## IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

## Waste Management and Remediation Division

## 58.01.13 – Rules for Ore Processing by Cyanidation

**To whom does this rule apply**?
*This rule applies to any person or entity that processes ore using cyanide as a primary leaching agent.*

**What is the purpose of this rule**?
*This rule establishes the procedures and requirements for the issuance and maintenance of a permit to construct, operate, and close facilities that process ore using cyanide as a primary leaching agent. This rule is intended to ensure that process water and process-contaminated water generated in ore processing operations that utilize cyanide, and pollutants associated with the cyanidation process, are safely contained, controlled, and treated so that they do not interfere with the beneficial uses of the waters of the state and do not endanger public safety or the environment.*

**What is the legal authority for the agency to promulgate this rule**?
*This rule implements the following statute passed by the Idaho Legislature:*

- Chapter 1, Title 39, Idaho Code – Health and Safety, Environmental Quality

**Who do I contact for more information on this rule**?

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**000. LEGAL AUTHORITY.**
Title 39, Chapter 1, Idaho Code, grants the authority to the Board of Environmental Quality to adopt rules, regulations and standards to protect the environment and the health of the State; grants authority to the Director to issue permits as prescribed by law and by the rules of the Board; and requires Department of Environmental Quality review and approval of plans and specifications for all new facilities, or for modifications or expansions to existing facilities, that process ore by cyanidation; and authorizes the Director to require a reasonable fee for processing permit applications. (3-20-20)T

**001. TITLE, SCOPE AND INTENT.**

**01. Title**. These rules are titled IDAPA 58.01.13, "Rules for Ore Processing by Cyanidation." (3-20-20)T

**02. Scope and Intent**. These rules establish the procedures and requirements for the issuance and maintenance of a permit to construct, operate and close that portion of a cyanidation facility that is intended to contain, treat or dispose of process water or process-contaminated water containing cyanide. The provisions of these rules also establish requirements for water quality protection which address performance, construction, operation and closure of that portion of any cyanidation facility that is intended to contain, treat, or dispose of process water. These rules are intended to ensure that process water and process-contaminated water generated in ore processing operations that utilize cyanide as a primary leaching agent and pollutants associated with the cyanidation process are safely contained, controlled, and treated so that they do not interfere with the beneficial uses of the waters of the state and do not endanger public safety or the environment. (3-20-20)T

**002. WRITTEN INTERPRETATIONS.**
As described in Section 67-5201(19)(b)(iv), Idaho Code, the Department of Environmental Quality may have written statements which pertain to the interpretation of these rules. If available, such written statements can be inspected and copied at cost at the Department of Environmental Quality, 1410 N. Hilton, Boise, Idaho 83706-1255. (3-20-20)T

**003. ADMINISTRATIVE PROVISIONS.**
Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality." (3-20-20)T

**004. INCORPORATION BY REFERENCE.**
These rules do not contain documents incorporated by reference. (3-20-20)T

**005. OFFICE HOURS – MAILING ADDRESS AND STREET ADDRESS.**
The state office of the Department of Environmental Quality and the office of the Board of Environmental Quality are located at 1410 N. Hilton, Boise, Idaho 83706-1255, telephone number (208) 373-0502. The office hours are 8:00 a.m. to 5:00 p.m. mountain time, Monday through Friday. (3-20-20)T

**006. CONFIDENTIALITY OF RECORDS.**
Information obtained by the Department under these rules is subject to public disclosure pursuant to the provisions of Title 74, Chapter 1, Idaho Code, and IDAPA 58.01.21, "Rules Governing the Protection and Disclosure of Records in the Possession of the Idaho Department of Environmental Quality." (3-20-20)T

**007. DEFINITIONS.**

**01. Beneficial Use**. Any of the various uses which may be made of the surface and/or ground water of the state including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, navigation, recreation in and on the water, wildlife habitat, and aesthetics. Beneficial uses for specific stream segments are established in Idaho Department of Environmental Quality Rules, IDAPA 58.01.02, "Water Quality Standards." (3-20-20)T

**02. Best Management Practices (BMPs)**. Practices, techniques or measures developed, or identified, by the designated agency or identified in the state water quality management plan, as described in IDAPA 58.01.02, "Water Quality Standards," which are determined to be a cost-effective and practicable means of preventing or reducing pollutants generated from nonpoint sources to a level compatible with water quality goals. (3-20-20)T

**03. Cyanidation**. The method of extracting target precious metals from ores by treatment with a cyanide solution, which is the primary leaching agent for extraction. (3-20-20)T

**04.** **Cyanidation Facility**. That portion of a new ore processing facility, or a material modification or a material expansion of that portion of an existing ore processing facility, that utilizes cyanidation and is intended to contain, treat, or dispose of cyanide containing materials including spent ore, tailings and process water. (3-20-20)T

**05.** **Department**. The Idaho Department of Environmental Quality. (3-20-20)T

**06.** **Director**. The Director of the Department of Environmental Quality or his designee. (3-20-20)T

**07.** **Discharge**. When used without qualification, any spilling, leaking, emitting, escaping, leaching, or disposing of a pollutant into the waters of the state. (3-20-20)T

**08.** **Groundwater**. Any water of the state which occurs beneath the surface of the earth in a saturated geological formation of rock or soil. (3-20-20)T

**09.** **Impoundment**. For the purpose of these rules an impoundment means a structure such as a pond, reservoir, tank, or vat that collects and confines liquids or slurries. (3-20-20)T

**10.** **Land Application**. A process or activity involving application of process water, wastewater, surface water, or semi-liquid material to the land for the purpose of disposal, pollutant removal, or groundwater recharge. (3-20-20)T

**11.** **Liner**. A continuous layer of natural or man-made materials beneath and, if applicable, on the sides of a surface impoundment or leach pad which restricts the downward and lateral movement of liquids. (3-20-20)T

**12.** **Material Modification or Material Expansion**. (3-20-20)T

**a.** The addition of a new beneficiation process, or a significant change in the capacity of an existing beneficiation process, which was not identified in the original application and that significantly increases the potential to degrade the waters of the state. Such process could include, but is not limited to, heap leaching and process components for milling; or (3-20-20)T

**b.** A significant change in the location of a proposed process component or site condition which was not adequately described in the original application; or (3-20-20)T

**c.** A change in the beneficiation process that alters the characteristics of the waste stream in a way that significantly increases the potential to degrade the waters of the state. (3-20-20)T

**d.** For a cyanidation facility with an existing permit that did not actively add cyanide after January 1, 2005, reclamation and closure related activities shall not be considered to be material modifications or material expansions of the cyanidation facility. (3-20-20)T

**13.** **Material Stabilization**. Managing or treating spent ore, tailings or other solids and/or sludges resulting from the cyanidation process to minimize waters or all other applied solutions from migrating through the material and transporting pollutants associated with the cyanidation facility to ensure that all discharges comply with all applicable standards and criteria. (3-20-20)T

**14.** **National Pollution Discharge Elimination System (NPDES) Permit**. A permit issued by the U.S. Environmental Protection Agency for the purpose of regulating discharges into surface waters. (3-20-20)T

**15.** **Neutralization**. Treatment of process waters such that discharge or final disposal of those waters does not, or shall not, violate any applicable standards and criteria. (3-20-20)T

**16.** **Permanent Closure**. Those activities which result in neutralization, material stabilization and decontamination of cyanidation facilities and/or the facilities' final reclamation. (3-20-20)T

**17.** **Permanent Closure Plan**. A description of the procedures, methods, and schedule that will be implemented to meet the intent and purpose of Section 39-118A, Idaho Code, and Chapter 15, Title 47, Idaho Code,

in treating and disposing of cyanide-containing materials including spent ore, tailings, and process water and in controlling and monitoring discharges and potential discharges for a reasonable period of time based on site-specific conditions. (3-20-20)T

**18.** **Permit**. When used without qualification, any written authorization by the Director, issued pursuant to the application, public participation and appeal procedures in these rules, governing location, operation and maintenance, monitoring, seasonal and permanent closure, discharge response, and design and construction of a new cyanidation facility or a material expansion or material modification to a cyanidation facility. (3-20-20)T

**19.** **Permittee**. The person in whose name a permit is issued and who is to be the principal party responsible for compliance with these rules and the conditions of a permit. (3-20-20)T

**20.** **Person**. An individual, corporation, partnership, association, state, municipality, commission, federal agency, special district or interstate body. (3-20-20)T

**21.** **Pilot Facility**. (3-20-20)T

**a.** A test cyanidation facility that is constructed primarily to obtain data on the effectiveness of the beneficiation process to determine: (3-20-20)T

i. The feasibility of metals recovery from an ore; or (3-20-20)T

ii. The optimum operating conditions for a predetermined process to extract values from an ore. (3-20-20)T

**b.** A pilot or test facility operates for one (1) year for a single test or two (2) years for multiple tests, during which time no more than ten thousand (10,000) tons of ore are evaluated for the testing process(es), unless the applicant can demonstrate that a greater amount is necessary for a specific purpose in the testing process. (3-20-20)T

**22.** **Pollutant**. Chemicals, chemical waste, process water, biological materials, radioactive materials, or other materials which, when discharged, cause or contribute adverse effects to any beneficial use, or for any other reason, may impact the surface or ground waters of the state. (3-20-20)T

**23.** **Post-Closure**. The period of time after completion of permanent closure when the permittee is monitoring the effectiveness of the closure activities. Post-closure shall last a minimum of twelve (12) months but may extend until the cyanidation facility is shown to be in compliance with the stated permanent closure objectives and requirements of Chapter 15, Title 47, Idaho Code, and these rules. (3-20-20)T

**24.** **Process Waters**. Any liquids which are intentionally or unintentionally introduced into any portion of the cyanidation process. These liquids may contain cyanide or other minerals, meteoric water, ground or surface water, elements and compounds added to the process solutions for leaching or the general beneficiation of ore, or hazardous materials that result from the combination of these materials. (3-20-20)T

**25.** **Seasonal Closure**. Annual cessation of operations that is due to weather. (3-20-20)T

**26.** **Small Cyanidation Processing Facility**. A cyanidation facility which chemically processes less than thirty-six thousand five hundred (36,500) tons of ore per year and no more than one hundred twenty thousand (120,000) tons of ore for the life of the project at any one (1) permitted cyanidation facility. No person or applicant may concurrently hold more than one (1) small cyanidation processing facility permit, if the facilities are located within ten (10) miles of each other. (3-20-20)T

**27.** **Special Resource Water**. Those waters of the state which are recognized as needing intensive protection: (3-20-20)T

**a.** To preserve outstanding or unique characteristics; or (3-20-20)T

**b.** To maintain current beneficial use (refer to Idaho Department of Environmental Quality Rules,

IDAPA 58.01.02, "Water Quality Standards," for a complete description; special resource waters for specific stream segments are established in Idaho Department of Environmental Quality Rules, IDAPA 58.01.02, "Water Quality Standards"). (3-20-20)T

**28.** **State**. The state of Idaho. (3-20-20)T

**29.** **Temporary Closure**. Any cessation of operations exceeding thirty (30) days, other than seasonal or permanent. (3-20-20)T

**30.** **Treatment**. Any method, technique or process, including neutralization, designed to change the physical, chemical, or biological character or composition of a waste for the purpose of disposal. (3-20-20)T

**31.** **Water Balance**. An inventory and accounting process, capable of being reconciled, that integrates all potential sources of water that are entrained in the cyanidation facility or may enter into or exit from the cyanidation facility. The inventory must include the water holding capacity of specific structures within the facility that contain process water. The water balance is used to ensure that all process water and other pollutants can be contained as engineered and designed within a factor of safety as determined in the permanent closure plan. (3-20-20)T

**32.** **Water Management Plan**. A document that describes the results of the water balance and the methods that will be used to ensure that pollutants are not discharged from a cyanidation facility into waters of the state unless permitted or otherwise approved by the Department. (3-20-20)T

**33.** **Waters of the State**. All the accumulations of water, surface and underground, natural and artificial, public or private, or parts thereof which are wholly or partially within, which flow through or border upon the state. These waters shall not include municipal or industrial wastewater treatment or storage structures or private reservoirs, the operation of which has no effect on waters of the state. (3-20-20)T

**34.** **Weak Acid Dissociable (WAD) Cyanide**. The cyanide concentration as determined by Method C, Weak Acid Dissociable Cyanide, D2036 of American Society of Testing Materials Book of Standards, "Standard Methods for the Examination of Water and Wastewater," Method 4500-CN- I, or other methods accepted by the scientific community and deemed appropriate by the Department. (3-20-20)T

**008. -- 009. (RESERVED)**

**010. APPLICABILITY TO FACILITIES WITH EXISTING PERMITS.**

A cyanidation facility with an existing permit approved by the Department prior to July 1, 2005 shall be subject to the applicable laws and rules for ore processing by cyanidation in effect on June 30, 2005. Material modifications or material expansions of such facilities are subject to Section 39-118A, Idaho Code. The rules for ore processing by cyanidation in effect on June 30, 2005 can be obtained by contacting the Department of Environmental Quality, Hearing Coordinator, 1410 N. Hilton, Boise, ID 83706-1255, (208)373-0502, www.deq.idaho.gov. (3-20-20)T

**011. -- 049. (RESERVED)**

**050. CONCEPTUAL DESIGN APPROVAL.**

**01.** **Information Required for Conceptual Design Approval**. Submittal of a Conceptual Design Report is not mandatory. The Director may, if requested, give initial approval of the basic operation, design concepts, and environmental safeguards proposed based on the information included in a Conceptual Design Report. Approval of the Conceptual Design Report shall not authorize the construction, modification or operation of the cyanidation facility. It is recommended that the Conceptual Design Report address the contents for a permit application as listed in Subsection 100.03. (3-20-20)T

**02.** **Notice of Conceptual Design Approval or Disapproval**. The Director shall notify the applicant in writing of the decision for conceptual approval or disapproval within a period of thirty (30) days from receiving all information as required under Subsection 050.01. The time required to review and approve, if appropriate, a conceptual design shall be considered separate from and shall not be included as part of the one hundred eighty (180)

day time period for processing the formal application and issuance of a Director's determination pursuant to these rules. (3-20-20)T

**03. Preapplication Conference**. Prospective applicants are encouraged to meet with agents of the Department at least one (1) year in advance of the application submittal to discuss environmental baseline data requirements; waste characterization requirements; siting requirements for surface and ground water monitoring stations, mills, tailing impoundments, waste disposal sites and land application sites; monitoring well construction requirements; operation and maintenance plans; emergency and spill response plans; quality control/quality assurance plans for water quality sampling and analyses; required contents for permit applications; application procedures and schedules; public review and comment periods; public meetings; and agency cyanidation facility visits. The preapplication conference may trigger a period of collaborative effort between the applicant, the Idaho Department of Environmental Quality, and the Idaho Department of Lands in development of checklists to be used by the agencies in reviewing an application for completeness, accuracy and protectiveness. (3-20-20)T

**051. -- 099. (RESERVED)**

**100. PERMIT AND PERMIT APPLICATION.**

**01. Permit Required**. No person shall construct a new cyanidation facility prior to obtaining a permit from the Director. No person shall materially expand or materially modify a cyanidation facility prior to obtaining a modified permit for such expansion or modification pursuant to Section 750. (3-20-20)T

**02. Permit Application**. The owner or proposed operator of a cyanidation facility or the owner's or operator's authorized representative shall: (3-20-20)T

**a.** Make application to the Director in writing and in a manner or form prescribed herein; and (3-20-20)T

**b.** Provide five (5) paper copies of the application to the Director, unless otherwise agreed to by the Department and the applicant. (3-20-20)T

**03. Contents of Application**. A permit application and its contents shall be used to determine if an applicant can locate, construct, operate, maintain, close and monitor the proposed cyanidation facility in conformance with these and other applicable rules including, but not limited to, Idaho Department of Environmental Quality Rules, IDAPA 58.01.02, "Water Quality Standards"; IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems"; IDAPA 58.01.05, "Rules and Standards for Hazardous Waste"; IDAPA 58.01.06, "Solid Waste Management Rules"; and IDAPA 58.01.11, "Ground Water Quality Rule." Information required shall include the following, in sufficient detail to allow the Director to make necessary application review decisions concerning design concepts and protection of human health and the environment: (3-20-20)T

**a.** Name, location, and mailing address of the cyanidation facility. (3-20-20)T

**b.** Name, mailing address, and phone number of the applicant, and a registered agent. (3-20-20)T

**c.** Land ownership status of the cyanidation facility (federal, state, private or public). (3-20-20)T

**d.** Name, mailing address, and phone number of the applicant's construction and operations manager. (3-20-20)T

**e.** The legal structure (corporation, partnership, etc.) and residence of the applicant. (3-20-20)T

**f.** The legal description, to the quarter-quarter section, of the location of the proposed cyanidation facility. (3-20-20)T

**g.** Evidence the applicant is authorized by the Secretary of State to conduct business in the State of Idaho. (3-20-20)T

**h.** A general description of the operational plans for the cyanidation facility from construction through

permanent closure. This description shall include any proposed phases for construction, operations, and permanent closure. (3-20-20)T

**i.** The design maximum daily throughput of ore through the cyanidation facility and the total projected volume of material to be processed during the life of the operation. (3-20-20)T

**j.** Cyanidation facility layouts including water management systems designed to segregate storm water from process water. (3-20-20)T

**k.** A geotechnical evaluation of all process water and process chemical containment systems within the proposed cyanidation facility. (3-20-20)T

**l.** A preconstruction topographic site map or aerial photos extending at least one (1) mile beyond the outer limits of the cyanidation facility, identifying and showing the location and extent of the following features: (3-20-20)T

i. All wells, perennial and intermittent springs, adit discharges, wetlands, surface waters and irrigation ditches that may be affected by the cyanidation facility; (3-20-20)T

ii. All process water supply source(s); (3-20-20)T

iii. All public and private drinking water supply source(s) within at least one (1) mile of the cyanidation facility; (3-20-20)T

iv. Identified floodplain areas (shown on USGS sectional Quadrangle maps); (3-20-20)T

v. All service roads and public roads; (3-20-20)T

vi. All buildings and structures within a half (1/2) mile of the cyanidation facility; (3-20-20)T

vii. All special resource waters within one (1) mile of the cyanidation facility; (3-20-20)T

viii. All Clean Water Act Section 303(d) listed streams, and their listed impairments, within ten (10) miles of the site boundary that may be affected by the cyanidation facility. (3-20-20)T

**m.** To the extent such information is available, a description and location of underground mine workings and adits and a description of the structural geology that may influence ground water flow and direction. (3-20-20)T

**n.** A description of the proposed land application site. The description shall include a potentiometric map, surface and subsurface soil characteristics, geology, hydrogeology and ground water quality. The description of these characteristics must be sufficient to determine anticipated impacts to the affected soils, associated vadose zone as well as anticipated changes in geochemistry that may affect surface and ground water quality. (3-20-20)T

**o.** Siting diagram for land application sites, monitoring wells, lysimeters, surface or ground water discharge sites, or surface water monitoring locations. (3-20-20)T

**p.** A description of measures to protect wildlife that may be affected by the facility. (3-20-20)T

**q.** Proposed post-construction topographic maps. (3-20-20)T

**r.** Engineering Plans and Specifications. Engineering plans and specifications for all portions of the cyanidation facility intended to contain, treat, convey or dispose of all process water and pollutants must be submitted to the Department for review and approval. Prior to construction, all cyanidation facility engineering plans and specifications must be stamped by a professional engineer registered in the state of Idaho. These plans and specifications shall include: (3-20-20)T

i. The water balance, ore flow and processing calculations demonstrating the logic behind sizing of facilities. (3-20-20)T

ii. The general ore processing overview analyses of chemical compatibility of containment materials with process chemicals and wastes, including a chemical mass balance at inputs and outputs from the cyanidation facility. (3-20-20)T

iii. Geotechnical data and analyses demonstrating the logic for plans and specifications of foundation materials and placement. (3-20-20)T

iv. Requirements for site preparation. (3-20-20)T

v. Pumping and dewatering requirements. (3-20-20)T

vi. Procedures for materials selection and placement for backfilling foundation areas. (3-20-20)T

vii. Criteria for ensuring slope stabilization of embankments for pads, ponds and tailings impoundment. (3-20-20)T

viii. Procedures to classify and modify, if necessary, excavated fill, bedding and cover materials for buildings, pads, ponds, and tailings impoundments. (3-20-20)T

ix. Plumbing schematics and component specifications. (3-20-20)T

x. Manufacturers' specifications and warranties for all materials that will or may come in contact with process waters. (3-20-20)T

xi. Plan views and cross-section drawings of leach pad, permanent heaps, vats, process water storage ponds, tailing ponds and spent ore disposal areas. (3-20-20)T

xii. Leak detection and collection system plans and specifications including, but not limited to, schematics and narratives describing liner and geotextile material specifications, sumping capacity and layout, location of monitoring port(s), monitoring port components, construction operation and maintenance procedures for monitoring ports and pumping systems, including backup system, triggers for primary and secondary containment repairs, replacement or other contingency mitigation, frequency of monitoring, and monitoring parameters. (3-20-20)T

xiii. Provisions to protect primary and secondary containment systems from heavy equipment, fires, earthquakes and other natural phenomena. (3-20-20)T

xiv. Quality control and quality assurance procedures. (3-20-20)T

xv. The identity and qualifications of person(s) directly responsible for supervising construction and providing project quality control and quality assurance. (3-20-20)T

**s.** Operation and maintenance plans that includes: (3-20-20)T

i. Maintenance plans, including routine service procedures for primary and secondary containment systems, process chemical storage, and disposal of contaminated water or soils, including petroleum-contaminated soils. (3-20-20)T

ii. A water management plan that provides for handling and containment of process water including the methods to manage and/or treat all process water and pollutants, and run-off or run-on water, emergency releases, and excess water due to flood, rain, snowmelt, or other similar events. The plan shall include the basis for impoundment volumes and estimations of the need for and operation of a land application site, injection wells, infiltration galleries or leach fields, or the need for an NPDES permit. The plan shall be updated on a regular basis to reflect the reconciliation of the water balance changes in the project through construction, operation, maintenance,

and permanent closure, including modifications to the cyanidation facility. (3-20-20)T

iii. A proposed water quality monitoring plan that meets the requirements of Subsection 200.08. (3-20-20)T

iv. An emergency and spill response plan that describes procedures and methods to be implemented for the abatement and clean up of any pollutant that may be discharged from the cyanidation facility during use, handling or disposal of processing chemicals, petrochemicals and/or fuels, and any other deleterious materials. (3-20-20)T

v. A seasonal/temporary closure plan, if applicable, that describes the procedures, methods, and schedule to be implemented for the treatment and disposal of process water and pollutants, the control of drainage from the cyanidation facility during the period of closure, the control of drainage from the surrounding area, and the secure storage of process chemicals. (3-20-20)T

**t.** Permanent Closure Plan. The permanent closure plan may be the same as the plan submitted to the Idaho Department of Lands pursuant to the Idaho Surface Mining Act, Chapter 15, Title 47, Idaho Code. The permanent closure plan shall: (3-20-20)T

i. Identify the current owner of the cyanidation facility and the party responsible for the permanent closure and the long-term care and maintenance of the cyanidation facility. (3-20-20)T

ii. Include a time line showing the schedule to complete permanent closure activities, including neutralization of process waters and material stabilization, and the time period for which the permittee shall be responsible for post-closure activities. (3-20-20)T

iii. Provide the objectives, methods and procedures, that will achieve neutralization of process waters and material stabilization during the closure period and through post-closure. (3-20-20)T

iv. Provide a water management plan from the time the cyanidation facility is in permanent closure through the defined post-closure period. (3-20-20)T

v. Include the schematic drawings for all BMPs that will be used during the closure period, through the defined post-closure period, a description of how the BMPs support the water management plan, and an explanation of the water conveyance systems that are planned for the cyanidation facility. (3-20-20)T

vi. Provide proposed post-construction topographic maps and scaled cross-sections showing the configuration of the final heap or tailing facility, including final cap and cover designs and the plan for long-term operation and maintenance of the cap. Caps and covers used as source control measures for cyanidation facilities must be designed to minimize the interaction of meteoric waters, surface waters, and ground waters with wastes containing pollutants that are likely to be mobilized and discharged to waters of the state. Prior to issuance of a final permit, engineering plans and specifications for caps and covers must be signed and stamped by a professional engineer registered in the state of Idaho. (3-20-20)T

vii. Include monitoring plans for surface and ground water during closure and post-closure periods adequate to demonstrate water quality trends and to ensure compliance with the stated permanent closure objectives and requirements of these rules. (3-20-20)T

viii. Provide an assessment of the potential impacts to soils and vegetation for all areas to be used for land application and provide a mitigation plan as appropriate. (3-20-20)T

ix. Provide information on how the permittee will comply with the Resource Conservation and Recovery Act, 42 U.S.C. Sections 6901 et seq.; the Idaho Hazardous Waste Management Act, Chapter 44, Title 39, Idaho Code; the Idaho Solid Waste Management Act, Chapter 74, Title 39, Idaho Code; and appropriate state rules, during operation and permanent closure. (3-20-20)T

x. Provide sufficient detail to allow the permittee to prepare an estimate of the reasonable cost for the

state of Idaho to hire a third party to implement the closure plan. (3-20-20)T

**u.** The application shall be accompanied by a fee pursuant to Subsection 100.05. (3-20-20)T

**04. Application for a Small Cyanidation Processing Facility and Pilot Facility**. The owner or proposed operator of a small cyanidation processing facility or the owner's or operator's authorized representative shall make application to the Director in writing of the intent to operate a small cyanidation processing facility or a pilot facility. The application shall include an explanation as to why the proposed small cyanidation processing facility qualifies as a small cyanidation processing facility or a pilot facility. The application must provide the information, plans and specifications identified in Subsection 100.03. (3-20-20)T

**05. Permit Application Fees**. (3-20-20)T

**a.** The application shall be accompanied by a fee as described below: (3-20-20)T

i. Five thousand dollars ($5,000) for a pilot facility; (3-20-20)T

ii. Ten thousand dollars ($10,000) for a small cyanidation processing facility; (3-20-20)T

iii. Twenty thousand dollars ($20,000) for a cyanidation facility that is neither a pilot facility nor a small cyanidation processing facility; or (3-20-20)T

iv. In lieu of paying a fee at the time the application is submitted, an applicant may enter into an agreement with the Department for actual costs incurred to process an application and issue a final permit. The applicant shall not commence operations at the cyanidation facility until the terms of the agreement have been met, including that the Department has been reimbursed for all actual costs incurred for the permitting process.(3-20-20)T

b. Completeness of an application is contingent upon one (1) of the following: (3-20-20)T

i. Submission of the applicable fees as described in Subsections 100.05.a.i. through 100.05.a.iii.; or (3-20-20)T

ii. The applicant enters into an agreement with the Department as described in Subsection 100.05.a.iv. (3-20-20)T

**06. Exemptions to Fees**. Requests made by the Department to the permittee for any permit modifications shall not be subject to application fees set forth in Subsection 100.05. Requests by the permittee for minor modifications to a permit shall not be subject to application fees set forth in Subsection 100.05. (3-20-20)T

**101. -- 199. (RESERVED)**

**200. REQUIREMENTS FOR WATER QUALITY PROTECTION.**
The following design and performance standards are intended as the minimum criteria for protection of public health and the waters of the state. These standards shall apply to all facilities unless the Department determines that other site-specific criteria are appropriate to protect water quality and the public health. (3-20-20)T

**01. Cyanidation Facilities Siting and Preparation**. All cyanidation facilities including, but not limited to, the process building, laboratories, process chemical storage and containment facilities, plumbing fixtures that support process water, untreated or treated process water ponds, tailings impoundments, ore stock piles, and spent ore disposal areas must be appropriately sited and prepared for construction. Siting criteria must ensure that, at a minimum, the facilities are structurally sound and that primary and secondary containment systems can be adequately protected against factors such as wild fires, floods, land slides, surface and ground water systems, equipment operation, subsidence of underground workings, public access and public activities. All sites must be properly prepared prior to construction of foundations and facilities. Vegetation, roots, brush, large woody debris and other deleterious materials, top soil, historic foundations and plumbing, or other materials that may adversely affect appropriate construction and long term stability, must be removed from the footprint of the cyanidation facility unless approved by the Department. (3-20-20)T

**02. Process Water Storage Sizing Criteria**. All aspects of the cyanidation facility that entrain, utilize, treat, discharge, pump, or otherwise contain process water and pollutants shall be included in the water balance. The water balance shall include process water ponds, treated process water ponds, tailing impoundments, and water conveyance systems. The engineered containment criteria for each pond shall be incorporated into the water balance and must be designed to maintain a minimum two (2) foot freeboard at all times. At a minimum, a cyanidation facility shall be designed to contain the maximum expected normal operating water balance and the volume of run-on/run-off water associated with a climatic event that has a frequency of occurrence of one (1) year in one hundred (100) years or one percent (1%). Snowmelt events shall be considered in determining the containment capacity. Contingency plans for managing excesses of process water shall be described in the water management strategy. Each impoundment design must include a spillway, unless otherwise approved by the Department. (3-20-20)T

**03. Minimum Plans and Specifications for Impoundments, Leach Pads and Other Facilities Designed to Contain Process Water**. Engineering plans and specifications, which are signed and stamped by a professional engineer registered in the state of Idaho, must be approved and included in the final permit issued by the Department prior to construction of cyanidation facilities that are designed to contain process waters. The plans and specifications must provide for: (3-20-20)T

**a.** A prepared subbase of compacted soil, which shall be a minimum of twelve (12) inches thick. The soil must be compacted to ninety-five percent (95%) of Standard Proctor Test ASTM 698 or ninety-five percent (95%) of Modified Proctor Test ASTM 1557. The compacted soil layers must be placed in a minimum of two (2) lifts; (3-20-20)T

**b.** A prepared subbase, which shall be free of plus three (3) inch rocks, roots, brush, trash, debris or other deleterious materials; (3-20-20)T

**c.** Primary containment synthetic liners, which shall have a minimum thickness of eighty (80) milli-inches (2.0 mm) consisting of high-density polyethylene (HDPE) material and a maximum coefficient of permeability of $10^{-11}$ cm/sec, or comparable liners approved by the Department; (3-20-20)T

**d.** A final smoothed and compacted soil layer, which shall not contain particles in excess of point seven five (0.75) inches (nineteen (19) mm) in diameter and have a maximum coefficient of permeability of $10^{-6}$ cm/sec, or comparable liners approved by the Department; (3-20-20)T

**e.** Primary and secondary liner systems, which shall be constructed according to manufacturers' standards, or Department-approved design standards, and which must protect against cracking, sun damage, ice, frost penetration or heaving, wildlife and wildfires, and damage that may be caused by personnel or equipment operating in or around these facilities; (3-20-20)T

**f.** Compacted clay liners (CCLs), which shall be placed within two percent (2%) of optimum moisture content for the CCL to achieve specified compaction and permeability criteria; (3-20-20)T

**g.** An appropriate interface friction strength plus a factor of safety when either a geosynthetic clay liner (GCL) or CCL is used with a geomembrane liner on a slope; (3-20-20)T

**h.** Minimum factors of safety, and the logic behind their selection, for the stability of the earthworks and the lining systems of heap leach pads and ponds; (3-20-20)T

**i.** Redundant systems, which shall be available if there are failures in primary power and/or pumping systems; (3-20-20)T

**j.** Procedures for loading ore onto the leach pads which will minimize tensile stresses in the primary and secondary containment liners that may result in failure of the liners; and (3-20-20)T

**k.** Leak detection and collection systems, which shall be designed and installed for all facilities, or portions thereof, where process waters may place an average of twelve (12) inches or greater of hydraulic head pressure on primary containment. The engineering plans and specifications shall: (3-20-20)T

i. Provide a material between primary and secondary containment synthetic liners to collect, transport and remove all process water that passes through the primary containment synthetic liner at such a rate as to prevent hydraulic head from developing on the secondary containment synthetic liner to the level at which it may be reasonably expected to result in discharges through the secondary containment synthetic liner; (3-20-20)T

ii. Provide routines and schedules for the evaluation of the efficiency and effectiveness of the removal of process waters from the layer placed between primary and secondary containment synthetic liners. The properly working system shall continually relieve head pressures on the secondary containment synthetic liner; (3-20-20)T

iii. Provide specific triggers for maintenance routines, which shall be initiated in response to inadequate performance of primary or secondary containment synthetic liners; (3-20-20)T

iv. Specify operation and maintenance procedures, which shall be initiated in response to inadequate performance of primary and secondary containment or leak detection and collection systems; and (3-20-20)T

v. Provide secondary containment synthetic liners, which shall have a minimum thickness of eighty (80) milli-inches (two (2.0) mm) consisting of HDPE and a maximum coefficient of permeability of $10^{-11}$ cm/sec, or comparable liners approved by the Department. (3-20-20)T

**04. Process Buildings, Process Chemical Storage Containment Areas and General Facility Criteria**. Storage, handling and use of all process chemicals, process wastes, process water and pollutants must be conducted within a clean, safe and secure work space to prevent unauthorized discharges to soils, ground water or surface water. The plans and specifications must contain sufficient detail, including pump capacity and plumbing for evacuation of collection sumps, triggering systems for sump evacuation, and monitoring and reporting requirements. Plans and specifications must be submitted with the application for the Department's review and approval. Prior to construction, plans and specifications for the process buildings and auxiliary facilities, including process chemical storage and containment facilities and laboratories, must be signed and stamped by a professional engineer registered in the state of Idaho. Where appropriate, these plans and specifications must provide for: (3-20-20)T

**a.** Structural integrity of the foundation, walls and roof for process and process chemical storage buildings. (3-20-20)T

**b.** Restriction of public access. (3-20-20)T

**c.** Protection of wildlife. (3-20-20)T

**d.** Internal sumps and spill cleanup plans. (3-20-20)T

**e.** Grouted and sealed concrete stemmed walls and floors in the process and process chemical storage and containment facilities. (3-20-20)T

**f.** Vapor barriers and frost protection. (3-20-20)T

**g.** Segregation of process chemicals according to compatibility. (3-20-20)T

**h.** Communication systems. (3-20-20)T

**i.** Fire suppression systems, internal and external. (3-20-20)T

**j.** Quality assurance and quality control for construction activities and construction materials. (3-20-20)T

**05. Cap and Cover Criteria**. Caps and covers used as source control measures for facilities must be designed and constructed to minimize the interaction of meteoric waters, surface waters, and ground waters with wastes containing pollutants that are likely to be mobilized and discharged to waters of the state. Caps and covers designed for permanent closure must demonstrate permanence applicable to the permittee's designed and approved

permanent closure plan. Prior to issuance of a final permit, engineering plans and specifications for caps and covers must be signed and stamped by a professional engineer registered in the state of Idaho. (3-20-20)T

**06. Plumbing and Conveyance Criteria**. Engineering plans and specifications must be submitted to the Department for review and approval. Plumbing and conveyance systems shall be structurally sound and chemically compatible with the materials being conveyed; shall provide adequate primary and secondary containment; and shall be protected against heat, cold, mechanical failures, impacts, fires, and other factors which may cause breakage and result in unauthorized discharges. Prior to construction, engineering plans and specifications of all conveyances of materials containing process water must be signed and stamped by a professional engineer registered in the state of Idaho. (3-20-20)T

**07. Operation and Maintenance Plans**. Operation and maintenance plans must be submitted to the Department for review and approval. Operation and maintenance plans must include, but are not limited to: (3-20-20)T

**a.** An overall plan that includes techniques for evaluating the integrity and performance of all primary and secondary containment systems. (3-20-20)T

**b.** Schedule for inspections of all primary and secondary containment systems. (3-20-20)T

**c.** Schedule for inspections on piping and conveyance systems that carry process water. (3-20-20)T

**d.** Response plans that detail specific actions that will result in mitigation of compromised or damaged containment systems. (3-20-20)T

**08. Water Quality Monitoring and Reporting**. The water quality monitoring plan submitted with the application shall be reviewed and, if appropriate, approved by the Department. The approved water quality monitoring plan shall: (3-20-20)T

**a.** Provide for physical, chemical and biological monitoring, including surface water flow measurements, in potentially affected surface and ground water, as appropriate. (3-20-20)T

**b.** Provide for sampling locations and frequency. (3-20-20)T

**c.** Provide an assessment of the existing surface and ground water conditions prior to construction of the proposed cyanidation facility. (3-20-20)T

**d.** Be site specific and dependent on location, design and operation of the cyanidation facilities included in the overall operating plan. (3-20-20)T

**e.** Specify compliance points and associated water quality compliance criteria. (3-20-20)T

**f.** Specify monitoring points, which will provide for early detection of discharges of pollutants. (3-20-20)T

**g.** Provide analytical methods and method detection limits for chemical analysis used in the determination of water quality. (3-20-20)T

**h.** Provide a quality assurance quality control plan for data collection and analysis. (3-20-20)T

**i.** Provide for appropriate and timely analytical data analyses including evaluations of water quality and quantity trends. (3-20-20)T

**j.** Provide an annual environmental monitoring and data analysis report of water quality and quantity trends. (3-20-20)T

**k.** Provide for the reporting and re-sampling of monitoring locations where detectable and statistically

significant changes in water quality are found. The permittee shall propose a statistical method to determine the significance of the changes in water quality. (3-20-20)T

**l.** Provide for anticipated changes or modifications to monitoring plans, which may be the result of a phased approach to cyanidation facility construction, operations and permanent closure. (3-20-20)T

**09. Monitoring Wells Siting and Construction Plans**. The applicant is encouraged to submit the purpose, objectives, location and proposed construction of monitoring wells to the Department for review and comment during the initial stages of site characterization. (3-20-20)T

**a.** Monitoring well siting and construction plans shall provide for a minimum of three (3) monitoring wells. One (1) shall be located up gradient and two (2) shall be located down gradient of primary components of the cyanidation facility to determine ground water flow direction. (3-20-20)T

**b.** Siting and planning for additional wells or replacement wells may be required in the permit application and final permit. Specifically, additional wells may be required for: (3-20-20)T

i. Large areas with multiple potential sources for pollutants; (3-20-20)T

ii. Areas with complex geology, fractured bedrock; and (3-20-20)T

iii. Areas with insufficient background hydrogeology. (3-20-20)T

**c.** All monitoring well construction must also conform to the well construction rules listed in IDAPA 37.03.09, "Well Construction Standards Rules." (3-20-20)T

**d.** Record diagrams along with a detailed geologic log shall be provided to the Department for each monitoring well. (3-20-20)T

**10. Land Application**. Prior to issuance of a final permit, plans and specifications for the construction or modification of land application of process water disposal systems shall be submitted to and approved by the Department. All plans and specifications for the construction, operation and closure of land application or other waste treatment or disposal facilities or modification must be signed and stamped by a registered professional engineer licensed in the state of Idaho. Plans and specifications shall include: (3-20-20)T

**a.** An operation and maintenance plan including: (3-20-20)T

i. Water balance for the land application site. (3-20-20)T

ii. Pretreatment requirements and procedures. (3-20-20)T

iii. Operating season for land application. (3-20-20)T

iv. Seasonal closeout procedures. (3-20-20)T

v. Special soils or vegetative amendments. (3-20-20)T

vi. Storm water run-on/run-off controls. (3-20-20)T

vii. Best management practices for all areas impacted by the land application system. (3-20-20)T

viii. A topographic map of the land application site and adjacent affected areas, of sufficient scale to facilitate site-specific analysis of soils, vegetation, surface water and ground water. (3-20-20)T

**b.** Chemical, physical, and volumetric characteristics of the process water to be land applied. (3-20-20)T

**c.** A complete description of the chemical and physical characteristics of the soils and applicable

geology of the land application site. (3-20-20)T

**d.** Methods of process water treatment, distribution and disposal. (3-20-20)T

**e.** Hydraulic loading capacity of the soils. (3-20-20)T

**f.** Constituent loading capacity of the site. (3-20-20)T

**g.** Attenuation capacity of the vegetative covers and soils. (3-20-20)T

**h.** Evapotranspiration capacity of the site. (3-20-20)T

**i.** Testing and analytical procedures for water quality and soils samples prior to, during, and following the land application process. (3-20-20)T

**j.** Trend analysis of the constituent loading in the affected soils, vegetation and water quality of the affected surface or ground water systems. (3-20-20)T

**k.** Reporting requirements including both frequency and form. (3-20-20)T

**l.** Standby power and pumps sufficient to maintain all treatment and distribution works. (3-20-20)T

**11. Temporary or Seasonal Closure**. Temporary and seasonal closure plans for the entire cyanidation facility must be submitted by an applicant to the Department for review and approval prior to issuance of a final permit. Temporary and seasonal closure plans may, subject to Department approval pursuant to Section 750, be modified to provide for changes in operating conditions of the facilities and must incorporate a water management plan for the period of inactivity as well as during shut down and reactivation. (3-20-20)T

**a.** Prior to seasonal closure, process buildings, process chemical storage, process water ponds, tailing ponds, spent ore disposal areas and other ancillary facilities must be stabilized and/or conditioned to prevent any emergency or unauthorized discharges to surface or ground water. (3-20-20)T

**b.** Subsequent to seasonal closure, process buildings, process chemical storage, process water ponds, tailings ponds, spent ore disposal areas and other ancillary facilities must be maintained to prevent any emergency or unauthorized discharges to surface or ground water. Cyanidation facilities shall be conditioned and maintained to provide: (3-20-20)T

i. Material stabilization for all solids affected by process waters. (3-20-20)T

ii. Optimum freeboard in all ponds, as dictated by the water management plan. (3-20-20)T

iii. Fully functional power and pumping systems that are ready for use; both power and pumps shall have incorporated redundant systems to allow for failure of either power or a pumping system. A failed power supply or pump is not an acceptable reason for an unauthorized discharge. (3-20-20)T

iv. Protection of all primary and secondary containment. (3-20-20)T

v. Sufficient availability of qualified staff to restrict public access, fully implement the water quality monitoring plan, and initiate the emergency and spill response plan. (3-20-20)T

**12. Employee Education Program**. Operators and staff of facilities must be properly oriented and trained to operate, maintain and protect primary and secondary containment systems; waste disposal and discharge systems; and to implement monitoring and emergency and spill response plans. An applicant must submit an employee orientation and continuing training plan to the Department for review prior to issuance of a final permit. The plan must provide the format and contents for training, the general qualifications of the person(s) responsible for training and testing, and the person(s) or positions which should receive such training. (3-20-20)T

**201. -- 299. (RESERVED)**

**300. APPLICATION PROCESSING PROCEDURE.**

**01. Application Processing Time Line for Director's Final Decision**. A chart illustrating the application processing time line is located in Appendix A of these rules. (3-20-20)T

**02. Completeness Review**. Within thirty (30) days of receipt of an application, the Department will issue a written notice to the applicant and the Idaho Department of Lands, indicating: (3-20-20)T

**a.** That the application is complete; or (3-20-20)T

**b.** That the Department is rejecting the application as incomplete and shall provide a list of deficiencies. Upon determination that the application is incomplete, the Department shall refund one half (1/2) of the application fee. (3-20-20)T

**03. Accuracy and Protectiveness Review**. Within sixty (60) days of receipt of an application and upon determination by the Department that the application is complete, the Department will review the application for accuracy and protectiveness based on these and other applicable rules including, but not limited to, IDAPA 58.01.02, "Water Quality Standards," and IDAPA 58.01.11, "Ground Water Quality Rule." (3-20-20)T

**04. Notice of Intent to Deny the Permit Application or to Draft a Permit**. Within sixty (60) days of receipt of an application for a new permit or to modify an existing permit, the Director shall: (3-20-20)T

**a.** Provide public notice of intent to deny the permit application; or (3-20-20)T

**b.** Provide public notice that the Director has determined that the application is complete and the Director intends to draft a permit, is seeking public comment, and will hold at least one (1) public meeting on the draft permit in accordance with Section 400. (3-20-20)T

**05. Basis for Permit Application Denial**. The Director shall deny a permit application if: (3-20-20)T

**a.** The application is inaccurate or incomplete; (3-20-20)T

**b.** The cyanidation facility as proposed cannot be conditioned for construction, operation, and closure so as to comply with applicable state law; or (3-20-20)T

**c.** The applicant has not submitted the appropriate fees. (3-20-20)T

**06. Permit Fact Sheet**. The Director shall prepare a fact sheet, for each denial or draft permit, which briefly states the principal facts and the significant legal and policy questions considered in the Director's decision. The fact sheet shall include, when applicable: (3-20-20)T

**a.** A brief description of the proposed cyanidation facility and the operating plan. (3-20-20)T

**b.** A brief summary of the basis for the decision, including references to applicable requirements and supporting materials. (3-20-20)T

**c.** Reasons why any requested conditions or alternatives to required standards do or do not appear justified. (3-20-20)T

**d.** The name and phone number of the agency representative to contact for additional information. (3-20-20)T

**301. -- 399. (RESERVED)**

**400. PUBLIC INVOLVEMENT IN PERMIT PROCEDURES.**

**01. Public Notice of Permit Actions**. No public notice is required when a request for a permit modification is denied. The Director shall give public notice of: (3-20-20)T

**a.** Receipt of an application for a permit; (3-20-20)T

**b.** Any public meeting schedule; (3-20-20)T

**c.** Issuance of a draft permit or a decision to deny the application for a permit; and (3-20-20)T

**d.** An appeal that has been filed. (3-20-20)T

**02. Public Notice Information**. All public notices shall contain the name and address of the Department's office processing the permit action, where the application and draft permit will be available for public review, and a brief description of the public involvement procedures. (3-20-20)T

**03. Serving the Public Notice**. Public notice of permit actions shall be given by the following methods: (3-20-20)T

**a.** By mail to: (3-20-20)T

i. The applicant; (3-20-20)T

ii. Persons on a mailing list who request to be notified; and (3-20-20)T

iii. Other appropriate federal, tribal, state and local government entities. (3-20-20)T

**b.** Publication in a daily or weekly major newspaper of general circulation in the area of the proposed cyanidation facility; and (3-20-20)T

**c.** Any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected. (3-20-20)T

**04. Participation by Idaho Department of Lands**. The Department shall formally request that the Idaho Department of Lands participate in the public meeting with respect to performance criteria for permanent closure. (3-20-20)T

**05. Public Comment(s), Public Comment Period, and Public Meetings**. (3-20-20)T

**a.** Within thirty (30) days after the Director's decision to draft a permit, the Department shall hold a public meeting. Oral or written comments may be submitted by any person at the public meeting. The meeting may be presided by agency personnel appointed by the Director. In order for the Department to address public comments in its Response to Public Comments pursuant to Subsection 450.03., comments must be submitted in writing within sixty (60) days after the Director's decision to draft a permit. (3-20-20)T

**b.** From the time an application is received, until sixty (60) days after issuance of the notice pursuant to Subsection 300.04., the public may provide written comments. All written comments submitted during this public comment period shall be considered by the Director. (3-20-20)T

**401. -- 449. (RESERVED)**

**450. FINAL PERMIT DECISION.**

**01. Issuance**. Within sixty (60) days after the close of the public comment period, the Director shall either issue or deny a permit, or major modification of a permit. Provided however, that if weather conditions prevent the Director from inspecting the proposed or existing cyanidation facility site to obtain information needed to approve or reject a submitted application, he may, in writing to the applicant, extend the time not to exceed thirty (30) days

after weather conditions permit such inspection. (3-20-20)T

**02. Notification of the Decision**. The Director shall notify the applicant and each person who requested notice of the final permit decision. This notice shall include reference to the procedures for administrative appeal under Section 003. For the purpose of this section, a final permit decision means a final decision to issue, deny, modify, or revoke a permit. (3-20-20)T

**03. Response to Public Comments**. All written comments and information received during the comment period, together with the Department's final permit decision and the response to relevant written comments shall be made available to the public at the time the Director issues the final permit decision. This response shall: (3-20-20)T

**a.** Specify any differences between the final permit decision and the draft permit and state the reasons for those differences; (3-20-20)T

**b.** Briefly describe and respond to all relevant written comments on the draft permit or denial. (3-20-20)T

**04. Basis for Permit Denial**. The Director shall deny a permit if: (3-20-20)T

**a.** The application is incomplete or inaccurate; (3-20-20)T

**b.** The cyanidation facility as proposed cannot be conditioned for construction, operation, and closure so as to comply with applicable state law; or (3-20-20)T

**c.** The Idaho Department of Lands has determined that the permanent closure plan does not meet the requirements of Chapter 15, Title 47, Idaho Code. (3-20-20)T

**05. Immediate Effect of the Permit**. A valid permit authorizes the construction and operation of a cyanidation facility. (3-20-20)T

**451. -- 499. (RESERVED)**

**500. PERMIT CONDITIONS.**
The following conditions shall apply to and be specified in all permits: (3-20-20)T

**01. Compliance Required**. The applicant or permittee shall comply with all conditions of the permit. Issuance or possession of a permit issued according to these rules shall not relieve the applicant or permittee of the responsibility to comply with all other applicable local, state, and federal laws. (3-20-20)T

**02. Record Plans and Specifications**. A professional engineer registered in the state of Idaho must confirm in writing that all record drawings and specifications are complete and accurate. These record plans and specifications must be submitted by the permittee to the Director within thirty (30) days after the completion of the construction of each critical phase of facility development as approved by the Department. The record plans and specifications must be accompanied by a final construction report. If the construction proceeded in substantial compliance with the approved plans and specifications, a statement to the effect may be submitted by the registered, professional engineer. (3-20-20)T

**03. Provide Information**. The permittee shall furnish to the Director within a reasonable or specified time any information, including copies of records required by the permit or other applicable rules, which the Director may reasonably require to determine whether cause exists for modifying or revoking the permit or to determine compliance with the permit or other applicable rules. (3-20-20)T

**04. Notifications**. After initial construction and seasonal and/or temporary closure, the permittee shall, within thirty (30) days, provide written notice to the Director of the permittee's intentions to commence or restart operations. At least thirty (30) days prior to completion of operations, and/or temporary or seasonal operations, the permittee shall notify the Director of the permittee's intentions to temporarily, seasonally or permanently close

operations. Notification shall provide sufficient time for the Director to provide pre-operational or post-operational inspections, as necessary. (3-20-20)T

**05. Entry and Access**. The permittee shall allow the Director, or a designee obligated by agreement with the Director to comply with the confidentiality provisions of Section 39-111, Idaho Code, to: (3-20-20)T

**a.** Enter at reasonable times upon the premises of a permitted cyanidation facility or where records required by a permit are kept; (3-20-20)T

**b.** Have access to and copy at reasonable times any records that must be kept under the conditions of the permit; (3-20-20)T

**c.** Inspect at reasonable times any cyanidation facility, equipment, practice, or operation permitted or required by the permit; (3-20-20)T

**d.** Sample or monitor at reasonable times, substance(s) or parameter(s) directly related to permit or regulation compliance. (3-20-20)T

**06. Reporting**. It shall be the permittee's responsibility to report to the Director: (3-20-20)T

**a.** Orally, as soon as possible but no later than twenty-four (24) hours from the time the permittee knows or should reasonably know of any noncompliance which may endanger the public health or the environment. (3-20-20)T

**b.** In writing, within five (5) working days from the time a permittee knows or should reasonably know of any event which may be or which may result in a violation of these rules, or Idaho Department of Environmental Quality Rules, IDAPA 58.01.02, "Water Quality Standards," or IDAPA 58.01.11, "Ground Water Quality Rule." This report shall contain: (3-20-20)T

i. A description of the event and its cause; if the cause is not known, steps taken to investigate and determine the cause; (3-20-20)T

ii. The period of the event including, to the extent possible, the individual(s) involved in the incident(s) and the time(s) and date(s) of the incidents; (3-20-20)T

iii. Measures taken to mitigate or eliminate the event and protect the public health; and (3-20-20)T

iv. Steps taken to prevent recurrence of the event. (3-20-20)T

**c.** In writing, confirmation of any conditions which may result in violation of any permit condition. (3-20-20)T

**d.** In writing, when the permittee knows or should reasonably know of relevant facts not submitted or incorrect information submitted in a permit application or any report or notice to the Director or the Department. Those facts or the correct information shall be included as a part of this report. (3-20-20)T

**07. Discharge Response**. If an unauthorized discharge occurs the permittee shall implement the Department approved emergency and spill response plan. (3-20-20)T

**08. Temporary or Seasonal Closure Plans**. Prior to temporary or seasonal closure, the permittee shall submit a temporary or seasonal closure plan to the Director for approval. The plan shall describe the procedures, methods, and schedule to be implemented for the treatment and disposal of process water and pollutants, the control of drainage from the cyanidation facility, the control of drainage from the surrounding area, and the secure storage of chemicals during the period of closure. Within thirty (30) days of receiving the plan, the Director shall approve and/or suggest modifications necessary to protect the waters of the state. The permittee shall ensure that closure complies with an approved plan. In no case shall the permittee complete temporary or seasonal closure prior to implementation of the approved plan. Facilities may not be temporarily or seasonally closed for a period longer than two (2) years

unless approved by the Director. (3-20-20)T

**09. Begin Construction**. If the permittee fails to begin construction of a cyanidation facility within one (1) year of the effective date of the permit, the permit will be deemed void. (3-20-20)T

**10. Permanent Closure**. The permanent closure plan, as approved by the Idaho Department of Environmental Quality in coordination with the Idaho Department of Lands, shall be incorporated by reference into the Department-issued permit as a permit condition and shall be enforceable as such. The Department may evaluate permanent closure based on different performance standards than those used by the Idaho Department of Lands. (3-20-20)T

**501. COMPLETION OF PERMANENT CLOSURE.**

**01. Implementation of a Permanent Closure Plan**. Unless otherwise specified in the approved permanent closure plan, the permittee must begin implementation of the approved permanent closure plan: (3-20-20)T

**a.** Within one (1) year of the final addition of cyanide to the ore processing circuit for pilot or small cyanidation processing facilities; or (3-20-20)T

**b.** Within two (2) years of the final addition of cyanide to the ore processing circuit for all other cyanidation facilities; or (3-20-20)T

**c.** If the product recovery phase of the cyanidation facility has been suspended for a period of more than two (2) years. (3-20-20)T

**02. Submittal of a Permanent Closure Report**. The permittee shall submit a permanent closure report to the Department for review and approval. A permanent closure report shall be of sufficient detail for the directors of the Idaho Department of Environmental Quality and the Idaho Department of Lands to issue a determination that permanent closure, as defined in Section 007 of these rules, has been achieved. The permanent closure report shall address: (3-20-20)T

**a.** The effectiveness of material stabilization. (3-20-20)T

**b.** The effectiveness of the water management plan and adequacy of the monitoring plan. (3-20-20)T

**c.** The final configuration of the cyanidation facility and its operational/closure status. (3-20-20)T

**d.** The post-closure operation, maintenance, and monitoring requirements, and the estimated reasonable cost to complete those activities. (3-20-20)T

**e.** The operational/closure status of any land application site of the cyanidation facility. (3-20-20)T

**f.** Source control systems that have been constructed or implemented to eliminate, mitigate, or contain short and long term discharge of pollutants from the cyanidation facility, unless otherwise permitted. (3-20-20)T

**g.** The short and long term water quality trends in surface and ground water through the statistical analyses of the existing monitoring data collected pursuant to the ore processing by cyanidation permit. (3-20-20)T

**h.** Ownership and responsibility for the cyanidation facility during the defined post-closure period. (3-20-20)T

**i.** The future beneficial uses of the land, surface and ground waters in and adjacent to the closed facilities. (3-20-20)T

**j.** How the permanent closure of the cyanidation facility complies with the Resource Conservation

and Recovery Act, Hazardous Waste Management Act, Solid Waste Management Act, and appropriate rules. (3-20-20)T

**502. DECISION TO APPROVE OR DISAPPROVE OF A PERMANENT CLOSURE REPORT.**

**01. Issuance of Director's Determination**. Within sixty (60) days of receipt of a permanent closure report, the Director shall issue to the permittee a Director's determination of approval or disapproval of the permanent closure report. (3-20-20)T

**02. Director's Determination to Disapprove a Permanent Closure Report**. A Director's determination to disapprove a permanent closure report shall specifically identify and discuss those reasons for disapproval, any administrative actions being considered by the Director, and the permittee's options and procedures for administrative appeal. The Director's determination to disapprove a permanent closure report must include: (3-20-20)T

**a.** Identification of errors or inaccuracies in the permanent closure report. (3-20-20)T

**b.** Issues or details which require additional clarification. (3-20-20)T

**c.** Failures to fully implement the approved permanent closure plans. (3-20-20)T

**d.** Outstanding violations or other noncompliance issues. (3-20-20)T

**e.** Other issues supporting the Department's disagreement with the contents, final conclusions or recommendations of the permanent closure report. (3-20-20)T

**503. -- 549. (RESERVED)**

**550. VALIDITY AND DURATION OF PERMITS.**
A permit shall remain valid until the Director determines that permanent closure is completed or the Director revokes or modifies the permit. (3-20-20)T

**551. -- 649. (RESERVED)**

**650. FINANCIAL ASSURANCE.**

**01. Financial Assurance Required**. The permittee is required to provide financial assurance pursuant to the Idaho Surface Mining Act, Chapter 15, Title 47, Idaho Code, and the rules promulgated thereunder. The Department shall not issue a permit under these rules to a cyanidation facility unless the cyanidation facility has satisfied such financial assurance requirements. (3-20-20)T

**02. Insufficiency**. In the event the financial assurance is forfeited as described in the Idaho Surface Mining Act, Chapter 15, Title 47, Idaho Code, the Department may seek to recover the amount necessary to implement permanent closure under the Department-issued permit and these rules as provided by law. (3-20-20)T

**651. -- 749. (RESERVED)**

**750. PERMIT MODIFICATION.**

**01. Cause for Permit Modification**. Causes for permit modification are: (3-20-20)T

**a.** A material modification or material expansion in the cyanidation facility operation, design or closure plan. (3-20-20)T

**b.** Natural phenomena substantially different from those anticipated in the original permit. (3-20-20)T

**02. Modification at Request of Permittee**. Requests for modification from the permittee shall include: (3-20-20)T

**a.** A written description of the modification(s); (3-20-20)T

**b.** Data supporting the modification request; (3-20-20)T

**c.** Causes and anticipated effects of the modification. (3-20-20)T

**03. Modification at Request of Director**. Pursuant to Subsection 750.01, if the Director determines that cause exists for permit modification, the Director shall notify the permittee in writing and request information necessary for the Director to modify the permit. (3-20-20)T

**04. Modification Procedure**. The Director shall evaluate the request for a permit modification, based on the information provided in Subsection 750.02 or otherwise obtained by the Department, and determine if the modification requires a major permit modification or a minor permit modification. Major permit modifications shall be subject to the provisions of Sections 100, 200, 300, 400, and 450. Minor permit modifications shall not be subject to the provisions of Sections 100, 300 and 400. The permittee shall notify and receive approval from the Department prior to making minor modifications. (3-20-20)T

**05. Major Permit Modifications**. Changes that require a major permit modification include but are not limited to: (3-20-20)T

**a.** Material modifications or material expansions to a cyanidation facility as defined by these rules; or (3-20-20)T

**b.** A significant increase or decrease in the time the cyanidation facility is expected to be in operation. (3-20-20)T

**c.** Requests to modify or change water quality compliance criteria and/or water quality compliance monitoring points. (3-20-20)T

**06. Minor Permit Modifications**. Minor permit modifications are those which, if granted, would not result in any increased hazard to the environment or to the public health. Within thirty (30) days of receipt of a written request for a minor modification, the Department shall complete an evaluation of the request and either approve or deny the request in writing. Minor modifications may include but are not limited to: (3-20-20)T

**a.** The correction of typographical errors in an approved permit. (3-20-20)T

**b.** Legal transfer of ownership or operational control. (3-20-20)T

**c.** A change in the requirements for monitoring or reporting frequency of the quality or quantity of the project air, water or waste generated. (3-20-20)T

**d.** A change in the cost estimates submitted by a permittee to the Idaho Department of Lands to complete permanent closure. (3-20-20)T

**e.** A change or modification that is required by a state or federal requirement that supersedes the authorities of these rules. (3-20-20)T

**751. -- 799. (RESERVED)**

**800. TRANSFER OF PERMITS.**

**01. Transfer of Permits Allowed**. A permit shall be transferred to a new permittee if such permittee provides written notice to the Director containing: (3-20-20)T

**a.** A specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees. (3-20-20)T

**b.** Demonstration that the new permittee has established appropriate financial assurance for permanent closure of the facility; and (3-20-20)T

**c.** The information required in Subsections 100.03.b., 100.03.d., 100.03.e. and 100.03.g. (3-20-20)T

**02. Decision**. The Director shall either approve of or deny the transfer of the permit within thirty (30) days of receipt of notice that the current permittee wishes to transfer the permit to a new permittee. (3-20-20)T

**03. Basis for Permit Denial**. The Director shall deny the request for the permit transfer if the new permittee has not provided the information required in Subsection 800.01. (3-20-20)T

**801. -- 849. (RESERVED)**

**850. PERMIT REVOCATION.**

**01. Cause for Revocation**. A material violation of a permit or these rules may be grounds for the Director to revoke a permit. A violation that is shown to have occurred as the result of an unforeseeable act of God despite a permittee's reasonable efforts to comply with all applicable legal requirements shall not be grounds for revocation. (3-20-20)T

**02. Revocation Hearing**. If the Director decides to revoke a permit, he shall issue a notice of intent which shall become final within thirty-five (35) days of service upon the permittee, unless the permittee requests in writing an administrative hearing. The hearing shall be conducted in accordance with IDAPA 58.01.23, Rules of Administrative Procedure Before the Board of Environmental Quality." (3-20-20)T

**851. -- 899. (RESERVED)**

**900. VIOLATIONS.**

**01. Failure to Comply**. Failure by a permittee to comply with the provisions of these rules or with any permit condition shall be deemed a violation of these rules. (3-20-20)T

**02. Falsification of Statements and Records**. It shall be a violation of these rules for any person to knowingly make a false statement, representation, or certification in any application, registration, report, document, or record developed, maintained, or submitted pursuant to these rules or the conditions of a permit. (3-20-20)T

**03. Discharges**. Any unauthorized discharge shall be a violation of these rules. (3-20-20)T

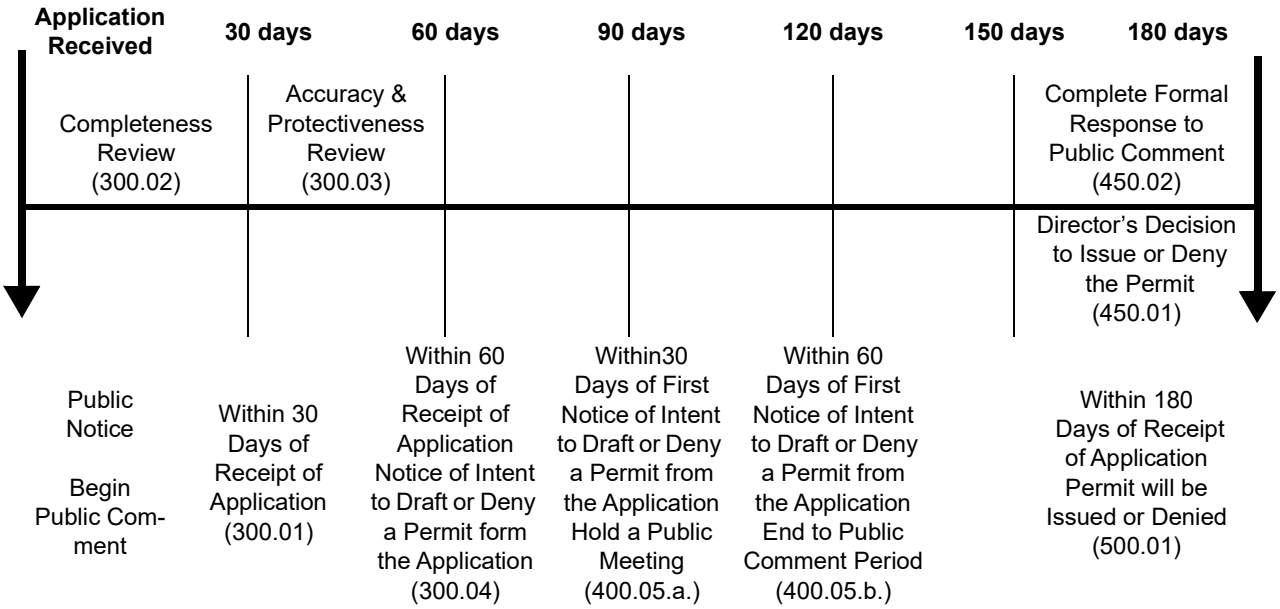
**901. -- 999. (RESERVED)**

## APPENDIX A

## APPLICATION PROCESSING TIME LINE FOR DIRECTOR'S FINAL DECISION

## IDAPA 58.01.13, RULES FOR ORE PROCESSING BY CYANIDATION

The following chart illustrates the time line for processing a permit application and references the corresponding sections from IDAPA 58.01.13.



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