## R652-21. Great Salt Lake Elements and Minerals.

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## R652-21-100. Purpose and Authority

- (1) Authority. These rules are promulgated pursuant to Utah Code § 65A-6-4 et seq.
- (2) **Purpose.** The purpose of this chapter of the division's rules is to implement regulations consistent with the purpose and intent of the legislature's amendments to Utah Code § 65A-6-4 regarding Great Salt Lake Elements and Minerals.



#### R652-21-200. Definitions

- (1) "Applicant" means any person submitting a Feasibility Application or Operations Application to the division.
- (2) "Base Royalty Rate" means the royalty rate established, by the division, for an Applicant before any Royalty Rate Deductions are applied.
- (3) "Biota" means all plant, fungi, animal, and other bacteria and archaea in the Great Salt Lake ecosystem.
- (4) "Bond" or "Bonding" means full-cost bonding, executed with the division, and reclamation bonding, executed with the Division of Oil, Gas & Mining.
- (5) "Chemistry" means the properties, composition, and structure of the elements and compounds, and interactions thereof, making up the waters, brines, and substrate of Great Salt Lake.
- (6) "Commercial Viability" means the Applicant:
  - (a) Proposes an operation with a life of mine of at least twenty years;
  - (b) Proposes an operation that addresses significant risks and minimizes dangers to protect the ecological integrity of Great Salt Lake;
  - (c) Has the requisite Bonding in place for upland property and sovereign lands;
  - (d) Proposes an operation that meets the qualifications in the Commercial Viability Form;
  - (e) Enters into a Cooperative Agreement; and
  - (f) Proposes an operation to produce a product for commercial sale or commercial use.
- (7) "Common Source of Supply" means the mineral estate contained within the entirety of Great Salt Lake within the Ordinary Highwater Mark, and any hydrological connections contributing minerals, elements, or ores to Great Salt Lake.
- (8) "Companion Element or Mineral" means a Great Salt Lake Element or Mineral that is attached, embedded to, or is a by-product of another Great Salt Lake Element or Mineral.
- (9) "Cooperative Agreement" means an agreement between two or more Operators to collaborate on the extraction of Great Salt Lake Elements and Minerals and coordinate accordingly.
- (10) "Correlative Rights" means the opportunity of each Commercially Viable owner to extract a portion of a Common Source of Supply, subject to the state's sovereign lands management responsibilities, to produce a just and equitable share of the Great Salt Lake Mineral Resource without the occurrence of Waste. For purposes of Great Salt Lake Element or Mineral leasing, the protection of Correlative Rights is inclusive of balancing the state's interests in protecting the ecological integrity of Great Salt Lake, ensuring a healthy and sustainable salinity level within the Great Salt Lake, and protecting the Great Salt Lake's Chemistry and Biota.
- (11) "Emergency Trigger" means the salinity levels of the Gilbert Bay of Great Salt Lake do not satisfy the ecological conditions required for healthy brine shrimp and brine fly reproduction.

- (12) "Emergent Technologies" means a new technology or a new use of an existing technology that is not currently, or has not previously been, deployed as an extractive method on Great Salt Lake and for which the division has not issued a Royalty Agreement, but for which an Application and Feasibility Plan has been submitted for approval to the division. For purposes of this definition, "Emergent Technologies" is synonymous with "Innovative Technologies."
- (13) "Evaporative Technologies" means a production operation that partially or wholly utilizes evaporative processes, not including naturally occurring evaporative processes, at any stage of the extractive process to develop or extract a Great Salt Lake Element or Mineral from the waters, brines, or substrates of Great Salt Lake.
- (14) "Feasibility Assessment" means the process, prior to execution of an Operations Royalty Agreement with the division, for determining whether a Great Salt Lake Operator can demonstrate Commercial Viability and no Negative Impacts to Great Salt Lake Biota and Chemistry.
- (15) "Final Royalty Rate" means the royalty established in the Operations Royalty Agreement, by the division, after applying all relevant and proven Royalty Rate Deductions. The Final Royalty Rate shall be a Variable-Rate Royalty.
- (16) "First Marketable Product" means the form of a Great Salt Lake Element or Mineral, as determined by the division, to which the Base Royalty Rate attaches.
- (17) "Greater Benefit to the State" means maximizing the recovery of Great Salt Lake Elements or Minerals and minimizing the Negative Impacts to Great Salt Lake Natural Resources.
- (18) "Great Salt Lake Element or Mineral" means, as defined in Utah Code § 65A-6-4, a rare earth element; a trace element or mineral; or a chemical compound that includes a rare earth element or trace element or mineral.
- (19) "Great Salt Lake Mineral Resource" means any Great Salt Lake Element or Mineral, including any marketable Companion Element or Mineral, that can be produced in Paying Quantities.
- (20) "Great Salt Lake Natural Resources" means the Biota, water resources and water quality, the fishery and recreational resources, the wetlands and wildlife resources, and any other naturally occurring resource on Great Salt Lake.
- (21) "Great Salt Lake Operator" or "Operator" means a qualified person or business entity pursuing the extraction of Great Salt Lake Elements or Minerals.
- (22) "Healthy Ecological Conditions" means salinity levels, measured according to the protocols adopted by the Salinity Advisory Committee, which satisfy healthy brine shrimp and brine fly reproduction.
- (23) "Life of Mine" means the anticipated duration an Operator can produce a Great Salt Lake Element or Mineral in Paying Quantities.
- (24) "Mitigation Water" means the water returned to Great Salt Lake to compensate for water consumed or evaporated by Operators, pursuant to Utah Code § 65A-6-4. Mitigation Water shall not include wastewater reuse.
- (25) "Negative Impact" means a substantive and material adverse impact or disturbance, in the singular or cumulative instance, as determined by the division.

- (26) "Operations Plan" means a plan meeting the requirements specified in R652-21-604.
- (27) "Operations Royalty Agreement" means the agreement entered into between an Operator and the division authorizing and governing the extraction of a Great Salt Lake Element or Mineral.
- (28) "Operational Waste" means waste products, in any unmarketable state, generated throughout operations.
- (29) "Paying Quantities" means the revenue generated from the sale of the Great Salt Lake Element or Mineral being produced exceeds all costs associated with obtaining such Great Salt Lake Element or Mineral, measured over a commercially reasonable period of time.
- (30) "Produced Water" means any water discharged back into Great Salt Lake from commercial operations.
- (31) "Royalty Rate Deduction" means the percent reductions, contained in RXX-XX-3, which an Operator may apply to lower the Base Royalty Rate.
- (32) "Sampling Royalty Agreement" means a short-term agreement entered into between an Operator and the division authorizing and governing the extraction of a fixed volume of Great Salt Lake water or brine for the express purpose modifying or enhancing project equipment design, evaluation, and calibration.
- (33) "Self-Certification" means a representation by an Operator affirmatively stating the contents provided are correct under penalty of perjury by the signatory.
- (34) "Total Water" means both water or brine extracted from Great Salt Lake and any other water used for processing and operations.
- (35) "Variable-Rate Royalty" means a royalty rate that adjusts depending on the value of the commodity being sold.
- (36) "Waste" means: 1) an inefficient, excessive, or improper use or operation failing to provide the state with a full and fair return on each separately identified Great Salt Lake Element or Mineral; 2) an unnecessary depletion, diminishment, or reduction of the quantity or quality of Great Salt Lake Mineral Resources; and 3) imprudent and uneconomical operations.
- (37) All other definitions in Utah Code §§ 65A-6-4 and 65A-10-201 are adopted by reference.

## R652-21-300. Nomination Process.

- (1) An existing or prospective Operator may, at any time, file a nomination for rulemaking with the division, on the form provided by the division, to establish a royalty rate and calculation methodology for any Great Salt Lake Element or Mineral that does not have an established royalty rate and calculation methodology.
- (2) Upon such nomination, the division shall, by rule, establish a royalty rate and calculation methodology for the Great Salt Lake Element or Mineral nominated.



## R652-21-400. Feasibility Assessment.

#### R652-21-401. Necessity.

To be eligible for an Operations Royalty Agreement, an Operator shall first enter into a Feasibility Assessment.

#### R652-21-402. Purpose.

- (1) The purpose of such Feasibility Assessment is to:
  - (a) Inform the division's continuing assessment and determination of what a full and fair return to the state from the nominated element or mineral is; and
  - (b) Inform the division of impacts the extraction of the nominated element or mineral would have on the Biota and Chemistry of Great Salt Lake.

#### R652-21-403. Feasibility Application.

- (1) **Submission.** An existing or prospective qualified applicant shall submit a Feasibility Application on the form provided by the division.
- (2) **Discretion.** The division has exclusive discretion to approve, conditionally approve, deny, or deem incomplete any Feasibility Application.
- (3) **Qualified Applicant.** Applicants shall meet the minimum qualifications set forth in R652-3-300.
- (4) **Required Showings.** Additionally, before the division and an Operator may enter into a Sampling Royalty Agreement, such Operator shall submit the following information in its Feasibility Application to the division:
  - (a) Self-certification with supporting documentation establishing the Operator's Commercial Viability for the Life of Mine, including both the method of evaluation and the data used in such evaluation;
  - (b) Self-certification with supporting documentation establishing the Operator's planned Feasibility Assessment operations will not negatively impact the Biota and Chemistry of Great Salt Lake;
  - (c) Type(s) of technology to be employed;
  - (d) Anticipated surface use occupancy and ownership thereof, including a description of any infrastructure to be placed on Great Salt Lake sovereign land and upland development necessary for the Feasibility Assessment;
  - (e) Proof of Bonding for any disturbance to sovereign land and any disturbance to uplands;
  - (f) If applicable, a description of the Operator's plan for any necessary reclamation action in the Feasibility Assessment area following termination of the Feasibility Assessment;
  - (g) Copies of any easements, permits, approvals, agreements, or other documents which have been or will be submitted to other agencies for initiation of the Feasibility Assessment operations;

- (h) Copies of any agreements, contracts, options, and other financial arrangements entered into by the Operator and a third-party relating to both the feasibility assessment and planned extraction operations;
- (i) Self-Certification, complete with any supporting documentation, the Operator is fully compliant with all known contractual obligations owed to the state and all regulatory requirements, as well as having paid or settled all known outstanding fines or assessments due and owing to the state and United States;
- (j) Proof of all water rights and related appropriations necessary to perform the Feasibility Assessment operations;
- (k) Self-Certification planned Feasibility Assessment operations will not violate Utah Code § 65A-6-1(3);
- A detailed description of the Operator's experience and knowledge predicating the Operator's ability to commercially produce minerals from the brines of Great Salt Lake;
- (m) A detailed description of the Operator's plan and operations for mineral extraction;
- (n) Identification of any Royalty Rate Deductions the Operator intends to pursue;
- (o) A detailed description of the Operator's plan for metering water usage and/or water or brine intake;
- (p) A detailed description of the Operator's plan for the location, processing, and storage of minerals;
- (q) An assessment of whether the Operator's planned operations will create any Operational Waste and a plan for management of any such Operational Waste;
- (r) An assessment of the operation's Life of Mine and estimated mineral production during the Feasibility Assessment;
- (s) The projected operational recovery rate for the Great Salt Lake Element or Mineral;
- (t) An initial plan for the Operator's management of Negative Impacts on Great Salt Lake Biota and Chemistry through the Feasibility Assessment;
- (u) An initial plan for the Operator's mitigation of water used through the Feasibility Assessment;
- (v) An initial plan for testing, monitoring, and recording all hydrologic inputs and outputs, including the Chemistry thereof, throughout the Feasibility Assessment; and
- (w) If Operator has an existing royalty agreement, it is within the division's discretion to require additional showings regarding the Operator's standing and compliance with any existing division obligations.
- (5) **Additional Required Information.** At any point during review of a Feasibility Application, the division or Director may request additional information from the Applicant. To remain in consideration for a Sampling Royalty Agreement, the Applicant shall provide such information in the time specified by the division.
- (6) **Application Processing.** Within forty-five days of receiving a Feasibility Application, the division shall notify the applicant in writing of the status of the Application. The division may:
  - (a) Approve the Feasibility Application as submitted;
  - (b) Deny the Feasibility Application as submitted;

- (c) Approve the Feasibility Application, with conditions determined by the Division; or
- (d) Deem the Feasibility Application incomplete and provide the applicant with a list of missing information, at which point an applicant may re-submit.
- (7) **Identification of Operators.** Upon submission of a Feasibility Application, any Operator wishing to enter into a Cooperative Agreement shall obtain a list from the division of all existing Operators and notify each existing Operator of its intention to enter into a Cooperative Agreement.

#### R652-21-404. Feasibility Assessment Term.

- (1) **Term Length.** The Feasibility Assessment term shall be nine months, unless otherwise determined by the division.
  - (a) **Extensions.** Extensions may be granted by the Director upon good cause shown by the Operator. A Request for Extension shall be submitted to the division upon the form provided by the division at least one month prior to the expiration of the Feasibility Assessment term.
  - (b) **Termination.** The Feasibility Assessment shall terminate if:
    - (i) Nine months have passed without the Director's approval of an extension, whether or not a Royalty Agreement has been executed;
    - (ii) A Royalty Agreement is executed before the Feasibility Assessment Term expires;
    - (iii) The Director finds there is not good cause shown to grant an extension to the Operator; or
    - (iv) The Director, in her or his sole discretion, finds the Feasibility Assessment has resulted in Negative Impacts to Great Salt Lake or the Operator's water right(s) for the Feasibility Assessment are insufficient to maintain or substantiate Commercial Viability.

#### R652-21-405. Sampling Royalty Agreement.

- (1) **Requirement.** Upon the division's approval of a Feasibility Application, the Operator shall obtain a Sampling Royalty Agreement from the division.
- (2) **Sampling Royalty Rate.** Except for an agreement providing for a royalty rate for extraction of a Great Salt Lake Element or Mineral entered into prior to May 3, 2023, an Applicant shall pay a minimum royalty of \$30,000 per month for the duration of the Feasibility Assessment.
- (3) **Sampling Royalty Agreement Duration.** A Sampling Royalty Agreement shall terminate upon the occurrence of any event specified in R652-21-404(1)(b).
- (4) **Scope of Sampling Royalty Agreement.** Any Great Salt Lake Element or Mineral extracted or produced under a Sampling Royalty Agreement shall be accounted for, separately stored, and not sold until execution of an Operational Royalty Agreement.

#### R652-21-406. Feasibility Assessment Reporting.

(1) **Sampling and Testing Intervals.** During the term of the Feasibility Assessment, an Operator shall perform the necessary sampling and testing on at least a monthly basis.

- (2) **Reporting Requirements and Intervals.** During the term of the Feasibility Assessment, an Operator shall submit the following monthly:
  - (a) A Feasibility Report;
  - (b) Production Report; and
  - (c) Commercial Viability Report.
- (3) **Feasibility Report.** During the term of the Feasibility Assessment, an Operator shall report the following information to the division:
  - (a) Total water or brine use and depletion data based on data collected from water meters;
  - (b) Volume of Mitigation Water returned to Great Salt Lake;
  - (c) Actual data and findings with respect to the Required Showings in the Operator's Feasibility Application;
  - (d) Information supporting the Operator's ongoing ability to Self-Certify an absence of Negative Impact to Biota and Chemistry, including:
    - (i) Information on the pH value, turbidity, temperature, total dissolved solids, and salinity of waters and brines extracted at the point of intake;
    - Information on the pH value, turbidity, temperature, total dissolved solids, and salinity of waters and brines discharged into Great Salt Lake and intermediary evaporation ponds;
    - (iii) Information on the amount and Chemistry of all added substances utilized in the Feasibility Assessment;
    - (iv) Information on Operational Waste, including Operational Waste production, composition, methods of Operational Waste material disposal, and the placement and disposal of Operational Waste; and
    - (v) Concentration values for Na, Mg, K, Ca, Cl, SO4 in terms of grams per liter; and Br, Li, and B in terms of parts per million;
  - (e) Such other information the division may require.
- (4) **Production Report.** An Operator shall report the volume and weight of any Great Salt Lake Element or Mineral extracted or produced through the Feasibility Assessment.
- (5) **Commercial Viability Report**. An Operator shall report any additional information supporting the Operator's self-certification of Commercial Viability.
- (6) **Required Sharing of Information.** Upon request by the division, an Operator shall provide any additional required information to the division.
- (7) **Records.** An Operator with a Feasibility Royalty Agreement shall keep accurate records of the volume and weight of any Great Salt Lake Element or Mineral extracted. Such records shall be retained for at least five years and shall be available for inspection upon request by the division.
- (8) **Final Feasibility Report.** Upon either the termination of a Feasibility Assessment or the filing of an Operations Application, whichever occurs first, an Operator shall file a Final Feasibility Report with the division. The Final Feasibility Report shall include:
  - (a) The Operator's quantitative and qualitative assessment of successes and limitations encountered by the Operator during the term of the Feasibility Assessment;
  - (b) The Operator's plan for any necessary reclamation action following termination of the Feasibility Assessment;

- (c) A description of the amount of water and brine diverted and appropriated from Great Salt Lake and other sources during the Feasibility Assessment;
- (d) A description of the amount of water and brine depleted or otherwise consumed during the Feasibility Assessment;
- (e) Proof the operator processed, at a minimum, 100 acre-feet of water and brine during the Feasibility Assessment;
- (f) A description of the total amount of water and brine anticipated for the planned operation;
- (g) An assessment of the recoverable mineral resources for planned operations and a timeframe and development plan under which planned extraction will occur;
- (h) A good faith projection of the duration of potential extraction and the net revenue derived from such extraction;
- (i) Any material changes to the Required Showings submitted in the Feasibility Application; and
- (j) Any additional information requested by the division or Director.

## R652-21-500. Multiple Operator / Correlative Rights.

#### R652-21-501. Common Source of Supply Designation.

- (1) Pursuant to the division's Great Salt Lake management authority, codified in Utah Code § 65A-10-203, and based on the numerous Great Salt Lake Elements or Minerals which can be extracted from Great Salt Lake's water or brine, the division designates the entire mineral estate held in suspension within the water and brines of Great Salt Lake, or hydrologically connected to Great Salt Lake, as a Common Source of Supply.
- (2) As a Common Source of Supply, the division shall manage and plan for the overall development of Great Salt Lake's Mineral Resources in consideration of each Operator or separate operation on Great Salt Lake.

#### R652-21-502. Statement of Public Interest and Establishment of Conservation Principles.

- (1) Pursuant to Utah Code § 65A-10-1 and as the executive management authority over the state's sovereign lands, the division declares it is in the public interest to foster, encourage, promote, and balance the responsible development, production, and utilization of Great Salt Lake Elements or Minerals in such a manner as to:
  - (a) Prevent Waste;
  - (b) Ensure the greatest ultimate recovery of Great Salt Lake Elements or Minerals is obtained:
  - (c) Protect the Correlative Rights of all owners having rights to the Common Source of Supply and the state's fiduciary obligation to manage all aspects of a public trust asset or resource; and
  - (d) Encourage new and Emergent Technologies to protect Great Salt Lake's overall ecological integrity while simultaneously ensuring the greatest possible economic recovery for Great Salt Lake Operators and the State.

#### R652-21-503. Designation of Great Salt Lake as a Multiple Mineral Development Area.

- (1) Pursuant to its management authority over sovereign lands and consistent with R652-20-2500, the division designates the entirety of Great Salt Lake below the ordinary high water mark, including any groundwater there below or geothermal hydrologic connections thereto where Great Salt Lake Mineral Resources are located or which contribute to the presence or occurrence of Great Salt Lake Elements or Minerals.
- (2) Mineral operations conducted in areas designated by the division for multiple mineral development shall comply with all rules and regulations governing individual operations while also complying with all rules and regulations promulgated for Multiple Mineral Development Areas.
- (3) In its sole and exclusive discretion, the division may determine certain areas within Great Salt Lake are withdrawn from mineral development or incapable of any mineral development.

(4) In order to fully protect Great Salt Lake Elements or Minerals and Great Salt Lake Natural Resources, the division may condition the issuance of any mineral lease or royalty agreement with stipulations tailored to protect the interests of the state and other Great Salt Lake Natural Resources.

# R652-21-504. Cooperative Agreements and Mineral Lease and Royalty Agreement Integration.

- (1) It is the policy of the division to promote the responsible and orderly development of Great Salt Lake Elements or Minerals. Consistent with that policy, and recognizing Great Salt Lake is a Common Source of Supply, Great Salt Lake Operators shall enter a "Cooperative Agreement" with each existing Operator conducting mineral extraction or mineral processing on Great Salt Lake.
- (2) Entering into a Cooperative Agreement with all other Great Salt Lake Operators is a condition precedent to the division issuing a final Great Salt Lake Royalty Agreement and is a condition for continued operations.
- (3) In addition to any other negotiated term or condition, each Cooperative Agreement executed by Great Salt Lake Operators shall clearly and conspicuously provide any rights, responsibilities, and obligations contained in the Cooperative Agreement are subject to the public trust as referenced in R652-2-200. Such Cooperative Agreement shall also define and address the following:
  - (a) The basis and overall agreement on how two or more operators on Great Salt Lake can conduct concurrent or simultaneous operations without materially reducing the value of the Great Salt Lake Element or Mineral produced;
  - (b) The protection of Great Salt Lake Natural Resources, without unnecessary cost to the operations of another Operator, unless there is compensation for increased operational costs;
  - (c) The extent and limits of liability when one Operator, either intentionally or unintentionally, interferes with or damages the mineral rights or mineral interests of another operator;
  - (d) The coordination and locations of access to the Common Source of Supply and the overall plan of operations, including assessment of costs resulting from concurrent operations, within the same Multiple Mineral Development Area;
  - (e) Mitigation of surface impacts including, but not limited to:
    - (i) The location or relocation of any Great Salt Lake Element or Mineral extraction intake or discharge facility;
    - (ii) Phased or coordinated surface occupancy to allow each operator to access and develop its respective mineral estate or interest with the least disruption of operations and damage to Great Salt Lake Elements or Minerals and Great Salt Lake Natural Resources either directly, indirectly, or through Waste; and

- (iii) Limitation of Great Salt Lake Element or Mineral operations in areas where impacts to Correlative Rights or to Great Salt Lake Natural Resources are significant or most acute, as determined by the Operators or the division;
- (f) Mitigation of impacts to any groundwater below sovereign lands or geothermal hydrologic connections thereto including, but not limited to, the use of any underground well or aquifer in any aspect of extraction or processing;
- (g) The scope and extent of how geological, engineering, production, and water use data is disclosed or exchanged;
- (h) How any joint reclamation obligation or plan shall be achieved or coordinated;
- (i) Provisions on how Bonding will be obtained and coordinated on any lands impacted, disturbed, or developed in relation to mineral extraction and processing activities;
- (j) Terms and conditions indemnifying the state, the division, and any of its directors, officers, agents or employees from any and all damage or liability, of any kind whatsoever, resulting from any stage of mineral extraction operations or any stage of mineral processing;
- (k) Terms and conditions obligating Great Salt Lake Operators to plan, and carry out such plans, for the protection of the ecological integrity and healthy salinity levels of Great Salt Lake;
- (I) Terms and conditions attributable to full compliance with any Royalty Rate Deductions to which a Great Salt Lake Operator is entitled;
- (m) A schedule for how the Great Salt Lake Operators plan to collectively curtail production in the event of reaching the Emergency Trigger and a required curtailment of production; and
- (n) Any other term or condition outlining cooperative efforts consistent with Multiple Mineral Development under the rules, regulations, or plans of the division.
- (4) The Director shall review each Cooperative Agreement negotiated by Operators and issue a record of decision, under R652-9-200. Upon the Director's approval of the Cooperative Agreement, the division shall be a signatory to the Cooperative Agreement.
- (5) In addition to the Cooperative Agreement, an Operations Royalty Agreement executed by a Great Salt Lake Operator shall also contain terms and conditions consistent with Multiple Mineral Development and the purpose and intent of R652-2-2500, as well as terms required in R652-X-XXX.
  - (o) The Operations Royalty Agreement shall obligate the lessee to prevent Waste to the Common Source of Supply or Great Salt Lake Element or Mineral to be extracted and to prevent Waste regarding any Companion Element or Mineral extracted while also avoiding Waste to any Great Salt Lake Natural Resource.
  - (p) The Operations Royalty Agreement shall contain terms and conditions wherein the lessee agrees to preserve and conserve Great Salt Lake Mineral Resources and Great Salt Lake Natural Resources for future mineral extraction and mineral processing operations and to ensure ecological integrity and healthy salinity levels are also preserved and protected.

- (q) The Operations Royalty Agreement shall also contain terms and conditions wherein the lessee represents and warrants full compliance, at lessee's sole expense, with all management decisions and instructions of the division and Director for preservation of Great Salt Lake's Mineral and Natural Resources.
- (6) No Operator shall obstruct the ability of another new or existing Operator to enter into a Cooperative Agreement.

#### R652-21-505. Multiple Mineral Development Conflict Resolution and Special Remedies.

- (1) Two or more lessees or Great Salt Lake Operators may conduct concurrent operations on Great Salt Lake under a Cooperative Agreement upon stipulation and agreement that:
  - (a) All operations can be conducted simultaneously without materially reducing the value of the resources being produced;
  - (b) All operations can be conducted simultaneously without materially damaging or significantly impacting Great Salt Lake Natural Resources;
  - (c) All operations will be conducted without unduly interfering with, or unnecessarily raising the cost of operations of another Operator, unless the other affected Operator is compensated for increased costs or diminished returns.
- (2) If the Operators cannot agree on a plan for concurrent development, or an assessment of costs, or that operations are not conducive to concurrent development, the parties shall resolve their impasse through binding arbitration with a reputable arbitrator who has knowledge of and expertise in mining operations.
- (3) If the parties reach an impasse, the parties shall notify the division within seven days of the conclusion of negotiations.
- (4) The parties shall complete any binding arbitration to resolve the impasse within six months of providing notice to the division.
  - (a) If the arbitrator finds a proposed Cooperative Agreement does not materially reduce the quantity or value of the affected Operator's rights to the Common Source of Supply and does not significantly increase the cost of another Operator's operations or, if costs are increased, they are adequately compensated by the other Operators, the arbitrator may then submit the proposed Cooperative Agreement to the Director for approval and operations may be conducted concurrently.
  - (b) However, if the arbitrator finds the existence of issues preventing the objectives in R652-21-505(1), the arbitrator shall submit such findings to the Director. The Director may then issue a decision deferring the development obligations of the newest Operator seeking to enter into a Cooperative Agreement.
  - (c) If the Director issues a decision deferring a development obligation, any contractual obligation to the state is transferred to operational, but deferred status, subject to rental payments during the period of deferment and subject to renegotiation if the period of deferment exceeds twelve months.
  - (d) If the Director determines concurrent operations cannot be conducted without causing Waste to Great Salt Lake Elements or Minerals or causing a Negative Impact

- to Great Salt Lake Natural Resources, or that multiple operations will unnecessarily and uneconomically affect the costs of other operations, but finds the operations of a new Operator will provide a Greater Benefit to the State than an existing operation, the Director may enter a decision terminating an existing operation upon full compensation for any rights lost by the existing Operator.
- (e) The value of any rights lost by an existing Operator shall be determined in the same manner as appraisals and evaluations are made in eminent domain proceedings.
- (f) Upon full compensation for an Operator's lost rights, the existing Operator shall assign all rights to the Operator providing a Greater Benefit to the State than the existing operation.
- (g) Any dispute as to valuation of lost rights or compensation afforded to another Great Salt Lake Operator can be appealed pursuant to the division's rules and the Utah Administrative Procedures Act.
- (h) During the pendency of any administrative appeal, an affected Operator may stay operations without violating any development obligations during the pendency of the appeal.
- (5) In making any decision regarding cost compensation or which operation provides a Greater Benefit to the State, the division or arbitrator shall apply the following guiding principles:
  - (a) An operation that provides a full and fair return to the state, while also being protective of Great Salt Lake Elements or Minerals and Great Salt Lake Natural Resources, will prevail over an operation that does not.
  - (b) When determining which Operator pays for increased costs, unless there are other mitigating factors presented, the incoming Operator is required to compensate the existing Operator for identified and verifiable additional costs incurred for the subsequent and concurrent operations. This principle shall also be followed whenever Great Salt Lake Operators are negotiating the terms and conditions of a Cooperative Agreement.
  - (c) It is the intent of these regulations to resolve problems with lease suspensions and incompatible operations by providing for deferments and authorizing the pursuit of eminent domain procedures to ensure the state is obtaining a full and fair return on Great Salt Lake Elements or Minerals while also protecting Great Salt Lake Natural Resources.

## R652-21-600. Operations Application.

#### R652-21-601. Purpose.

- (1) The purpose of the Operations Application is:
  - (a) To substantiate the information generated through the Feasibility Assessment; and
  - (b) To thoroughly evaluate potential Great Salt Lake Operators prior to the commencement of extraction operations.

#### R652-21-602. Submission.

Applications to the division shall be submitted on the form provided by the division. All information submitted in support of an Operations Application shall have been obtained within one year of filing an Operations Application, unless otherwise extended by the division.

#### R652-21-603. Discretion.

The division has exclusive discretion to approve, deem incomplete, or deny any Operations Application. The division's approval of an Operations Application is required to obtain an Operations Royalty Agreement.

#### R652-21-604. Required Showings.

- (1) Before the division and an Operator may enter into an Operations Royalty Agreement permitting the extraction of a nominated Great Salt Lake Element or Mineral, such Operator shall submit the following information in its Operations Application to the division:
  - (a) Proof of a Sampling Royalty Agreement;
  - (b) Proof of a Cooperative Agreement;
  - (c) Demonstration of the Operator's Commercial Viability for the Life of Mine, including both the method of evaluation and the data used in such evaluation, through submission of a completed Commercial Viability Form;
  - (d) Certification from the division supporting a finding the operations will not Negatively Impact the Biota or Chemistry of Great Salt Lake;
  - (e) Certification from the Department of Environmental Quality supporting a finding the operations will not Negatively Impact the Biota or Chemistry of Great Salt Lake;
  - (f) Type(s) of technology, and a description of how, including in what sequence, they are to be employed through all stages of operations;
  - (g) Surface use occupancy and ownership thereof, including a description of any infrastructure to be placed on Great Salt Lake sovereign land and upland development necessary for operations;
  - (h) Proof Bonding is in place with the division and the Division of Oil, Gas & Mining, if applicable;
  - (i) A reclamation plan negotiated with and approved by the division;
  - (j) Copies of any easements, permits, approvals, agreements, or other documents required for initiation of operations;
  - (k) Copies of any executed agreements, contracts, options, and other financial arrangements entered into by the Operator and a third-party relating to operations;
  - (I) Proof of all water rights and appropriations necessary for operations;

- (m) A description of the Operator's experience and knowledge predicating the Operator's ability to commercially produce elements or minerals from the brines of Great Salt Lake;
- (n) An Operations Plan;
- (o) The operational recovery rate for the Great Salt Lake Element or Mineral;
- (p) An approved plan for testing, monitoring, and recording all hydrologic inputs and outputs, including the Chemistry thereof, throughout operations;
- (q) A calculation of the net revenue accrued during the Feasibility Assessment if the Great Salt Lake Element or Mineral had been sold and an estimate of projected future revenue generated under an Operations Royalty Agreement;
- (r) Self-Certification operations shall not violate Utah Code § 65A-6-1(3); and
- (s) Any other information the division or Director deems necessary to approve the application, including proprietary information regarding planned technology.

#### R652-21-605. Surface Use Authorizations.

Before the Division and Operator may enter into an Operations Royalty Agreement, an Operator shall obtain the necessary permits, easements, or other surface use authorizations required for Operations. An Operator is required to apply for a surface use authorization from the division for the extraction of Great Salt Lake Elements or Minerals if the Operator is proposing to utilize Great Salt Lake sovereign lands for evaporation ponds, dikes, pipelines, processing equipment or facilities, roads, or any other improvements or structures requiring surface use or disturbance.

#### R652-21-606. Operations Plan.

- (1) The Operator shall provide a narrative description referencing maps or drawings as necessary, of the proposed operations including:
  - (a) Type of Great Salt Lake Element or Mineral to be extracted;
  - (b) Type of operations to be conducted, including the extraction and processing methods to be used on-site, and the identification of any Operational Waste present or to be left on site as a result of extraction or processing;
  - (c) Estimated acreages proposed to be disturbed;
  - (d) A description of the nature of the waters and brines to be extracted or processed and the estimated annual tonnages of extracted product and Operational Waste to be extracted;
  - (e) A description of the existing Chemistry of water and brine to be utilized in operations and the contents thereof, including concentration values in grams per liter for Na, Mg, K, Ca, Cl, SO4, and total dissolved solids and in parts per million for Br, Li, and B.
  - (f) A description of existing Biota potentially impacted by operations;
  - (g) A description of the plan for protecting Biota and Chemistry;
  - (h) A plan for Operator's mitigation of Negative Impacts on Great Salt Lake Biota and Chemistry during operations;
  - (i) A plan for Operator's mitigation of water used during operations;

- (j) Proposed location and quantity of Elements or Minerals and Operational Waste stockpiles, Operational Waste facilities, and water storage/treatment ponds;
- (k) Information regarding the amount of material extracted, transported, or proposed to be transported;
- (I) A description of Operator's plan for metering water usage; and
- (m) A list of the Royalty Rate Deductions the operator desires to obtain and all data, information, reporting, and self-certification required for the division's analysis of such Royalty Rate Deductions.
- (2) Within thirty days of receiving the Operations Plan, the division shall determine whether all necessary and available information supporting the Royalty Rate Deductions has been submitted. The division may deem the Operational Plan complete or incomplete. If the Operational Plan is incomplete, the division shall notify the applicant and provide a list of missing information to supply.
- (3) To remedy an incomplete Operational Plan, an applicant may submit the additional missing information requested by the division within thirty days of receipt of the notice of incompleteness. An Operational Plan which is deemed incomplete and is not remedied within thirty days is deemed denied, at which point the division shall notify the Operator and the Operator may re-submit an Operations Application.

#### R652-21-607. Additional Required Information.

At any point during review of an Operations Application, the division or Director may request additional information from the Applicant. To remain in consideration for an Operations Royalty Agreement, the Applicant shall provide such information in the time specified by the division.

#### R652-21-608. Certification.

- (1) After receiving an Operations Application, the division shall collaborate with the Department of Environmental Quality to review the Operations Application.
- (2) Before approving an Operations Application, the division shall review the Application and certify:
  - (a) The Operator will not Negatively Impact the Biota of Great Salt Lake;
  - (b) The Operator will not Negatively Impact the Chemistry of Great Salt Lake;
  - (c) The operation is Commercially Viable, as established by the required showings in the Commercial Viability Form provided by the division.
- (3) If the division cannot in good faith certify the above, within thirty days of receiving the Operations Plan, the division shall notify the applicant and provide a list of missing information to supply.
- (4) An Applicant may submit the additional missing information requested by the division within thirty days of receipt of notice from the division. If the Operator does not provide the requested missing information to the division, the division shall deny the Operations Application, at which point the Operator may re-submit the Operations Application.

#### R652-21-610. Application Evaluation.

- (1) Within forty-five days of receiving an Operations Application, the division shall notify the Operator in writing of the status of the Operations Application. The division may:
  - (a) Approve the Operations Application;
  - (b) Deny the Operations Application;
  - (c) Deem the Operations Application incomplete and provide the Applicant with a list of missing information, at which point an Applicant may re-submit.

#### R652-21-611. Multiple Applications.

- (1) If the division is in receipt of more than one active Operations Application for extraction of the same Great Salt Lake Element or Mineral, the division shall first evaluate Operations Applications which:
  - (a) Do not use Evaporative Technologies in any stage of the extractive process; and
  - (b) Use Commercially Viable extractive processes.



## R652-21-700. Required Terms – Operations Royalty Agreement

#### R652-21-701. Required Terms.

Operations Royalty Agreements shall contain provisions necessary to affect the purposes of these rules.

**R652-21-702.** In addition to any other negotiated provisions, an Operations Royalty Agreement shall include the following terms and conditions:

**Rights Reserved to the Division as Lessor.** The division expressly reserves the right to:

- Issue easements, leases, rights of entry, and other surface use authorizations which do not substantially interfere with Operator's mineral extraction operations.
- b. Use or otherwise manage the surface of Great Salt Lake sovereign lands pursuant to its obligations under the public trust.
- c. Lease or issue additional royalty agreements for the extraction of Great Salt Lake Elements or Minerals.
- d. Alter or modify the quantity and rate of Great Salt Lake Operator's production pursuant to RXX-XX-X.
- e. Withdraw certain Great Salt Lake lands, methods of extraction, operations, or technologies if the division finds these methods, operations, or technologies are directly causing or exacerbating the conditions creating the Emergency Trigger, defined under RXX-XX-X.
- f. Contract with a qualified third-party to audit and review Operator's reporting required by RXX-XX-X.
- g. Contract with a qualified third-party or government entity to monitor the Chemistry and composition of water and brine inputs and outputs and produced water.

**Term.** This Operations Royalty Agreement shall remain in effect, unless sooner terminated as herein provided, for a term of three years commencing on the first day of the month following the execution date, and subject to any and all existing valid rights in said land, unless Operator submits a written request for renewal to continue said activity on sovereign land at least six months prior to the expiration date of this agreement and renewal is approved by the division. The Final Royalty Rate may be renegotiated prior to the lapse of the final year of the term. This Operations Royalty Agreement is limited to a three-year term and shall not be held by production.

**Royalties.** Royalties shall be paid by Operator to the division pursuant to RXX-XX-X.

**Reporting.** Within thirty days after the end of each calendar quarter during the term of this Operations Royalty Agreement, Operator shall furnish to the division a report providing information required in RXX-XX-X.

**Reassessment.** The division reserves the right to review and adjust the royalty rate and terms of this Operations Royalty Agreement in the event of significant changes or unforeseen circumstances, including but not limited to, changes in market conditions significantly affecting the demand or pricing of the Great Salt Lake Element or Mineral; technological advancements; Negative Impacts to Great Salt Lake Chemistry or Biota caused by Operator; or the reaching of the Great Salt Lake Emergency Trigger, as defined in RXX-XX-X.

Change in Operations. If at any point an Operator adds or intends to add emerging technologies to their existing operation, such Operator shall notify the division. The division may require the Operator to submit any additional information required to evaluate such proposed Emergent Technology. If at any point an Operator adds or intends to add Evaporative Technologies to their existing operation, such Operator shall notify the division. The division may require the Operator to submit any additional information required to evaluate such proposed Evaporative Technology. Upon the occurrence of any such events, the division shall adjust the royalty rate and terms of this Operations Royalty Agreement, as necessary.

**Consent to Suit.** Operator consents to suit in the courts of the State of Utah in any dispute arising under the terms of this Operations Royalty Agreement or as a result of operations carried on under this Operations Royalty Agreement. Operator agrees for itself, its heirs, successors, and assigns that any suit brought by Operator, its heirs, successors, or assigns concerning this Operations Royalty Agreement may be maintained only in the Utah State District Court in and for Salt Lake County.

**Assignment.** Operator shall not assign this Operations Royalty Agreement in whole or in part without obtaining the prior written consent of the division. Operator shall not be relieved of the responsibilities or liabilities assumed hereunder by virtue of any assignment to a third party unless the division provides written approval as provided herein, the third party is acceptable to the division as an Operator, and the third party assumes, in writing, all obligations of Operator under the terms of this Operations Royalty Agreement. Additionally, Operator shall notify the division of any changes to Operator's corporate structure within thirty days of the change. Upon notification of the change, the division reserves the right to amend the material terms of this Agreement.

**Establishment of Water Rights.** For the term of this Operations Royalty Agreement, the Operator must have the continuing right to appropriate, remove, and divert water of and from Great Salt Lake for the purpose of extracting the Great Salt Lake Element or Mineral contemplated by this Agreement therefrom. This Agreement shall not be construed to relieve Operator from full compliance with Title 73 of the Utah Code, relative to applications for the diversion and appropriation of waters of the State of Utah.

**Discovery of Other Minerals.** In the event the Operator discovers other Great Salt Lake Elements or Minerals during its operations under this Operations Royalty Agreement and wishes to produce those Great Salt Lake Elements or Minerals, the Operator shall immediately notify the division and obtain a separate royalty agreement for such Great Salt Lake elements or minerals.

**Research and Development.** This Operations Royalty Agreement does not provide the Operator with the right to extract water or brine for the purpose of equipment design, evaluation, and calibration or to transfer such water or brine to a third party for the purposes of testing, research equipment design, evaluation, and calibration.

**Intellectual Property.** The division acknowledges certain intellectual property may be derived or developed resulting from Operator's Great Salt Lake Element or Mineral extraction. Such intellectual property may include, but is not limited to, inventions, designs, trademarks, copyrights, trade secrets, processes, and any other proprietary rights. The division retains a right to any Intellectual Property developed or derived from activities carried out on Great Salt Lake sovereign lands. The Operator, or their Operator's tenants, licensees, lessees, contractors, or any other authorized party, shall not acquire any rights or interests in the Intellectual Property without the written consent of the division. The Parties agree to negotiate in good faith to determine the appropriate rights and compensation for the Parties which may result in separate agreements or arrangements to address ownership, licensing, or sharing of the intellectual property.

**Waste.** The Operator shall conduct operations in a manner that avoids Waste and maximizes the recovery and utilization of Great Salt Lake Elements or Minerals. The Operator shall employ methods and techniques which promote maximum and efficient resource recovery, such as proper sorting, separation, stockpiling, and processing of element or mineral-bearing materials. Waste of a commercially marketable Companion Element or Mineral by any Great Salt Lake Operator is prohibited.

**Indemnification.** The Operator shall be liable for all damage incurred in connection with any activity undertaken or work authorized by this Agreement. The Operator shall indemnify and hold the division harmless against all liability, including attorney's fees, of any nature imposed upon, incurred by, or asserted against the division which in any way relate to or arise out of the activity or presence of the Operator, its servants, employees, agents, sublessees, assignees, or invitees.

**Force Majeure.** If either Party is prevented or delayed from completing any obligation under this Operations Royalty Agreement by a Force Majeure Event, as defined herein (the "Affected Obligation") except for the performance of any payment obligation that has accrued prior to the Force Majeure Event, the Affected Obligation shall be suspended and the affected Party shall not be deemed in default or liable for damages or subject to other remedies as a result thereof for so long as the affected Party is prevented to delayed from completing the Affected Obligation by the Force Majeure Event. For purposes of this Agreement, a "Force Majeure

Event" shall mean any matter (foreseeable or unforeseeable) not avoidable or overcome by the exercise of commercially reasonably diligence, and that is beyond the affected Party's reasonable control, including but not limited to: acts of God, any action after the date hereof by governmental authorities that would prevent, delay, or make unlawful a Party's performance, suspension of activities to remedy or avoid an actual or alleged violation of environmental laws, fires, explosions, epidemics, unusually inclement weather, flood, drought, acts of war, insurrection, revolution, civil commotion, rights or terrorism, strikes, lock-outs or other labor disputes (including but not limited to strikes, lock-outs, or other labor disputes by the employees of direct or indirect contractors, suppliers, or agents of Operator); the Division's invocation of the Emergency Trigger, as defined in Utah Admin. Code R652-2X-XXX; inability to obtain necessary materials, power or other utilities or obtain permits, approvals, or consents from governmental authorities or private parties within a reasonable time; significant damage to, substantive destruction of, or unavoidable shutdown of necessary facilities or equipment.

Water Depletion and Mitigation. The Operator shall adhere to commercially viable technologies which minimize water depletion. If an Operator depletes any water during operations, the Operator shall mitigate such depletion by supplying the same amount and quality of the depleted water into Great Salt Lake (hereinafter referred to as "Mitigation Water"). It is the Operator's obligation to ensure the Mitigation Water is delivered to Great Salt Lake in the approximate location where the depletion occurred. Prior to complying with such mitigation requirements, the Operator shall obtain discharge permits from the Department of Environmental Quality, if necessary.

**Third Party Monitoring.** The division reserves the right to hire a qualified third-party to review, audit, or monitor Operator's ongoing reporting and data gathering methodology required by RXX-XX-X. The division also reserves the right to install and use monitoring equipment, paid for exclusively by the Operator, within the Operator's leased area to independently gather data. The division may enter the Operator's leased area at any time.

**Curtailment Framework and Emergency Trigger.** The Parties agree, in the event the Emergency Trigger is reached, pursuant to RXX-XX-X, the Operator shall temporarily curtail mineral production as directed by the division. The Parties agree curtailment will not automatically result in the termination of this Operations Royalty Agreement.

**Subordination**. The terms and conditions within this Agreement are subordinate and subject to the public trust doctrine and any management decision by the division when exercising its management authority and commensurate obligations with respect to sovereign lands.

Conditions for Material Breach. Actions amounting to a material breach of this Agreement include, but are not limited to, failure to provide ongoing reporting required by RXX-XX-X, providing false or misleading information in required reports or certifications, failure to participate in an audit, or otherwise breaching a substantive obligation. Upon a finding of material breach, the division shall notify Operator of the breach. If the condition causing the material breach is not remedied or fully cured within thirty days of receipt of notice, the

division shall issue a Cessation Order and rescind the Operations Royalty Agreement, at which time the Operator shall immediately initiate any applicable reclamation activities.

**Coordination and Incorporation of Cooperative Agreements**. This Operations Royalty Agreement acknowledges and incorporates any term and condition negotiated in any fully executed Cooperative Agreement. However, to the extent there is a conflict, the terms and conditions of the Operations Royalty Agreement shall govern.

Operator Agreement to State's Exercise of Legitimate Police Powers, Including Eminent Domain. Pursuant to Utah Code § 65A-10-202, the division, as manager, is obligated to ensure the continued protection of the ecological integrity of Great Salt Lake. The division is afforded police powers in carrying out this obligation. Operator agrees the division retains the right to exercise appropriate police powers, including the exercise of eminent domain proceedings, if the division determines the remedy is in the best interest of Great Salt Lake or the public health, safety and welfare of the State's citizens.

**Water Depletion**. The Operator agrees any extraction operation or extraction method shall adhere to commercially viable technologies which minimize water depletion throughout the entire term of the Operations Royalty Agreement and shall accurately report to the division any water depletion and water savings. To the extent Emergent Technologies are available to the Operator, the deployment of which would further minimize water depletion, the Operator shall agree to obtain and deploy such Emergent Technologies as a condition precedent to entering into a renegotiated Operations Royalty Agreement upon expiration of the applicable three-year term.

**Imposition of Emergent Technologies**. The Operator agrees the division has the discretion and power to require an existing Operator to use Commercially Viable, Emergent Technologies to minimize water depletions caused by the current or planned mineral extraction as a condition of continued operations.

**R652-21-703. Term Conflict**. To the extent there is a conflict between these rules and R652-20-3200(6) and R652-20-220, these rules govern.

## R652-21-800. Lithium Royalty Rate and Methodology.

#### R652-21-801. Royalty Rate.

Great Salt Lake Elements or Minerals require a separate royalty rate and structure, particularly when a Companion Element or Mineral is available for commercial production based on innovation or improved technologies.

#### R652-21-802. Base Royalty Rate for Lithium.

- (1) Lithium Chloride and Unavailability of Post-Extraction or Processing Deductions. To provide a full and fair return to the state, as required by Utah Code § 65A-6-4(6)(a)(i), the division determines Lithium Chloride is not commercially marketable or fails to provide the full and fair return contemplated by Utah Code § 65A-6-4(6)(a)(i). In addition, any Operator desiring to produce or process Lithium Carbonate and Lithium Hydroxide is not entitled to post-production deductions for any expended capital costs. The only Royalty Rate Deductions available to Lithium Carbonate and Lithium Hydroxide are the categories expressly designated in Royalty Rate Deductions under these rules.
- (2) **Lithium Carbonate**. For all lithium related exploration, extraction, processing, production, and sales, the division determines Lithium Carbonate is the First Marketable Product to which the Base Royalty Rate attaches.
  - (a) Base Royalty Rate for Lithium Carbonate. Subject to Royalty Rate Deductions as provided for in these rules, the Base Royalty Rate for Lithium Carbonate shall be \_\_\_\_\_\_% of gross sale proceeds for each short ton of Lithium Carbonate extracted, produced, processed, and sold from Great Salt Lake water or brines.
- (3) **Base Royalty Rate for Lithium Hydroxide**. Subject to Royalty Rate Deductions as provided for in these rules, the Base Royalty Rate for Lithium Hydroxide shall be \_\_\_\_\_% of gross sale proceeds for each short ton of Lithium Hydroxide extracted, produced, processed, and sold from Great Salt Lake water or brines.
- (4) **Final Royalty Rate and Variable Adjustments**. After applying the applicable Royalty Rate Deductions and verifying the commitments made by an Operator to qualify for a Royalty Rate Deduction, the Final Royalty Rate set will be provided for in an Operations Royalty Agreement executed with the division as required before the production, processing, and sale of any Great Salt Lake Element or Mineral. However, the Final Royalty Rate is further subject to the Variable-Rate Royalty Adjustments provided in Utah Admin. Code RXX-XX-X of these rules.

#### R652-21-803. Royalty Rate Deductions.

(1) **Purpose.** The division has been directed to incentivize Emergent Technologies, reduce water depletion for Great Salt Lake mineral operations, protect the ecological conditions and Biota of Great Salt Lake, protect and preserve salinity levels necessary for brine fly and

shrimp production, and obtain a full and fair return on all minerals, elements, or ores owned by the state. These considerations are in addition to the public trust management responsibilities the division has with respect to management of sovereign lands. To accomplish these goals, the division is providing financial incentives to Great Salt Lake Operators in the form of reduced Base Royalty Rates if the stated goals are accomplished.

(5) Specified Royalty Rate Deductions. The following deductions are available to any Operator that can verifiably demonstrate the referenced requirements are, or will be, accomplished:

(a) Use of a Non-Evaporative method of producing the Great Salt Lake Element or

t ca	in vermably demonstrate the referenced requirements are, or win be, accomplished.
(a)	Use of a Non-Evaporative method of producing the Great Salt Lake Element or
	Mineral shall result in a deduction of%;
(b)	Use of Commercially Viable technologies or Emergent Technologies which result in
	reduction of previously utilized evaporative technologies shall result in a deduction
	of% deduction for every acre-foot reduction of water; and
(c)	Executed contractual agreements demonstrating planned processing of Great Salt
	Lake Elements or Minerals or lithium battery manufacturing within the State of Utah
	shall result in a deduction of %.

#### R652-21-804. Minimum Royalty Rate.

A Great Salt Lake Operator may qualify for multiple Royalty Rate Deductions, so long as the Final Royalty Rate is not below %.

#### R652-21-805. Proof Requirements to Perfect Royalty Rate Deductions.

- (1) Feasibility Assessment. To qualify for a Royalty Rate Deduction, an Operator shall:
  - (a) Notify the division, at the time of filing the Feasibility Application, of which, if any, Royalty Rate Deductions the Operator intends to pursue; and
  - (b) Comply with each of the requirements specified in the rules governing Feasibility Applications.
- (2) **Operations Application**. To qualify for a Royalty Rate Deduction, an Operator shall submit any information, data, or other supporting materials to support a finding the operation will remain Commercially Viable and comply with each of the requirements specified in the rules governing Operations Applications.

#### R652-21-805. Final Royalty Rate Shall be a Variable-Rate Royalty.

(1) After applying the appropriate Royalty Rate Deductions to the Base Royalty, the Final Royalty Rate shall be established upon application of the Royalty Rate Deductions to the Base Royalty Rate. However, a Final Royalty Rate for production of Lithium Carbonate and Lithium Hydroxide shall be a Variable-Rate Royalty. A Variable-Rate Royalty applicable to Lithium Carbonate or Lithium Hydroxide shall be adjusted quarterly. Adjustments to the Variable-Rate Royalty are as follows:

(2)	Minimum Variable-Rate Royalty for Lithium Carbonate. When, over the	course of one
	fiscal quarter, the average commodity price of Lithium Carbonate is \$	per ton or less,
	the Variable-Rate Royalty shall be the Final Royalty Rate reduced by	%.

(3)	Maximum Variable-Rate Royalty for Lithium Carbonate. When, over the course of one
	fiscal quarter, the average commodity price of Lithium Carbonate is \$ per ton or
	more, the Variable-Rate Royalty shall be the Final Royalty Rate plus an additional%.
	When, over the course of one fiscal quarter, the average commodity price of Lithium
	Carbonate is \$ per ton or more, the Variable-Rate Royalty shall be the Final Royalty
	Rate plus an additional%.
(4)	Minimum Variable-Rate Royalty for Lithium Hydroxide. When, over the course of one
	fiscal quarter, the average commodity price of Lithium Hydroxide is \$ per ton or less,
	the Variable-Rate Royalty shall be the Final Royalty Rate reduced by%.
(5)	Maximum Variable-Rate Royalty for Lithium Hydroxide. When, over the course of one
	fiscal quarter, the average commodity price of Lithium Hydroxide is \$ per ton or more
	the Variable-Rate Royalty shall be the Final Royalty Rate plus an additional%. When,
	over the course of one fiscal quarter, the average commodity price of Lithium Hydroxide is
	\$ per ton or more, the Variable-Rate Royalty shall be the Final Royalty Rate plus an
	additional%.
(6)	Average Variable-Rate Royalty. When, over the course of one fiscal quarter, the average
	commodity price of Lithium Carbonate or Lithium Hydroxide remains between the
	Minimum Variable-Rate Royalty and the Maximum Variable-Rate Royalty, the Variable-Rate
	Royalty shall be the Final Royalty Rate.

#### R652-21-806. Execution of Operations Royalty Agreement.

Within thirty days of approval of the Operations Application, the division and the Operator shall execute an Operations Royalty Agreement. The Royalty Agreement shall govern operations for the full term of the Operations Royalty Agreement.

# R652-21-807. Royalty Payment Deadlines and On-going Reporting and Site-Inspection Requirements.

- (1) **Payment Deadlines**. Royalties due and owing under an Operations Royalty Agreement shall be paid to the State within sixty days of the end of each quarter of a fiscal year.
- (2) **Royalty Report**. Each Operator shall attach a complete Royalty Report on a form authorized by the Division wherein the operator certifies, under penalty of perjury, the total amount of product extracted, produced and sold during the applicable quarter, the price and Variable-Rate Royalty applied to the commodity sold during the quarter, all requirements necessary to justify the applicable Royalty Rate Deductions, and any other information required by the division. Royalty reports shall be delivered to the division within sixty days of the end of each quarter of a fiscal year.
- (3) **Site Inspections**. The division is authorized to conduct scheduled or random site-inspections on any of the Operator's facilities to ensure any metering devices are operational and functioning or perform any other task necessary to ensure Operator obligations are being met, the ecological integrity of Great Salt Lake is being preserved, or the Operator is not conducting operations which jeopardize the public, health and safety of the State's citizens.

## R652-21-900. Ongoing Reporting.

#### R652-21-901. General Reporting.

- (1) During the term of the Operations Royalty Agreement, an Operator shall report the following information to the division when submitting a Royalty Report:
  - (a) The volume of the Great Salt Lake Element or Mineral produced, in short tons;
  - (b) Self-certification with supporting documentation establishing the Operator's continued Commercial Viability, including both the method of evaluation and the data used in such evaluation;
  - (c) Actual recovery rate of the Great Salt Lake Element or Mineral produced;
  - (d) Notification of surface disturbances within the lease or easement area prior to Operator undertaking such activity;
  - (e) The volume of water and brines pumped into evaporation ponds, if pumping is a part of operations;
  - (f) The volume of water and brines used or depleted through operations;
  - (g) The volume of Mitigation Water returned to Great Salt Lake and the location at which such Mitigation Water is returned;
  - (h) Self-Certification showing an absence of Negative Impact to Biota and Chemistry, including:
    - (i) Information on the pH value, turbidity, temperature, and salinity, of waters and brines extracted at the point of intake;
    - (ii) Information on the pH value, turbidity, temperature, and salinity of waters and brines discharged into Great Salt Lake;
    - (iii) Information on the amount and Chemistry of all substances added to the brine or water during processing, as applicable;
    - (iv) Information on the Chemistry of all water, brine or other effluent discharged into evaporation ponds, as applicable;
    - (v) Information on Operational Waste, including Operational Waste production, composition, methods of Operational Waste material disposal, and the management, placement, and disposal of Operational Waste; and
  - (i) Such other information the Division may require.

#### R652-21-902. Royalty Rate Deduction Reporting.

- (1) During the term of the Operations Royalty Agreement, an Operator, when submitting a Royalty Report, shall report, as applicable, the following information to the division to ensure the operation, or processing, is consistent and compliant with any applicable Royalty Rate Deductions:
  - (a) Proof demonstrating the use of a Non-Evaporative method of producing the Great Salt Lake Element or Mineral;

- (b) Proof demonstrating an Operator is utilizing Commercially Viable technologies or Emergent Technologies which are resulting in a reduction of previously used evaporative technologies; and
- (c) Any amendments to, termination of, or execution of contractual agreements demonstrating processing of Great Salt Lake Elements or Minerals or lithium battery manufacturing is occurring within the State, as applicable.

#### R652-21-903. Reporting Intervals.

During the term of the Operations Royalty Agreement, an Operator shall submit the information required in R652-X-XXX to the division within sixty days of the end of each quarter of a fiscal year.

## R652-21-904. Other Reporting.

An Operator shall notify the division of any changes to permitting or certifications from the Department of Environmental Quality. An Operator shall also notify the division of any changes to its water right(s) or point(s) of diversion during the term of the Operations Royalty Agreement. The Operator shall provide any other reporting requested by the division to ensure compliance with the division's management responsibilities over sovereign lands or statutes and regulations specific to Great Salt Lake.

## R652-21-1000. Inspection and Enforcement.

#### R652-21-1001. Enforcement Authority.

Nothing in these rules shall be construed as eliminating any additional enforcement rights, remedies, or actions available under an Operations Royalty Agreement or state law.

#### R652-21-1002. Right of Entry.

- (1) Division representatives may enter upon and through any Great Salt Lake Element or Mineral operation, whether at the Feasibility Assessment, operations, or reclamation stage.
- (2) Representatives of the division may inspect any monitoring equipment, water metering equipment, operations method or technology, or reclamation and have full access to and may copy any records required to be maintained by an Operator.
- (3) Representatives of the division may take samples from any stage of operations or area of operations during the Feasibility Assessment, operations, and reclamation stage.
- (4) When exercising a Right of Entry afforded under these regulations, a search warrant is not required, including when an inspection requires entry into a building or facility.
- (5) Division representatives may exercise these rights at reasonable times, without advance notice, upon presentation of appropriate credentials.

#### R652-21-1003. Inspection Program.

- (1) The division shall conduct an average of at least one on-site inspection per quarter of each active or inactive Great Salt Lake Element or Mineral operation to ensure effective enforcement.
- (2) An inspection is an on-site review of an Operator's compliance with all permit, surface use, and Operations Royalty Agreement conditions and requirements imposed under these rules, within the entire area disturbed or affected by the Operator's operations.
- (3) The division may conduct an aerial inspection of any Great Salt Lake Element or Mineral operation. Aerial inspections will be conducted in a manner that reasonably ensures the identification and documentation of conditions at each operation, including adjacent conditions and operational input and discharge points. The division shall investigate any potential violation observed during an aerial inspection within three days with an on-site inspection.
- (4) The inspections allowed for under these rules shall also:
  - (a) Be carried out on an irregular basis, so as to monitor compliance at all operations, including those which operate nights, weekends, or holidays;
  - (b) Occur without prior notice to the Operator or any agent or employee of the Operator, except for necessary on-site meetings; and
  - (c) Include the prompt filings of inspection reports adequate to enforce the requirements of these rules and Utah Code § 65A-6-4.

#### R652-21-1004. Availability of Records.

- (1) The division shall make available, upon request, copies of all documents relating to applications for and approvals of existing, new, or revised Great Salt Lake Mineral or Element operations and all documents relating to inspection and enforcement actions.
- (2) Copies of all records, reports, inspection materials, or information obtained by the division shall be made immediately available to the public until at least five years after expiration of the period during which the subject operation is active or is covered by any portion of a reclamation bond.
- (3) In preparation for any hearings or enforcement proceedings, the division may enter into agreements regarding procedures for the special handling of investigative and enforcement reports and other such materials.

#### R652-21-1005. Compliance Conference.

- (1) A Great Salt Lake Operator may request an on-site compliance conference with an authorized representative of the division to review the compliance status of any condition, methodology, or practice proposed at any Great Salt Lake Element or Mineral Operation. Any such conference shall not constitute an inspection within the meaning of these rules or any applicable Operations approval.
- (2) The division may, in its discretion, accept or deny any request to conduct a compliance conference.
- (3) The authorized representative at any compliance conference will review such proposed conditions and practices to advise whether any such condition or practice may become a violation of any requirement of applicable statute, rule, contract, or Operations Royalty Agreement term or condition.
- (4) Neither the holding of a compliance conference, nor any opinion given by the authorized representative of the division, shall affect:
  - (a) Any rights or obligations of the division or the Operator with respect to any inspection, notice of violation, or cessation order, whether before or after the compliance conference; or
  - (b) The validity of any notice of violation or cessation order issued with respect to any condition, methodology, or practice reviewed at the compliance conference.

#### R652-21-1006. Provisions of Division Enforcement.

- (1) Notices of Violation.
  - (a) The division shall issue a notice of violation if, on the basis of a division inspection carried out during the enforcement of Utah Code § 65A-6-4, any rule promulgated under Utah Code § 65A-6-4, or monitoring the terms and conditions of an Operations Royalty Agreement, it finds a violation of any condition of operations

- which does not create an imminent danger or harm for which a Cessation Order must be issued.
- (b) If the division determines there is a violation of a condition of operations that does not rise to the level of imminent danger or harm, the division shall issue a notice of violation to the Operator or its agent setting a reasonable time, not to exceed ninety days, for the abatement of the violation and providing an opportunity for a conference before the division.
- (c) A notice of violation issued to an Operator shall be in writing, signed by an authorized representative of the division, and will set forth with specificity:
  - (i) The nature of the violation;
  - (ii) The remedial action required, which may include interim steps;
  - (iii) A reasonable time for abatement, which may include time for accomplishment of interim steps; and
  - (iv) A reasonable description of the portion of the Operator's operations to which the notice of violation applies.
- (d) If the Operator fails to meet any time set for abatement, fails to completely abate the violation, or fails to accomplish an interim step, the division shall issue a Cessation Order under R652-21-1006(3).
- (e) The division shall terminate a notice of violation by written notice to the Great Salt Lake Operator when the division determines all violations listed in the notice of violation have been abated. Termination will not affect the right of the division to pursue any contractual remedies under an Operations Royalty Agreement.

#### (2) Pattern of Violation.

- (a) The Director may determine a pattern of violations exists or has existed, based upon two or more division inspections of an Operator's operations within a twelve-month period, after considering the circumstances, including:
  - (i) The number of violations, cited on more than one occasion, of the same or related requirements of applicable statute, regulation, or contractual provision;
  - (ii) The number of violations, cited on more than one occasion, of different requirements of applicable statute, regulation, or contractual provision; and
  - (iii) The extent to which the violations were isolated departures from lawful conduct.
- (b) If, after review, the Director or authorized delegate, determines a pattern of violations exists or has existed, and that each violation was caused by the Operator willfully or through unwarranted failure to comply, the Director shall authorize or instruct the Attorney General's Office to initiate informal adjudicative proceedings for the Operator to show cause why any applicable permit, lease, or Operations Royalty Agreement should not be cancelled, revoked, or rescinded.

#### (3) Cessation Orders.

- (a) The division shall immediately order a cessation of operations if it finds, based on any division inspection, any violation of applicable statute, regulation, permit, or contractual provision, which:
  - (i) Creates an imminent danger to the health or safety of the public; or

- (ii) Is causing or can reasonably be expected to cause significant, imminent environmental harm to land, air, water resources, Biota, or the ecological health and integrity of Great Salt Lake; or
- (b) Any mining or reclamation activity on Great Salt Lake conducted by any person or entity without a valid permit, lease, Operations Royalty Agreement, or Sampling Royalty Agreement constitutes a condition or practice which causes, or can reasonably be expected to cause, significant, imminent environmental harm to land, air or water resources, Biota, or the ecological health and integrity of Great Salt Lake.
- (c) If the Cessation Order issued under R652-21-1006(3) will not completely abate the imminent danger or harm in the most expeditious manner possible, the division shall impose affirmative obligations on the person or entity to whom the Cessation Order is issued to immediately abate the violations. The resulting Order shall specify the time upon which the abatement will be accomplished.
- (d) When a notice of violation has been issued under R652-21-1006(1) and the Operator fails to abate the violation within the abatement period, then the division shall immediately issue a Cessation Order. A Cessation Order issued will require the Operator to immediately take all steps the division deems necessary to abate the violations identified in the Cessation Order.
- (e) A Cessation Order issued by the division shall be in writing, signed by the authorized representative of the division who issued it, and will set forth, with reasonable specificity:
  - (i) The nature of the violation;
  - (ii) The remedial action of affirmative obligation required, if any, including interim steps, if appropriate;
  - (iii) The time established for abatement, if appropriate, including the time for meeting any interim steps; and
  - (iv) A reasonable description of the Great Salt Lake Operator's operations, or reclamation operations to which the Cessation Order applies.
- (f) A Cessation Order issued by the division shall remain in effect until the violation has been completely abated or until the Cessation Order is vacated, modified or terminated in writing by the division.
- (g) Reclamation operations and other activities intended to protect the public health, safety, and the environment shall continue during the period of the Cessation Order unless otherwise provided in the Cessation Order.
- (4) Eminent Domain Proceedings.
  - (a) The division is authorized to initiate eminent domain proceedings if conditions exist whereby, under the Multiple Mineral Development Area designation, a Great Salt Lake Operator's operations conflict with, or are not as commercially beneficial to the State, as another Operator's operations.
  - (b) Additionally, pursuant to Utah Code § 78B-6-501, the division is authorized to initiate eminent domain proceedings if the Emergency Trigger is reached and it becomes necessary, based on the state's police powers, to either:

- (i) Reduce the size of any evaporative leasehold so as to reduce the depletion of Great Salt Lake waters or brines; or
- (ii) Terminate an Operator's operations and initiate reclamation activities if the Emergency Trigger extends beyond the two-year period provided under Utah Code § 65A-10-205(5).

## R652-21-1100. Emergency Trigger Management.

#### R652-21-1101. Purpose and Authority.

These rules are promulgated pursuant to Utah Code § 65A-10-204 requiring the division to make rules providing the procedures the division shall follow under the Emergency Trigger.

#### R652-21-1102. Authority.

Under the Emergency Trigger, the division shall ensure the emergency management responsibilities in Utah Code § 65A-10-24 are met.

#### R652-21-1103. Trigger.

If salinity concentrations fall below 90 g/L or exceed 150 g/L, the Salinity Advisory Committee shall make a recommendation to the division the conditions necessary for reaching the Emergency Trigger have been met. The division may, upon consultation with the Great Salt Lake Commissioner, declare the conditions necessary for reaching the Emergency Trigger have been met.

#### R652-21-1104. Duties of the Division.

- (1) Upon reaching the Emergency Trigger, and if the division finds the following actions will directly contribute to improved ecological conditions required for healthy brine shrimp and brine fly reproduction:
  - (a) The division may, in its sole discretion, construct, operate, modify, and maintain the adaptive management berm and any additional berms, dikes, structures, or management systems, and such construction, operation, modification, and maintenance shall be consistent with Utah Code § 65A-10-204 and the public trust;
  - (b) The division may enter into agreements as necessary to provide for the construction of all or a portion of a berm, dike, system, or structure, if the division finds such agreements are consistent with the public trust;
  - (c) The division may curtail mineral production for leases containing provisions contemplating curtailment or similar contractual remedies;
  - (d) The division may, at its sole discretion, withdraw mineral leases over:
    - (i) Portions of Great Salt Lake,
    - (ii) Specific methods of extraction, or
    - (iii) Specific Great Salt Lake Elements and Minerals;
  - (e) The division may, at its sole discretion, decline to issue a new permit, authorization, or agreement; and
  - (f) The division may require Operators to implement Non-Depletive extraction methods, mitigate to offset depletion, or implement Innovative Technologies.

#### R652-21-1105. Record of Decision.

Upon reaching the Emergency Trigger, a record of decision summarizing the division's action and relevant facts shall be published on the division's website.

#### R652-21-1106. Third-Party Claims.

The division is not liable for a third-party claim resulting from the division's management actions under the Emergency Trigger.

## R652-21-1107. Emergency Trigger Termination.

Upon consultation with the Great Salt Lake Commissioner and the Salinity Advisory Committee, the Director shall, upon twelve consecutive months of conditions that support a termination of the Emergency Trigger, declare the conditions necessary for termination of the Emergency Trigger have been met.

#### R652-21-1108. Force Majeure.

- (1) Upon reaching the Emergency Trigger, the division may invoke force majeure.
  - (a) If force majeure is invoked, the parties to any Operations Royalty Agreement shall invoke the force majeure provisions within their respective agreements. The parties shall participate in an informal conference with the Director and any other affected Operators to arrive at a plan for the scope and duration of the cessation of operations caused by the Emergency Trigger. The division shall promptly waive force majeure once salinity conditions improve by declining below the Emergency Trigger threshold.
  - (b) If force majeure is invoked, the affected Operator is relieved from performance of any contractual provision requiring production to hold any Operations Royalty Agreement for a maximum of two years.
  - (c) If force majeure is invoked and the Emergency Trigger persists beyond two years, the division shall terminate the Operations Royalty Agreement and require the Operator to engage in new contracts where the Operator represents and warrants future operations will not amount to a net depletion of water.
  - (d) If force majeure is invoked, an Operator may continue to process brines already extracted and may sell products derived from those brines.