



IDAHO MINING ASSOCIATION

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John Tippetts, Director
Idaho Department of Environmental Quality
1410 N Hilton St.
Boise, ID 83706

Re: IDAPA 58.01.13, Cyanidation Facilities

Dear Director Tippetts,

IMA has long been a trusted voice on mining issues in the state of Idaho. For well over 100 years we have represented miners and mining companies engaged in mineral exploration, mineral developments, and land reclamation throughout the state of Idaho. Our membership not only consists of mining companies but also companies and industries that provide services to the mining industry within the state. IMA and its members are committed to responsible and sustainable mineral withdrawal in Idaho and our member companies continue to utilize and explore more innovative and science-based methods to extract minerals for the societal needs of everyday life while protecting and preserving the environment in Idaho for future generations. It is for these reasons that we are requesting the department conduct a rulemaking on rules regarding cyanidation facilities (IDAPA 58.01.13).

The Idaho Department of Environmental Quality (IDEQ) regulates the use of cyanide as it relates to mining activities. Regulation and oversight of these activities are essential to protect Idaho's people and natural resources and we recognize the important role IDEQ plays in ensuring mining companies design, construct, operate and close cyanidation facilities that meet Idaho's regulatory requirements to protect human health and the environment ("regulatory goals").

Last modified in 2006, IDAPA 58.01.13 governs the construction, operation and closure of cyanidation facilities. As currently written, the rules outlined the best available practices in 2006. Today, many of the materials available to industry have been improved and best practices for facility design, construction, operations and closure have progressed. The current rules adopted a one-size fits all for all aspects of cyanidation facilities without regard to location, level of cyanide, construction material and closure goals.

Through new technologies, and materials which meet or exceed regulatory goals, we know more about what designs work based on the demonstrated performance of facilities in other jurisdictions. As the rules governing cyanidation facilities are now more than a decade old, IDAPA 58.01.13 no longer references best available technology or the best practices for design and closure. Working with a prescriptive and outdated set of rules puts our industry in the challenging position of needing to comply with requirements that are unnecessarily burdensome and may not be the best methodologies to achieve the regulatory goals.

The attached sets forth areas of improvement or added flexibility that we are requesting IDEQ consider revising the current rules. Moving away from overly prescriptive rules that quickly become outdated in favor of rules that focus on performance-based outcomes will provide more successful results and better meet the intent of Idaho law. Additionally, simplifying the rules to focus on results will meet the requirements laid out by Governor Brad Little in Executive Order No. 2019-02. Therefore, on behalf of IMA members, and in the best interest of Idaho's citizens, lands, water quality and wildlife, we respectfully request that IDEQ opens IDAPA 58.01.13 for review and modernization through a negotiated rule-making commencing as soon as possible with the goal of completing a proposed rule to be submitted to the Board of Environmental Quality in November 2019.

IMA appreciates your consideration of this request. We look forward to working together to continue to create and modernize mining regulations that are in the best interest of the State of Idaho and that protect the resources and environment within our state.

Kindest Regards,



Benjamin J. Davenport
Executive Vice President
Idaho Mining Association

Enclosure

IDAPA 58.01.13 – Areas of Improvement.

- 1. Applicability of Design Criteria:** The prescriptive design included in the Rule is perhaps applicable to an impoundment that contains liquid primarily (i.e. a pond) or other material that would be subject to periodic unloading and replacement (such as a heap leach pad). Whereas a tailings impoundment would permanently impound continually dewatered solids to thicknesses over 300 feet, makes identification of leaks in the liner and accessing them for the purpose of repair impracticable. The Rule should provide sufficient latitude to allow for a composite liner design that is permanent and should consider other mechanisms for management of leakage (such as performance-based compliance).
- 2. Design Materials:** The Rule specifies material types for liner components, including 80 milli-inch (80-mil) high-density polyethylene (HDPE) for low permeability barriers. Research and development of materials for use in liner applications continues to produce alternative construction materials that meet or exceed the performance of those used in the past. The Rule should recognize that these advancements occur and instead should include a performance-based requirement that allows for consideration of a broader range of applicable materials.
- 3. Constructability:** The prescribed leak detection system included in the Rule includes installation of a high-permeability medium between the primary and secondary liners designed to collect, transport and remove all process water that passes through the primary liner, for the purpose of minimizing hydraulic head on the secondary liner. The construction of such a leak detection system will undoubtedly damage the secondary liner upon which it is placed, and thus it is equally as likely to serve as an efficient mechanism for transmitting leakage from the primary liner to and through the secondary liner. Furthermore, the installation of such material (to an adequate specification) on slopes that will occur around the impoundment perimeter is not practicable. The Rule should provide additional latitude for a broader interpretation of “leak detection” that is performance (and compliance) based and does not necessarily include the collection and redistribution of process waters in perpetuity. [Noting also the impracticability of identifying and repairing leaks, if they occur.]
- 4. Physical Characteristics of Impounded Materials:** The prescriptive impoundment design included in the Rule does not consider the range of physical characteristics of impounded material and does not allow for variability in design approach based on this characteristic. Current research has demonstrated that the consolidation of tailings results in a mass of increasingly low-permeability material with a low hydraulic conductivity. Should leaks occur, there are better options for managing them rather than providing a zone of high permeability in the leak detection design element of the prescribed design. Modification of the Rule to allow for a composite liner design that is performance-based would incorporate site-specific characteristics, best practices from similar facilities with similar impounded material, and would ultimately be more protective of the environment.
- 5. Chemical Characteristics of Impounded Materials:** The Rule does not provide for any variability in design to adequately consider the range of chemical characteristics of impounded materials and process waters; the current prescriptive design is the same for process water regardless of whether the cyanide concentration is 5 parts per million (ppm) or 500 ppm. When coupled with the variability in the physical characteristics of impounded materials, leakage rates and leakage concentrations can vary widely and have profoundly different impacts on the environment. The Rule should be modified to allow for these variables to be considered in the impoundment liner design so that a facility that is most protective of the environment may be constructed.