closure is expected to increase to 195 by 2025.

- The Closure Branch also has the responsibility of protecting waters of the State under the WPCL and regulations cited above. This branch works with facilities at the cessation of operations to ensure that all components, including Waters of the State, are left chemically stable for the long term. The Closure Branch maintains 26 permitted facilities and staff workload averages 13 permits each.
- The Reclamation Branch regulates exploration and mining operations in Nevada on both private and public lands under the WPCL in NRS 519A.010 through NRS 519A.280 and administered through NAC 519A.010 through NAC 519A.415. The branch issues permits to exploration and mining operations (effecting over 5 acres) to reclaim the disturbance created to a safe and stable condition to ensure a productive post-mining land use. The Reclamation Branch also manages the financial surety (e.g., bonding) for reclamation. The Reclamation Branch maintains 275 permitted facilities and this figure is projected to increase to 300 by 2025. When staffed to currently authorized levels, each full time equivalent (FTE) technical position averages 55 permitted facilities.
- The Hydrology Branch supports the Bureau's permitting, reclamation, and closure functions by performing pit lake modeling, hydrogeochemical studies, and other services.

The BMRR program is 100% fee funded by the mining industry. No federal grants or general funds are received.

An important part of the permitting process is the public notice requirements and the right for anyone to request a public hearing on a draft permit or appeal any permit to the State Environmental Commission. BMRR actions are not historically appealed; however, pit lake water quality modeling has generated significant public interest and debate recently warranting workshops and public hearings, resulting in significant diversion of BMRR staff time and resources. Passage of AB 313 is expected to increase this further and justifies the need for additional staffing.

The science of pit lake predictive modeling is constantly evolving. In 2016, BMRR created a hydrologist/modeler position for evaluating pit lakes and hydrological and geochemical predictive models. The hydrologist position has become a critical component in the regulation and reclamation application review process, with project workload exceeding current staffing. Adding a second hydrologist/geochemist would increase the level of service necessary to implement the Bill.

Estimated Fiscal Effect:

BMRR has reviewed AB 313 and has determined that there will be a fiscal impact to two BMRR branches: Regulation and Hydrology.

In accordance with existing law in NRS 445A, water pollution control permits renew every 5 years and effect both the Regulation Branch permits for active mines, and Closure Branch permits for inactive mines that have performed reclamation and are moving toward permanent closure. Reclamation permits are not renewed on a schedule but are affected by major modifications to mine operations plans and are also evaluated every 3 years to re-calculate the financial security (e.g. bond) in place for reclamation using the Nevada Standard Reclamation Cost Estimator (SRCE).

As of March 2023, BMRR records indicate 87 open pits throughout Nevada, not including placer operations. Nearly all these pits are situated on public land (i.e., Bureau of Land Management and US Forest Service) with small portions shared by private landowners. Of these open pits:

- 49 will not be impacted by water other than precipitation events:
 - 9 are currently, or are proposed for, backfilling.
- 38 are or are predicted to become Pit Lakes:
 - 8 Pit Lakes are currently predicted to exceed 200 acres.
 - 4 Pit Lakes are currently predicted to be 85 acres to 200 acres.
 - 26 Pit Lakes are currently predicted to be less than 85 acres.

Mining is market and technology driven, so some existing or new surface mining operations can be expected to continue and/or eventually penetrate the water table, whereas some properties may decide to cease operations close mining operations, depending on the location of the mineral resource and economics related to metal commodity price fluctuations.

Description of Fiscal Effect

Implementation of the Bill will require BMRR staff to revisit previously approved permits and operating plans at every 5-year renewal or if a major modification to the mine is sought. Adding the requirement for a mine to submit a revised plan for backfilling an open pit or pit lake will significantly increase review time, workload, and project backlog for the existing staff in the Regulation and Closure branches. BMRR anticipates the need to hire two (2) new FTE: a Professional Engineer position for Regulation Permitting and an ES III Hydrologist position to coordinate with and support the other BMRR branches with modeling activities as previously described herein.

The new Professional Engineer position will address the increased workload related to the Bill for reviewing and permitting new or revised mine operation plans. The ES III Hydrologist/Geochemist position will work in concert with the current Hydrologist in the technical review of submitted mine pit lake studies, site characterization geochemistry, groundwater hydrology, and validity of predictive modeling results to demonstrate that the backfill will not adversely affect pit lake water quality and degrade Waters of the State. These positions will also require expertise in the calculation of the volume of rock required to eliminate the pit lake's surface expression plus the additional volume of material to

address any seasonal fluctuations, and the mineral quality of the backfill material with respect to groundwater protection.

The Professional Engineer and Hydrologist positions are typically at the forefront regarding permit public hearings and State Environmental Commission appeals, particularly when pit lakes are involved. It is these positions that experience the direct impact first, due to unplanned workload increases and short time constraints when tasked with responding to comments and preparing testimony for hearings and appeals.

Because the existing 5-year permit renewal schedule is the primary trigger for evaluating a pit lake for backfilling, no new revenue will be experienced as a result of this Bill.