R647-2 File number 52349 AMD Effective February 10, 2020

CERTIFIED A TRUE COPY Office of Administrative Rules R647. Natural Resources; Oil, Gas and Mining; Non-Coal.

R647-2. Exploration.

R647-2-101. Filing Requirements and Review Procedures.

- 1. Prior to the commencement of exploration, a Notice of Intention to Conduct Exploration (FORM MR-EXP) containing all the required information must be filed with and determined complete by the Division and the Division shall have approved the form and amount of reclamation surety. It is recommended that the notice of intention be filed with the Division at least 30 days prior to the planned commencement of exploration.
- 2. Within 15 days after receipt of a Notice of Intention to Conduct Exploration (FORM MR-EXP), the Division will review the proposal and notify the operator in writing that the notice of intention is:
- 2.11. Complete and all required information has been submitted; or
- 2.12. Incomplete, and additional information as identified by the Division will be required.

The Division will review and respond to any subsequent filings of information within 10 working days of receipt.

- 3. If more than five acres of disturbance are planned, a detailed exploration development and reclamation plan must be included in the notice of intention and approved by the Division.
- 4. The Division will review and approve or disapprove:
- 4.11. The form and amount of reclamation surety, and;
- 4.12. Any variances requested under R647-2-107, 108, or 109, regardless of the number of surface acres of disturbance planned.
- 5. Developmental drilling conducted within an already approved disturbed area with approved surety does not require submittal of a Notice of Intention to Conduct Exploration (FORM MR-EXP).
- 6. A permittee's retention of a notice of intention shall require the paying of permit fees as authorized by the Utah Legislature. The procedures for paying the permit fees are as follows:
- 6.11. The Division shall notify the operators of record annually of the amount of permit fees authorized by the Utah Legislature for Exploration.
- 6.12. Fees are due annually by the deadline in R647-2-115 for reports.
- 6.13. A permittee may avoid payment of the fee by complying with the following requirements:
- 6.13.11. A permittee will notify the Division of a desire to close out a notice of intention by checking the appropriate box of the permit fees billing form.
- 6.13.12. The permittee will then arrange with the Division for an onsite inspection of the site to assure that all required reclamation has been performed. If an inspection reveals that an area is not yet suitably reclaimed, then a new billing notice will be issued and the permittee will be given 30 days from the date of the onsite inspection to pay the fee.

R647-2-102. Duration of the Notice of Intention.

- 1. A Notice of Intention to Conduct Exploration that has been determined complete or, for operations of more than 10 acres has been approved, shall be valid until December 31st of the year following the year of submittal. All exploration and reclamation activities should be completed within this time frame. An operator desiring to extend the duration of a notice of intention, must notify the Division in writing, prior to expiration of the notice of intention, specifying the reasons an extension is required, and the anticipated length of time required to complete exploration and reclamation.
- 2. The Division will review and approve the extension and adjust if necessary, the amount of reclamation surety.
- 3. Authorization to operate under a Notice of Intention to Conduct Exploration may be withdrawn in the event of failure by the operator to pay permit fees required by R647-2-101.6, or to maintain and update reclamation surety as required, after notice and opportunity for Board hearing.

R647-2-103. Notice of Intention to Conduct Exploration.

The notice of intention shall address the requirements of the following rules:

TABLE

RULE #	SUBJECT
R647-2-104	Operator(s), Surface and Mineral Owner(s)
R647-2-105	Maps and Drawings
R647-2-106	Project Description
R647-2-107	Operation Practices
R647-2-108	Hole Plugging Requirements
R647-2-109	Reclamation Practices
R647-2-110	Variance

R647-2-104. Operator(s), Surface and Mineral Owner(s).

The notice of intention shall include the following general information:

- 1. The name, permanent mailing address, and telephone number of the operator responsible for exploration.
- 2. The name and permanent mailing address of the surface land owner(s) and mineral owner(s) of all land to be affected by the operations.
- 3. The federal mining claim number(s), lease number(s), or permit number(s) of any mining claims, federal or state leases or permits included in the land affected.
- 4. A statement that the operator will conduct reclamation as required by these rules.

R647-2-105. Maps and Drawings.

The notice of intention shall include a location map and an operations map. Each map shall be plotted at a scale to accurately identify locational landmarks and operation details.

- 1. The general location map shall be the scale of a USGS 7.5-minute series map or equivalent (1"=2000') and identify new or existing access roads.
- 2. The operations map (1"=200' or other scale as determined necessary by the Division) shall identify:
 - 2.11 The area to be disturbed;
- 2.12 The location of any existing or proposed operations including access roads, drill holes, trenches, pits, shafts, cuts, or other planned exploration activities; and

2.13 Any adjacent previous disturbance for which the operator is not responsible.

R647-2-106. Project Description.

The notice of intention should include the following information:

- 1. A statement giving general details of the type or method of exploration proposed, including the proposed dates during which exploration will be conducted;
 - 2. The type of minerals to be explored for;
- 3. The general dimensions of all drill holes, including total depth and diameter;
- 4. The general dimensions of all trenches, pits, shafts, cuts, or other types of disturbances;
- 5. The width and length of any new roads constructed:
- 6. An estimate of the total number of surface acres to be disturbed.
- 7. The amount of material (including mineral deposit, topsoil, subsoil, overburden, waste rock, or core hole material) extracted, moved, or proposed to be moved during the exploration operation.

R647-2-107. Operation Practices.

The operator shall conform to the following practices while conducting exploration unless the Division grants a variance in writing:

- 1. Public Safety and Welfare The operator shall minimize hazards to the public safety and welfare during operations. Methods to minimize hazards shall include but not be limited to:
- 1.11. The closing or guarding of shafts and tunnels to prevent unauthorized or accidental entry in accordance with MSHA regulations;
- 1.12. The disposal of trash, scrap metal and wood, and extraneous debris;
- 1.13. The plugging or capping of drill, core, or other exploratory holes as set forth in Rule R647-2-108;
- 1.14. The posting of appropriate warning signs in locations where public access to operations is readily available;
- 1.15. The construction of berms, fences and/or barriers above highwalls or other excavations when required by the Division.
- 2. Drainages If natural channels are to be affected by exploration, then the operator shall take appropriate measures to avoid or minimize environmental damage.
- 3. Erosion Control Operations shall be conducted in a manner such that sediment from disturbed areas is adequately controlled. The degree of erosion control shall be appropriate for the site-specific and regional conditions of topography, soil, drainage, water quality or other characteristics.
- 4. Deleterious Materials All deleterious or potentially deleterious material, shall be safely removed from the site or kept in an isolated condition such that adverse environmental effects are eliminated or controlled.
- 5. Soils Suitable soil material shall be removed and stored in a stable condition where practical so as to be available for reclamation.
- 6. Concurrent Reclamation During operations, disturbed areas shall be reclaimed when no longer needed,

except to the extent necessary to preserve evidence of mineralization for proof of discovery. Areas which have been disturbed but are not routinely or currently utilized shall be kept in a safe, environmentally stable condition.

R647-2-108. Hole Plugging Requirements.

Drill holes shall be properly plugged as soon as practical and not be left unplugged for more than 30 days without approval of the Division. The procedures outlined below are required for the surface and subsurface plugging of drill holes. The Division may approve an alternate plan, if the operator can prove to the satisfaction of the Division that another method will provide adequate protection to the groundwater resources and long term stability of the land. Dry holes and nonartesian holes which do not produce significant amounts of water may be temporarily plugged with a surface cap to permit the operator to re-enter the hole for the duration of operations.

- 1. Surface plugging of drill holes shall be accomplished by:
- 1.11. Setting a nonmetallic permaplug at a minimum of five (5) feet below the surface, or returning the cuttings to the hole and tamping the returned cuttings to within five (5) feet of ground level. The hole above the permaplug or tamped cuttings will be filled with a cement plug. If cemented casing is to be left in place, a concrete surface plug is not required provided that a permanent cap is secured on top of the casing.
- 1.12. If the area is tilled farmland, a five (5) foot cement plug must be placed above a permaplug or tamped cuttings so that the top of the cement plug is a minimum of three (3) feet below the ground surface. The hole above the cement plug is to be filled with soil. If cemented casing is to be left in place, a concrete surface plug is not required provided that a permanent cap is secured on top of the casing. The top of the casing and cap must be a minimum of three (3) feet below the ground surface.
- 2. Drill holes that encounter water, oil, gas or other potential migratory substances and are 2-1/2 inches or greater in surface diameter shall be plugged in the subsurface to prevent the migration of fluid from one strata to another. If water is encountered, plugging shall be accomplished as outlined below:
- 2.11. If artesian flow (i.e., water flowing to the surface from the hole) is encountered during or upon cessation of drilling, a cement plug shall be placed to prevent water from flowing between geologic formations and at the surface. The cement mix should consist of API Class A or H cement with additives as needed. It should weigh at least 13.5 lbs./gal., and be placed under the supervision of a person qualified in proper drill hole cementing of artesian flow. Artesian bore holes must be plugged in the described manner, prior to removal of the drilling equipment from the well site. If the surface owner of the land affected desires to convert an artesian drill hole to a water well, the owner must notify the Division in writing accepting responsibility for the ultimate plugging of the drill hole.
- 2.12. Holes that encounter significant amounts of nonartesian water shall be plugged by:
- 2.12.111 Placing a 50 foot cement plug immediately above and below the aquifer(s); or

2.12.112 Filling from the bottom up (through the drill stem) with a high grade bentonite/water slurry mixture. The slurry shall have a Marsh funnel viscosity of at least 50 seconds per quart prior to the adding of any cuttings.

R647-2-109. Reclamation Practices.

The operator shall conform to the following practices while conducting reclamation unless the Division grants a variance in writing:

- 1. Public Safety and Welfare The operator shall minimize hazards to the public safety and welfare following completion of operations. Methods to minimize hazards shall include but not be limited to:
 - 1.11. The permanent sealing of shafts and tunnels;
- 1.12. Appropriate disposal of trash, scrap metal and wood, buildings, extraneous debris, and other materials incident to mining;
- 1.13. The plugging of drill, core, or other exploratory holes as set forth in Rule R647-2-108;
- 1.14. The posting of appropriate warning signs in locations where public access to operations is readily available:
- 1.15. The construction of berms, fences and/or barriers above highwalls or other excavations when required by the Division.
- 2. Drainages If natural channels have been affected by exploration, then reclamation must be performed such that the channels will be left in a stable condition with respect to actual and reasonably expected water flow so as to avoid or minimize future damage to the hydrologic system.
- 3. Erosion Control Reclamation shall be conducted in a manner such that sediment from disturbed areas is adequately controlled. The degree of erosion control shall be appropriate for the site-specific and regional conditions of topography, soil, drainage, water quality or other characteristics.
- 4. Deleterious Materials All deleterious or potentially deleterious material shall be safely removed from the site or left in an isolated or neutralized condition such that adverse environmental effects are eliminated or controlled.
- 5. Land Use The operator shall leave the on-site area in a condition which is capable of supporting the postmining land use.
- 6. Slopes Waste piles, spoil piles and fills shall be regraded to a stable configuration and shall be sloped to minimize safety hazards and erosion while providing for successful revegetation.
- 7. Highwalls In surface mining and in open cuts for pads or roadways, highwalls shall be reclaimed and stabilized by backfilling against them or by cutting the wall back to achieve a slope angle of 45 degrees or less.
- 8. Roads and Pads On-site roads and pads shall be reclaimed when they are no longer needed for operations. When a road or pad is to be turned over to the property owner or managing agency for continuing use, the operator shall turn over the property with adequate surface drainage structures and in a condition suitable for continued use.
- 9. Dams and Impoundments Water impounding structures shall be reclaimed so as to be self-draining and mechanically stable unless shown to have sound hydrologic design and to be beneficial to the postmining land use.

- 10. Trenches and Pits Trenches and small pits shall be reclaimed.
- 11. Structures and Equipment Structures, rail lines, utility connections, equipment, and debris shall be buried or removed.
- 12. Topsoil Redistribution After final grading, soil materials shall be redistributed on a stable surface so as to minimize erosion, prevent undue compaction and promote revegetation.
- 13. Revegetation The species seeded shall include adaptable perennial species that will grow on the site, provide basic soil and watershed protection, and support the postmining land use.

Revegetation shall be considered accomplished when:

- 13.11. The revegetation has achieved 70 percent of the premining vegetative ground cover. If the premining vegetative ground cover is unknown, the ground cover of an adjacent undisturbed area that is representative of the premining ground cover will be used as a standard. Also, the vegetation has survived three growing seasons following the last seeding, fertilization or irrigation, unless such practices are to continue as part of the postmining land use; or
- 13.12. the Division determines that the revegetation work has been satisfactorily completed within practical limits; where reseeding has occurred and the vegetation has survived one growing season, the reseeded area shall not be included for purposes of determining whether future exploration or mining operations involve a disturbed area of five acres or less.

R647-2-110. Variance.

- 1. The operator may request a variance from Rule R647-2-107, 108, or 109, by submitting the following information, which shall be considered by the Division on a site-specific basis:
- 1.11. The rule(s) as to which a variance is requested;
- 1.12. The variance requested and description of the area that would be affected by the variance;
 - 1.13. Justification for the variance;
 - 1.14. Alternate methods or measures to be utilized.
- 2. A variance shall be granted if the alternative method or measure proposed will be consistent with the Act.
- 3. Any variance must be specifically approved by the Division in writing.

R647-2-111. Surety.

- 1. After receiving notification that the notice of intention is approved or complete, but prior to commencement of operations, the operator must post a reclamation surety with the Division.
- 1.11. Failure to furnish and maintain reclamation surety may, after notice and opportunity for a Board hearing, result in a withdrawal of the notice of intention as provided for in Section 40-8-16.
- 2. The Division will not require a separate surety where a reclamation surety in a form and amount acceptable to the Division is held by other governmental entities, provided that the cost estimate is accurate and the Division is named as co-beneficiary. Cooperative Agreements may be developed and entered into according to Section 40-8-22.

- 3. As part of the review of the notice of intention, the Division shall determine the required surety amount based on:
- 3.11. Site-specific calculations or estimates by the Division reflecting the cost the Division or a third party would incur to reclaim the site:
- 3.12. Site-specific calculations or estimates by the operator reflecting the cost the Division or a third party would incur to reclaim the site, if accurate and verifiable by the Division; or
- 3.13. The average dollars per acre costs for reclamation for similar operations, as determined by the Division, based upon approved surety amounts for current large mining operations.
- 3.14. In determining or verifying the amount of surety under Subsections 3.11 or 3.12, the Division shall use cost data from current sureties for large mining operations, adjusted as necessary to reflect the nature and scope of operations and reclamation under the notice of intention.
- 3.15. For the average dollars per acre in Subsection 3.13, the Board will annually approve the figure after a formal presentation from the Division and an opportunity for public comment.
- 4. The operator shall submit a completed Reclamation Contract (FORM MR-RC) with the required surety. The form and amount of the reclamation surety must be approved by the Division. Acceptable forms may include:
- 4.11. A corporate surety bond from a surety company that is licensed to do business in Utah, that is listed in "A.M. Best's Key Rating Guide" at a rating of A- or better or a Financial Performance Rating (FPR) of 8 or better, according to the "A.M. Best's Guide". All surety companies also will be continuously listed in the current issue of the U.S. Department of the Treasury Circular 570. Operators who do not have a surety bond with a company that meets the standards of subsection 4.11 will have 120 days from the date of Division notification after enactment of the changes to subsection 4.11 to achieve compliance or face enforcement action. When the Division in the course of examining surety bonds, notifies an operator that a surety company guaranteeing its performance does not meet the standards of subsection 4.11., the operator has 120 days after notice from the Division by mail to correct the deficiency, or face enforcement action;
- 4.12. Federally-insured certificate of deposit payable to the State of Utah, Division of Oil, Gas and Mining;
 - 4.13. Cash;
- 4.14. An irrevocable letter of credit issued by a bank organized to do business in the United States;
 - 4.15. Escrow accounts; and
- 4.16. The Board may accept a written self-bonding agreement in the case of operators showing sufficient financial strength.
- 5. Surety shall be required until such time as reclamation is deemed complete by the Division. The Division shall promptly conduct an inspection when notified by the operator that reclamation is complete. The full release of surety shall be evidence that the operator has reclaimed as required by the Act.
- 5.11. A partial release of surety can be made by the Division if it determines that a substantial phase or segment of reclamation such as demolition, backfilling or regrading has

been successfully performed and the residual amount of retained surety is determined to be adequate to insure completion of reclamation.

R647-2-112. Failure to Reclaim.

If the operator fails or refuses to conduct reclamation as outlined in the complete notice of intention, and comply with the requirements of R647-2-107, R647-2-108, or R647-2-109 the Board may, after notice and hearing, order that:

- 1. Reclamation be conducted by the Division,
- 2. The costs and expenses of reclamation, together with costs of collection including attorney's fees, be recovered in a civil action brought by the attorney general against the operator in any appropriate court; and
- 3. Any surety filed for this purpose be forfeited. With respect to the surety filed with the Division, the Board shall request the Attorney General to take the necessary legal action to enforce and collect the amount of liability. Where a reclamation surety has been filed with other governmental agencies, the Board shall notify such agency of the hearing findings and seek forfeiture concurrence as necessary.
- 3.11. The forfeited surety shall be used only for the reclamation of land to which it relates, and any residual amount returned.

R647-2-113. Confidential Information.

Information provided in the notice of intention and in the Mineral Exploration Progress Report (FORM MR-EPR) that relates to the location, size, and nature of the mineral deposit, shall be protected as confidential information by the Board and the Division. The information will not be a matter of public record until a written release is received from the operator.

R647-2-114. Revised Notice.

- 1. Minor additions or changes in the location of exploration operations do not require the submittal of a revised notice of intention. A new or revised Notice of Intention to Conduct Exploration (FORM MR-EXP) letter must be submitted when:
- 1.1. The proposed additions or changes will occur outside the originally designated legal subdivision; or
- 1.2. For exploration operations under 5 acres the proposed additions will cause the total unreclaimed surface disturbance to increase by more than 1 acre or exceed 5 acres; or
- 1.3. For exploration operations over 5 acres, the proposed additions or changes will cause an increase in the area of disturbance previously approved.
- 2. In the event the Division or the operator determine at the time a revision is submitted that the amount of the current surety does not accurately reflect the potential cost to complete reclamation at any particular point in time during the revised exploration operations, the Division may undertake a recalculation of the surety amount as provided in R647-2-111.3. If the recalculated amount is greater than the amount of the existing surety, the revised operations may not be implemented until a revised surety is filed with the Division.

R647-2-115. Reports.

On or before November 30th of each year, the operator conducting exploration must submit a Mineral Exploration Progress Report (FORM MR-EPR), which describes any unusual drilling conditions, water encountered, hole plugging measures, and reclamation activities conducted.

R647-2-116. Practices and Procedures; Appeals.

The Administrative Procedures, as outlined in R647-5, shall be applicable to minerals regulatory proceedings.

KEY: minerals reclamation

Date of Enactment or Last Substantive Amendment:

February 10, 2020

Notice of Continuation: January 24, 2018

Authorizing, and Implemented or Interpreted Law: 40-8-

1 et seq.

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