MINE RECLAMATION PERMIT APPLICATION

RECLAMATION PLAN AND PERMIT APPLICATION FOR THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION, BUREAU OF MINING REGULATION AND RECLAMATION FOR A MINING PROJECT

Project Name _____

1.0 Applicant Information

1.1 Proposed Permittee:

Name _____

Title _____

Office Phone _____ Cell Phone _____

Email Address _____

Date _____

1.2 Business Address of Individual Completing Application:

Business Name _____

Physical Address _____

Mailing Address (if different) _____

City _____ State _____ Zip Code _____

Country, (if not in the USA) _____

1.3 Corporation Information, if applicable:

Corporation Name _____

Corporate Officer's Information:

1.3.1 President _____

Physical Address _____

Mailing Address (if different) _____

City _____ State _____ Zip Code _____

Country, (if not in the USA) _____

Office Phone _____ Cell Phone _____

Email Address _____

1.3.2 Treasurer _____

Physical Address _____

Mailing Address (if different) _____

City _____ State _____ Zip Code _____

Country, (if not in the USA) _____

Office Phone _____ Cell Phone _____

Email Address _____

1.3.3 Secretary _____

Physical Address _____

Mailing Address (if different) _____

City _____ State _____ Zip Code _____

Country, (if not in the USA) _____

Office Phone _____ Cell Phone _____

Email Address _____

1.3.4 Nevada Registered Agent _____

Physical Address _____

Mailing Address (if different) _____

City _____ State _____ Zip Code _____

Country, (if not in the USA) _____

Office Phone _____ Cell Phone _____

Email Address _____

1.4 Partnership Information, if applicable:

1.4.1 Name of Partnership _____

Type of Partnership _____

Physical Address _____

Mailing Address (if different) _____

City _____ State _____ Zip Code _____

Country, (if not in the USA) _____

Office Phone _____ Cell Phone _____

Email Address _____

1.4.2 Nevada Registered Agent _____

Physical Address _____

Mailing Address (if different) _____

City _____ State _____ Zip Code _____

Country, (if not in the USA) _____

Office Phone _____ Cell Phone _____

Email Address _____

1.4.3 Authorized Field Representative _____

Physical Address _____

Mailing Address (if different) _____

City _____ State _____ Zip Code _____

Country, (if not in the USA) _____

Office Phone _____ Cell Phone _____

Email Address _____

NOTE: *A signed authorization must be attached which gives the Field Representative authority to act on behalf of the operator*.

2.0 Mining Permit Application Fees

Provide an application for the proposed land acres included in the Reclamation Plan/Reclamation Permit Application that will be affected/disturbed. The application fee should be calculated as described below:

_____ Acres of Public Land at $3.10/acre = _____

_____ Acres of Private Land at $5.15/acre = _____

Total Fee = _____

Please Note: A check, money order, or e-payment confirmation receipt must be submitted with the Reclamation Plan/Reclamation Permit Application for the total amount of the calculated application fee. Checks and or money orders must be made 'Payable to the Nevada Division of Environmental Protection'.

3.0 Applicant Acknowledgments

3.1 The Applicant understands and agrees to accept all reclamation responsibility for the proposed affected land with a determined surety bond amount based upon site-specific project criteria as defined in the project's Plan of Operation and Reclamation Plan.

3.2 The Applicant understands and agrees, pursuant to NAC 519A.350 and NAC 519A.360, to accept the responsibility for the affected land with an acceptable surety bond amount obligated in coordination with the cooperating agencies thru a Memorandum of Understanding and **prior** to affecting the land.

3.3 The Applicant understands and agrees, pursuant to NAC 519A.043 and NAC 519A.050, if additional acres are proposed to be affected, (> greater than the acreage approved in the Reclamation Plan and reclamation Permit), a modification submittal must propose the additional acres to be affected, the appropriate permit modification fee, and the increased surety bond amount must be approved and obligated **prior** to affecting the land.

3.4 The Applicant understands and agrees, Per NAC 519A.235, that the reclamation annual fees and the annual "As-Built" disturbance report are required to be submitted **on or before April 15 of every calendar year** based upon the permitted acres and the "as-built" public/private acres affected as of the end of December 31st of the prior year to maintain permit compliance. The annual fees shall continue to be due each year until the agencies have determined that all reclamation requirements have been achieved.

3.5 The Applicant understands and agrees, Per NAC 519A.380, that a three-year reclamation cost update is required to be submitted every three years after the effective issuance date of the reclamation permit to account for inflation and ensure adequate funds are available to the agencies(s) to perform the reclamation activities described in the approved reclamation plan in the case of operator default.

3.6 The Applicant understands and agrees to complete and submit an Affidavit, under the penalty of perjury, with the Reclamation Permit Application provided on Page 5 of this document.

3.7 The Applicant understands and agrees that the approved Reclamation Plan/Permit **does not constitute**:

3.7.1 Certification of land ownership to any person named herein; and

3.7.2 Recognition of the validity of any mining claim(s) herein.

3.8 The Applicant understands and agrees that the approval of the Reclamation Plan and Permit does not relieve the operator of the responsibility to comply all other applicable State and Federal regulations.

3.9 The Applicant understands and agrees that any information provided in the Reclamation Plan that is marked 'Confidential' will be treated in accordance with the agency's regulations.

The Applicant hereby agrees to have reviewed the acknowledgements noted above including the approved Plan of Operations, the Reclamation Plan, and understands that no portion of the obligated surety amount will be released until an Attachment A document (enclosed with reclamation permit) has been properly submitted to the cooperating agencies to initiate a site inspection. Upon concurrent agency approval of the completed reclamation work, the lead agency holding the obligated surety amount will authorize a surety bond release for the project.

Print Name	Company Name
Signature of Operator or Authorized Official	Date

4.0 **AFFIDAVIT REQUIREMENT** Law AB148 (2021) and LCB RO85-21 (2022) are available for additional information on the required affidavit.

An applicant for a reclamation permit in the State of Nevada must submit, in addition to all other supporting materials, an affidavit that attests as to whether or not the applicant or operator, as applicable, and, if the applicant or operator is a corporation or other business entity, each person who has a controlling interest in the corporation or business entity:

- Has ever defaulted on an obligation related to the reclamation of an exploration project or mining operation in this State; and
- Is in good standing with agencies of other states or federal agencies relating to the reclamation of an exploration project or mining operation outside of this State.

Importantly, the applicant or operator or person who has controlling interest must (1) identify any exploration projects and/or mining operations that are or were in default in this State or are not in good standing in another state related to reclamation; and (2) for those exploration projects and mining operations, if any, state whether or not the default or conditions which resulted in a lack of good standing have been remedied. If no remedy has occurred, the applicant or operator must, within one year from the date the affidavit is filed with the Division, remedy the default or issues that resulted in a lack of good standing and submit a supplemental affidavit certifying that a remedy has occurred and describing the remedy with particularity. Failure to submit a timely supplemental affidavit renders the application void and a new application, affidavit, and fee must be submitted to the Division.

4.1 DEFINITIONS/TERMS

"Person who has a controlling interest" means:

1. The president, secretary, treasurer or equivalent thereof of the corporation or business entity;
2. A partner, director or trustee of the corporation or business entity; or
3. A person who, directly or indirectly, possesses the power to direct the management or determine the policy of the corporation or business entity resulting from, without limitation, his or her ownership of voting stock in the corporation or business entity, a contract or any other circumstance. The term does not include a person designated to act as a proxy, including, without limitation, an agent, bank, broker, nominee or custodian, for one or more persons who own voting stock unless the proxy otherwise has the power to direct the management or determine the policy of the corporation or business entity.

"Person" means a natural person, any form of business or social organization and any other nongovernmental legal entity including, but not limited to, a corporation, partnership, association, trust or unincorporated organization. NRS 0.039 (1985).

"Remedy" A default on an obligation relating to reclamation of an exploration project or mining operation in this State has been remedied if:

1. The applicant, operator, or a person who has a controlling interest, pays the full amount of the defaulted obligation or provides evidence that the full amount of the defaulted obligation has been paid and not discharged through bankruptcy, and
2. The applicant, operator or person who has a controlling interest demonstrates that the conditions which led to the default have been remedied and no longer exist.

An applicant, operator or person who has controlling interest has remedied issues in relation to the reclamation of an exploration project or mining operation outside of this State and is in good standing with a federal agency or agency of another state if the applicant, operator, or person who has controlling interest, as applicable:

1. Fully and completely satisfies and complies with every condition or requirements that is set forth in a judgment, order, ruling or decision by a federal agency, agency of another state or a court of competent jurisdiction that is not appealable, or has otherwise become final after declination or exhaustion of all

appeals including without limitation:

a. Paying any fee, penalty, fine, settlement, restitution or other obligation;
b. Complying with an injunction order,
c. Providing any required financial assurance; and

2. Does not discharge any debt or obligation related to the reclamation of the exploration project or mining operation through bankruptcy.

DECLARATION FORM
IN ACCORDANCE WITH AB 148 (2021) AND R085-21

1. I am the applicant or operator, or an authorized representative of the applicant or operator and I am submitting this declaration in accordance with (Check Applicable Box)

☐ NAC 519A.125 ☐ 519A.135 ☐ 519A.140 ☐ 519A.150 ☐ 519A.155 ☐ 519A.215

2. I or the corporation or business entity I represent, including its person(s) who has/have controlling interest (Check Applicable Boxes; Check "Have/Is Not" if not applicable)

☐ Have ☐ Have Not: Defaulted on any obligation relating to the reclamation pursuant to NRS and NAC Chapter 519A in the State of Nevada.

☐ Is ☐ Is Not: Currently subject to any settlement, consent decree or any criminal, civil or administrative order or judgment for a violation of a federal or state reclamation statute or regulation outside of the State of Nevada which is not appealable or has otherwise become final after declination or exhaustion of all appeals therefrom.

Complete Paragraph 3 and Attachment 1 only if you or the corporation or business entity you represent, including its person(s) who has/have controlling interest, checked "have" or "is" under paragraph 2. (Check Box, if applicable)

3. ☐ I or the corporation or business entity I represent, including its person(s) who has/have controlling interest, submit with this Declaration, Attachment 1, which completely and accurately identifies:

a) Each exploration project or mining operation for which I or the corporation or business entity I represent, including its person(s) who has/have controlling interest, engaged that: (i) Defaulted on any obligation relating to reclamation pursuant to NRS and NAC Chapter 519A in the State of Nevada; (ii) Is subject to any settlement, consent decree or any criminal, civil or administrative order or judgment for a violation of federal or state reclamation statute or regulation outside the State of Nevada which is not appealable or has otherwise become final after declination or exhaustion of all appeals therefrom;

b) The dates that I or the corporation or business entity that I represent, including its person(s) who has/have controlling interest, engaged in the exploration project(s) or mining operation(s) identified in subparagraph (a); and

c) Whether or not I or the corporation or business entity I represent, including its person(s) who has/have controlling interest, have remedied the default in the State of Nevada or become in good standing with all agencies of other states and federal agencies related to each exploration project and mining operation identified under subparagraph (a).

4. Declaration (Check Applicable Box)

☐ Executed in the State of Nevada: I declare under penalty of perjury that the foregoing is true and correct.

☐ Executed outside the State of Nevada but in the United States or its Territories: I declare under penalty of perjury under the law of the State of Nevada that the foregoing is true and correct.

☐ Executed outside the United States and its Territories: I declare under penalty of perjury under the law of the State of Nevada that the foregoing is true and correct, and that I am physically located outside the geographic boundaries of the United States, Puerto Rico, the United States Virgin Islands and any territory or insular possession subject to the jurisdiction of the United States.

Executed on the _____ (day) _____(month), _____ (year),

at _____ (city or other location and state) _____ (country)

By: _____ _____

Print Name Signature

_____ _____

Affiliation with Applicant/Operator Company Name

COMPLETE THE SUPPLEMENTAL DECLARATION BELOW IF YOU, OR THE CORPORATION, OR BUSINESS ENTITY THAT YOU REPRESENT, INCLUDING ITS PERSON(S) WHO HAS/HAVE CONTROLLING INTEREST, **HAVE NOT** REMEDIED A DEFAULT IN THIS STATE OR BECOME IN GOOD STANDING WITH ALL AGENCIES OF OTHER STATES OR FEDERAL AGENCIES. THE SUPPLEMENTAL DECLARATION MUST BE SUBMITTED WITHIN ONE YEAR OF THE DATE THIS DECLARATION IS FILED WITH THE DIVISION.

SUPPLEMENTAL DECLARATION FORM
IN ACCORDANCE WITH AB 148 (2021) AND R085-21

5. I am the applicant or operator or an authorized representative of the applicant or operator and I am submitting this Supplemental Declaration in accordance with (Check Applicable Box)

☐ NAC 519A.125 ☐ 519A.135 ☐ 519A.140 ☐ 519A.150 ☐ 519A.155 ☐ 519A.215.

6. I or the corporation or business entity I represent, including its person(s) who has/have controlling interest submit with this Supplemental Declaration, Attachment 2, which completely and accurately identifies:

   a) Each exploration project or mining operation identified in paragraph 3(a) that had not remedied a default in the State of Nevada or become in good standing with agencies of other states and federal agencies as of the date I or the corporation of business entity I represent filed the Declaration with the Division in accordance with NAC 519A.125, 519A.135, 519A.140, 519A.150, 519A.155 or 519A.215, as identified in paragraphs 1 and 5;

   b) Whether I or the corporation or business entity I represent, including its person(s) who has/have controlling interest, have remedied the default in the State of Nevada or become in good standing with all agencies of other states and federal agencies related to each exploration project and mining operation identified under subparagraph (a); and

   c) The actions that I or the corporation or business entity I represent, including its person(s) who has/have controlling interest, have taken to remedy the default in the State of Nevada or become in good standing with all agencies of other states and federal agencies related to each exploration project and mining operation identified in subparagraph (a).

7. Declaration (Check Applicable Box)

   ☐ Executed in the State of Nevada: I declare under penalty of perjury that the foregoing is true and correct.

   ☐ Executed outside the State of Nevada but in the United States or its Territories: I declare under penalty of perjury under the law of the State of Nevada that the foregoing is true and correct.

   ☐ Executed outside the United States and its Territories: I declare under penalty of perjury under the law of the State of Nevada that the foregoing is true and correct, and that I am physically located outside the geographic boundaries of the United States, Puerto Rico, the United States Virgin Islands and any territory or insular possession subject to the jurisdiction of the United States.

Executed on the _____ (date) day of _____ (month), _____ (year),

at _____ (city or other location and state) _____ (country)

By: _____ _____

Print Name Signature

_____ _____

Affiliation with Applicant/Operator Company Name

ATTACHMENT 1
INFORMATIONAL STATEMENT

☐ Applicant/Operator ☐ Person Who Has Controlling Interest Name:

_____

Mining or Exploration Project(s) Name and Address/Location

_____

_____

_____

_____

Dates Engaged in Exploration Project or Mining Operation

_____

☐ Has ☐ Has Not: Remedied Default or Become in Good Standing

☐ Applicant/Operator ☐ Person Who Has Controlling Interest Name ☐ Same as above:

_____

Mining or Exploration Project(s) Name and Address/Location:

_____

_____

_____

_____

Dates Engaged in Exploration Project or Mining Operation

_____

☐ Has ☐ Has Not: Remedied Default or Become in Good Standing

☐ Applicant/Operator ☐ Person Who Has Controlling Interest Name ☐ Same as above:

_____

Mining or Exploration Project(s) Name and Address/Location:

_____

_____

_____

Dates Engaged in Exploration Project or Mining Operation

_____

☐ Has ☐ Has Not: Remedied Default or Become in Good Standing

[PROVIDE ADDITIONAL PAGES AS NEEDED TO COMPLETE THE INFORMATIONAL STATEMENT]

ATTACHMENT 2:
INFORMATIONAL STATEMENT

☐ Applicant/Operator ☐ Person Who Has Controlling Interest Name:

_____

Mining or Exploration Project(s) Name and Address/Location

_____

_____

_____

_____

Dates Engaged in Exploration Project or Mining Operation

_____

☐ Has Remedied Default or Become in Good Standing

Description of Actions to Remedy Default or Become in Good Standing:

_____

_____

_____

_____

☐ Applicant/Operator ☐ Person Who Has Controlling Interest Name ☐ Same as above:

_____

Mining or Exploration Project(s) Name and Address/Location:

_____

_____

Dates Engaged in Exploration Project or Mining Operation

☐ Has Remedied Default or Become in Good Standing

Description of Actions to Remedy Default or Become in Good Standing:

[PROVIDE ADDITIONAL PAGES AS NEEDED TO COMPLETE THE INFORMATION

5.0 Mine Plan of Operations (PoO)

A summary of the proposed project should be provided. This summary should provide an overview of where the project is going to be constructed, how big the project is going to be, the various facilities associated with the project, and the anticipated duration of the project.

5.1 Claim Names(s) _____

Claim Type (Lode, Mill site, etc.) _____

Claim Owner(s) _____

Claim Owner's Mailing Address _____

City _____ State _____ Zip Code _____

BLM/USFS Case Number(s) _____

Location of Project (Township, Range, Section) T_____ R_____ S_____

UTM (meters, NAD83) Easting _____ Northing _____

5.2 Topographic Map(s)

Maps at an appropriate scale with sufficient detail should be provided showing the proposed project boundary, surface land ownership, the proposed layout of the project facilities, existing roads, and location of surface water bodies within one-half mile of the project boundary. The details of mapping requirements are described in the following sections.

5.2.1 Project Area Boundary

Provide the boundary of the mine project on a map to include the legal description of the project (Section, Township and Range based upon Mount Diablo Baseline and Meridian) and/or the UTM coordinates within the project boundary.

5.2.2 Surface Ownership and Proposed Affected Acreage

Provide the surface land ownership, (private, public) within the project boundary area on a

map(s). Identify the proposed affected acreage for each type of mine component within the project boundary and the proposed private/public acres that will be affected by each type of mine component. Provide a summary of all individual mine components and the corresponding affected land in a disturbance table. Include additional affected land based upon calculated cut/fill disturbances associated with construction of each mine facility to also include the adjacent affected acres created by heavy equipment construction and reclamation activities. List this affected area as a Yards category in the disturbance table

Sections 5.2.3 to 5.2.9 should be addressed in the reclamation plan if applicable

5.2.3 Areas Disturbed by Previous Operator and Inactive.

5.2.4 Areas Disturbed by Current Operator Prior to January 1, 1981, and Inactive.

5.2.5 Areas Disturbed by Current Operator Prior to January 1, 1981, and Still Active.

5.2.6 Areas Disturbed by Current Operator after January 1, 1981, but Prior to October1, 1990, and Inactive.

5.2.7 Areas Disturbed by Current Operator after January 1, 1981, but Prior to October 1, 1990, and Still Active.

5.2.8 Areas Active On or After October 1, 1990.

5.2.9 Access Roads Existing Prior to January 1, 1981.

Provide the location of all existing access roads on a map and provide narrative on which roads will be used for project access. Describe if any maintenance or reconstruction activity will be required on any existing roads in the plan.

6.0 Mine Reclamation Plan

The Reclamation Plan should describe the required reclamation, closure, and long-term management activities to be undertaken during and after completion of the mining operation needed to stabilize the disturbed areas to a safe condition and to protect both disturbed and undisturbed areas from unnecessary and undue degradation. The Reclamation Plan serves as the basic construction plan for calculating the reclamation cost estimate (RCE). The attached Basis and Checklist for the RCE describe the supporting information, individual drawings or figures, and level of detail required to calculate a project RCE. The plan should provide references to the detailed topographic maps, figures, and tables that are included to support the RCE when describing the reclamation of project facilities.

6.1 Methods Taken to Prevent Unnecessary or Undue Degradation

The plan should provide an overview of proposed concurrent reclamation activities and the use of Best Management Practices (BMPs) that will be employed to control erosion and reduce sedimentation from affected areas. A description of the revegetation plan should include an approved seed mixture and other measures such as temporary fencing and/or noxious weed control on the reclaimed re-vegetated areas.

6.2 Other Reclamation Activities, such as Reclamation of Historic Disturbances

If applicable, the plan should describe any planned reclamation activities not related to proposed project disturbances.

6.3 Proposed Reclamation Schedule and Constraints on the Estimated Time to Complete Reclamation Caused by the Residual Moisture Content or Physical or Chemical Qualities of Impoundments

Provide the anticipated schedule for initiating and completing reclamation/closure activities for each mine components type. Identify the post-mining component type(s) that will remain in active closure management/monitoring with the expected timeframes to achieve stabilization of process fluids from mine process components.

6.4 Post-Mining Land Use and Description of any Surface Facilities such as buildings or roads which will not be subject to reclamation to achieve the proposed post-mining use

Describe the proposed post-mining land use and the compatibility with surrounding land uses in the plan. If sustainable development portions of the project are proposed, the reclamation plan should outline existing mine infrastructure (e.g. buildings, roads, power lines, water lines, etc.) that would be used for post-mining/closure economic uses. Documentation will need to be included in the reclamation plan to describe post-closure land use only if the site conforms to land use plans approved by the local government entity. If an exemption from reclamation of the open pit is requested, the reclamation plan should contain a discussion of the requirements for requesting this exemption as outlined in NAC 519A.250.

6.5 Post-Mining Topography

Provide map(s) which define the post-mining reclamation topography for the affected land. The map(s) must include a scale that provides sufficient detail of the post-mining surface configuration to illustrate the regrading plan, provide verification of the amount of material to be moved during reclamation, and address the adequacy of storm water runoff controls..

6.6 Slope Stability Technical Criteria

Per NAC 519A.345 (3) (6) The regraded slopes for heap leach pads and waste rock storage facilities should be proposed to be constructed at Horizontal 3 to 1 Vertical (3H:1V) final slope topography. Proposed final slopes to be left at greater than (3H:1V) will require a geotechnical analysis report and a RUSLE soil loss calculations to demonstrate that the final configuration will provide long term reclamation structure and erosional stability and meets the suitability criteria for revegetation success.

6.7 Description of Reclamation Necessary Because of Instream Mining

If applicable, the plan should contain a discussion of required reclamation activities.

6.8 Effect of Proposed Reclamation on Future Mining and Public Safety

The effect of proposed reclamation activities on future mining and mineral exploration activities should be discussed. Include a written statement setting forth the effect the proposed reclamation will have on public safety. NAC 513 may be obtained at Nevada State Legislature NAC 513 which provides safety requirements for abandonment of mines.

6.9 Measures to be Taken During Extended Periods of Non-Operation

Provide a discussion of the measures and/or procedures to be implemented during an extended period of non-operation to maintain a stable and safe project site. If not filed at the time of plan submittal, this information shall be filed whenever the operator anticipates a period of non-operation.

6.10 Reclamation Methods

The plan must provide reclamation methods for all proposed acres that will be affected by the mine's facilities. Per 519A.345(5)(6), the reclamation plan requires a minimum 2 foot. growth media closure cover on heap leach pads and tailings impoundments.

For each of the reclamation categories listed below, the regrading, recontouring, growth medium placement, and revegetation tasks that would be completed should be described. See Table 1 for the complete list.

6.10.1 Exploration

This disturbance category includes abandonment of exploration drill holes and reclamation of exploration trenches. The number of exploration drill holes that will remain open during the operational phase of the project should be identified. The number of drill rigs at the site at any given time determines the number of open drill holes for borehole abandonment reclamation costs

6.10.2 Exploration Roads and Pads

This disturbance category includes exploration roads and pads, overland travel, storage ponds, and staging areas. Proposed construction of exploration roads and pads in steeper

terrain should account for the underlying natural ground slope when determining disturbances.

- 0-10%;
- 11-25%;
- 26-45%, and
- >45%

6.10.3 Roads

This reclamation category requires the documentation of all access, light duty, and haul roads within the project boundary. Location of these roads should be shown on a map or figure in the plan. Identify roads required for post mining monitoring activities during final reclamation and closure activities that will remain for such access, but reclaimed at a later date upon final closure approval.

6.10.4 Well Abandonment

The reclamation plan should describe all water production, dewatering, infiltration, and ground water monitoring wells that will be used during operations and when the wells will be abandoned. A figure or map should be included that shows the locations of the above wells within the project area. The wells which will be used for monitoring purposes during closure and reclamation should be identified. Abandonment methods for the wells as well as any open boreholes should be described and follow the Division of Water Resources requirements for plugging water wells, monitoring wells, and boreholes (NAC 534.420, 534.4365, 534.4369, and 534.4371, respectively).

6.10.5 Pits

Provide whether a pit lake will form upon the conclusion of active mining operations. The anticipated water quality and quantity over time should be discussed as well as whether access to the pit lake will be allowed as a post-mining use. Safety controls (berms, fencing, etc.) planned around the pit perimeter to restrict access should be described and shown on a map or drawing. If pit backfilling is proposed, the reclamation plan must contain supporting information and analysis that details environmental, safety, and economic information related to the proposed pit backfilling..

6.10.6 Quarries and Borrow Pits

This category includes reclamation of quarries and materials borrow sources constructed during operation and/or reclamation. Locations and proposed post-mining extents and topographic contours of these areas should be shown on a figure or map.

6.10.7 Underground Openings

If applicable, the plan should discuss all closure and reclamation activities required for portals, adits, shafts, declines, vent raises and secondary escape ways, etc., or other underground openings. All such openings should be identified on a figure or map. If an opening will penetrate a groundwater aquifer, the proposed closure design must be approved by the Bureau of Mining Regulation Closure Branch.

6.10.8 All Ponds

Reclamation activities that will be required for all process ponds, reclaim ponds, storm event ponds, and sediment/settling ponds should be discussed. Process ponds that will be converted to evapo-transpiration or evaporation-cells (ET or E-cells) should be identified and whether any removal and disposal of sediments or sludge may be required. Details of the pond conversion should be discussed in Section 6.11.

6.10.9 Heap Leach Facilities

The post-mining topographic configuration of the leach pads prior to regrading and

recontouring should be provided on a figure or drawing. The figure or drawing should contain enough detail to illustrate the operational lift heights, bench setback widths, mid-bench lengths, etc. A post-reclamation figure or drawing should also be provided to show the final slope angles after regrading/recontouring and final limits of disturbance of the reclaimed facility. The reclamation plan should discuss the cover thickness and volume of cover that is proposed to be placed over the heap leach facilities, the origin of the cover material, and the anticipated infiltration rate of meteoric waters through the cover. If the cover will be constructed as an ET cover, the store and release capability should be discussed. The Process Fluid Stabilization of heap leach solutions and residual draindown is discussed in Section 6.11.

6.10.10 Waste Rock Storage Facilities (WRSF)

The reclamation plan should contain a figure or drawing that depicts post-mining topographic configuration of each WRSF prior to regrading and recontouring. The figure or drawing should contain enough detail to illustrate the operational lift heights, bench setback widths, mid-bench lengths, etc. A post-reclamation figure or drawing should also be provided to show the final slope angles after regrading/recontouring and final limits of disturbance of the reclaimed facility. If planned reclamation includes placing a synthetic cover or constructing an evapotranspiration (ET) cover, the reclamation plan should describe the activities involved and anticipated performance of the cover systems. For an ET cover, the plan should describe the cover thickness and volume of cover that is proposed to be placed over the WRSF, and the origin of the cover material. Additionally, if the WRSFs are constructed based on an approved waste rock management plan, the reclamation plan must incorporate the measures approved for handling, source control, and mitigation of potentially acid generating waste rock. Diversion structures to convey surface water around the facilities should be described in the plan and shown on the appropriate maps or drawings.

6.10.11 Landfills

If a waivered landfill is proposed as part of the project, the reclamation plan should discuss the anticipated size of the landfill, where it will be located, and the reclamation activity that will be required. All solid wastes disposal on-site must be performed in compliance with Class III Waivered Landfill regulations. Disposal of waste in situ (concrete foundations, underground pipes, burial of liners, shall be in accordance with a separate Class III landfill waiver for this sole purpose. The burial of solid waste products on-site in any locations other than waivered landfill locations is not permitted.

6.10.12 Tailings Storage Facilities

Provide the reclamation activity required to re-grade the tailings impoundment embankment to a final stable slope topography. Provide figures or maps which show the proposed topographic as-built configuration of the tailings impoundment and the final re-graded topography. .Provide a topographic grading plan prior to the placement of a minimum 2 ft. evapotranspiration cover to provide proper meteoric drainage to a conceptual spillway. Provide a discussion of the anticipated timeframes for reclamation and closure of the impoundment (e.g., tailings consolidation, regrading, and cover placement). The discussion needs to include discussion of the proposed closure cover growth media depth, volume required, and origin of cover borrow source material. If the embankment is proposed to be left at a greater than a Horizontal to 1 Vertical (3H:1V) final slope, then a geotechnical analysis report is required to demonstrate that the proposed reclaimed configuration will provide geotechnical stability, long term erosional stability, and meet the suitability for long term re-vegetation success. RUSLE soil loss calculations may be required. The construction of surface water runoff controls and a spill way structure should be described. The Process Fluid Stabilization of tailings solutions and residual draindown should be discussed in Section 6.11.

6.10.13 Foundations and Buildings

The reclamation methods for demolition of buildings and structures, and concrete foundations, walls and pads should be described. The proposed disposal and burial depth of non-salvageable material should be explained. Foundations broken in situ requires a minimum of 2-3 foot of cover to prevent exposed concrete. A building foundation proposed to not be broken up and buried in place requires a minimum of a 5foot cover placement to provide for plant rooting depth. Any special handling requirements, such as rinsing and hazardous waste removal prior to demolition should be discussed. The location of any buried foundations must have prior approval via a Class III Landfill waiver.

6.10.14 Yards

This category includes areas used for a variety of purposes such as growth medium stockpile, yards, offices, mill area disturbances, and ancillary facilities. The plan should describe the planned reclamation activities, including the thickness of growth medium to be placed over these areas during reclamation, if applicable.

6.10.15 Drainage and Sediment Control

Describe all of the storm water drainage control features that will be constructed as temporary or permanent structures. Disturbance associated with these facilities should account for design dimensions, adjacent cuts and fills, and access that may be required for construction, reclamation, and monitoring. Provide the reclamation methods associated with the reclamation and maintenance of the structures.

6.10.16 Waste Disposal

Provide a reclamation plan that will describe the tasks involved for disposal of any hazardous waste and petroleum contaminated soils that may require offsite disposal. A cost estimate of the quantity of materials requiring offsite disposal should be included in the plan. This category should also include any mercury-bearing waste product and/or equipment associated with air pollution controls or mercury retorts which will require special handling, transport, and disposal off-site in a hazardous waste facility.

6.10.17 Miscellaneous

Provide the description of the tasks involved with removal of fencing, culverts, septic systems, tanks, vats, and all other facilities not addressed elsewhere in the Plan, etc.

6.10.18 Monitoring

This category will include erosion, revegetation monitoring, and water quality monitoring. Revegetation monitoring will be required on a bi-annual basis for three years, while water quality monitoring will be required for five years on a quarterly basis after closure of the project.

Table 1: Disturbance Types

Type of Disturbance	Existing Public Acres	Existing Private Acres	Proposed Public Acres	Proposed Private Acres	Subsequent Phases Acres	Total Acres
Exploration						
Exploration Roads and Drill Pads						
Roads						
Well Abandonment						
Pits						
Quarries and Borrow Areas						
Underground Openings						
Process Ponds						
Heap Leach Pads						
Waste Rock Storage Facilities						
Landfills						
Tailings						
Foundations and Buildings						
Yards						
Drainage and Sediment Control						
Generic Material Handling						
Other User Costs						
Other						

6.11 Fluid Management and Process Fluid Stabilization

Provide detailed methods that will be used to achieve process fluid stabilization (PFS) of the process components (such as leach pads, tailings impoundments, and associated process ponds) associated with the project. Include a discussion of the proposed strategy to reduce the contained process solution inventory, establish conditions to reduce infiltration, and the management of the long-term residual drain down of process solution(s) The plan should also summarize the methods used to estimate infiltration rates of meteoric waters through the cover material and to project solution draindown rates from the process components. The plan needs to identify which existing ponds will be used for PFS and whether additional ponds will be required. The activities required for conversion of the ponds to ET basins should be discussed. Any piping and ditch modifications that would need to be done for management of long-term draindown solutions should be discussed.

Describe the proposed procedures necessary in the event of a premature project shut down to manage

process fluids circulation and any other management of the contained process solutions during an interim fluid management period..

7.0 Reclamation Cost Estimate

A reclamation cost estimate (RCE) for completing the reclamation activities described in the plan needs to be included. These costs should be based on labor wage rates and equipment rental rates for the estimated time to complete the tasks and the anticipated costs of materials that would be needed. The RCE can be calculated by using:

a. The Nevada Standard Reclamation Cost Estimator (SRCE) found at Nevada Bond and the Cost Data File found at BMRR's SRCE page, or

b. The estimate of cost from an outside contractor with completed cost estimate certification form (see Attachment 1); or

c. Any other method which is acceptable to the Administrator, the Bureau of Land Management (BLM), the United States Forest Service (USFS) or another federal land management agency, if appropriate.

d. The mine affected facilities should be defined and listed in a comprehensive table and consistent with the Standard Reclamation Cost Estimate (SRCE) summary page for a more efficient review.

7.1 Cost Calculations

Provide reclamation costs for each disturbance category (Section 6.10) and PFS costs (Section 6.11) need to be presented and discussed. The attached guidance, Basis and Checklist for the RCE, describes the methodology which should be used to develop the costs and provides examples of information, data, figures, and tables that should be included with the Reclamation Plan to support the cost calculations.

Mine Project Reclamation Plan Basis and Checklist for the Reclamation Cost Estimate

This guidance information and checklist is provided to assist the operator in calculating the engineering and environmental costs required to properly stabilize, reclaim, and restore the area disturbed by the project. It is not all inclusive, but includes most reclamation activities required at mine projects.

For mine projects, including a supplemental section to the reclamation plan that describes the *basis of the reclamation cost estimate* is needed to ensure the Reclamation Plan includes the level of detail necessary to support the assumptions used to develop the reclamation cost estimate (RCE). The basis of the reclamation cost estimate should address all project facilities and generally follow the format of the Nevada Standardized Reclamation Cost Estimator (SRCE) Summary Sheet. **Operators should be familiar with the SRCE User Manual as it provides additional detailed information needed to prepare the RCE.**

Accurate topographic maps showing all project facilities both at the time of closure and after reclamation is complete are critical to develop the reclamation cost estimate.

The basis for the reclamation cost estimate should include the following information:

For major facilities such as leach pads and WRSFs, individual topographic maps or figures that depict anticipated end of mining configurations should be provided to show the following information:

a. Where mid-bench lengths were measured, and include a table that summarizes the total length of mid-benches, by height intervals of not greater than 10 feet (vertical). The figure should clearly document how the preparer determined the numerical values that are used in the calculations to determine the reclamation costs.

b. Where the toe of the facility will be located prior to, and after regrading is performed, and include disturbance beyond the toe that may be created by equipment to complete reclamation.

c. Show the permitted limits of disturbance for each major component.

Growth Media Salvage and Management Plan

The reclamation plan needs to describe all of the facilities that will require replacing growth media material, or using stockpiled materials during reclamation and closure activities. The RCE needs to account for the quantity of material that will needed at each facility, and where the material will located when reclamation and closure activities commence. This may best be quantified by providing two tables as follows:

a. One table would show the volume of material that is anticipated to be salvaged from within the footprints of various facilities at the time of initial clearing and grubbing and during operations. This may be done by using published soils maps, or more site-specific information. This table would identify both the anticipated volume of material that would be salvaged and stockpiled, and the volume of material that would be required at each major facility during reclamation and closure work. See example Growth Media Salvage Inventory and Project Requirements table at the end of this document.

b. A second table would show the anticipated volume of material that would be placed in each stockpile, and provide a unique identification for each stockpile to correlate to a mapped location. The table will also identify where the material in each stockpile would be used during reclamation and closure activities. See example Growth Media Stockpile Inventory table at the end of this document.

A figure should be provided that shows and labels the various haul routes that would be utilized from stockpile locations to the receiving facilities. The labels should include the haul distance from centroid positions of the facilities and the average slope of the haul route. This information is needed to determine haulage costs from the stockpile locations to the receiving facility. Facilities such as roads where the growth media is typically stored in the road fill slope and/or berms would not need to be included in the inventory.

RCE Checklist:

The RCE should present the costs for Earthwork, Recontouring, Revegetation and Stabilization associated with reclamation of the following disturbance categories.

1. Exploration Drill Hole Abandonment
   a. The RCE must include costs for proper abandonment of water wells, monitoring wells, and exploration drill holes per the Division of Water Resources requirements as contained in NAC 534.420, 534.4365, 534.4369, and 534.4371, respectively. The plan must state the maximum number drill rigs that may be present on site. The RCE must include cost for proper abandonment of the maximum number of bore holes that may be left open at any one time, and assume at least one bore hole for each drill rig that may be on site.
   b. Exploration trenches should be located on a figure. The RCE must include costs to backfill the trenches and revegetate the trench and spoil pile, if applicable.
2. Exploration Roads and Drill Pads
   a. Existing and/or proposed exploration drill road and pad locations need to be shown on a figure that identifies which roads will be overland travel and which roads will be constructed (bladed in). The length and width of each road type should be quantified . For constructed roads, the underlying slope, average travel width and additional cut and fill cross-sectional widths need to be accounted for in the RCE.
   b. The RCE should include costs for reclaiming drill pads and sumps that will be constructed. The average width and length of pad working platforms and additional cut and fill disturbance based on underlying ground slope need to be accounted for in the cost calculations. The RCE for backfilling the sumps should be based on the average size and depth of sumps.
3. Roads
   c. A figure should be provided in the plan that locates all access, light duty and haul roads. All road segments should be provided a unique identifier. Roads that will require berms on one or both sides of the roadbed should be identified.
   d. An accompanying table that provides a comprehensive inventory and dimensions of all roads to be reclaimed will summarize the information needed to calculate reclamation costs.
4. Well Abandonment
   a. The RCE should include costs for abandonment of all water production, dewatering, infiltration and ground water monitor wells within the project area. All wells and boreholes must be properly abandoned pursuant to NAC 534 requirements.
   b. A table that includes a comprehensive inventory of all wells that will be used for the operation and require closure should be included to develop the RCE.
5. Pits
   a. The RCE should include costs for public safety measures such as berms and/or fences around the pit rim. Cost should be based on length of berm required, projected berm dimensions and if berms would be constructed by hauling material in, or pushing a berm up with a dozer.
   b. If pit backfill is proposed, the RCE should reflect the volume of backfill required, haulage distance, and compaction of the backfill, if necessary. The cost should also reflect whether lime addition to the backfill is necessary prior to placement.
6. Quarries and Borrow Areas
   a. The RCE should include costs for all reclamation activities required for these types of disturbances.

7. Underground Openings
    a. Costs associated with closure of each underground opening such as portals, adits, declines, vent raises and secondary escapeways, etc., need to be accounted for in the RCE.
    b. If any opening will intercept a ground water aquifer, the proposed closure design must be approved by the Division of Water Resources before the proposed closure design can be approved in the plan for reclamation.
8. Process Ponds and Other Ponds
    a. The RCE should include costs for closure and reclamation of all process, reclaim, storm event, and sediment/settling ponds.
    b. A table which provides a comprehensive inventory of all ponds to be constructed, including pond capacity with freeboard, types of liner(s) material, and whether the pond is to be converted to an evaporation cell for process fluid stabilization activities should be provided as part of the RCE.
    c. Costs for conversion of ponds to evaporation cells should be provided in the Process Fluid Stabilization, Water Treatment and Disposal of Waste section of the RCE. Conversion costs should be based on a conceptual evaporation cell design, illustrating all activities that will be required to construct the evaporation cells.
9. Heap Leach Pads
    a. The costs for reclaiming a heap leach pad should be developed based on a figure that depicts the projected configuration of the leach pad at the end of operations prior to regrading/recontouring. The figure should show where mid-bench lengths measurements were made, and label and quantify the various operational lift heights and lengths constructed during operations. The figure should also show the final footprint of the reclaimed facility.
    b. The RCE should also include costs for cover placement based on the volume of cover required and the origin of the cover.
    c. Costs should also be assigned to reclamation activities that will be required to transition from an operational facility to a closed facility. For example, during operations process flows may be conveyed in open lined trenches and during closure draindown flows may be conveyed in slotted pipes placed in the lined channels and backfilled with coarse drain rock.
10. Waste Rock Storage Facilities
    a. The costs for reclaiming a WRSF should be developed based on a figure that depicts the projected configuration of the facility at the end of operations prior to regrading/recontouring. The figure should show where mid-bench lengths measurements were made, and label and quantify the various operational lift heights and lengths constructed during operations. The figure should also show the final footprint of the reclaimed facility.
    b. If a cover system (ET cover or synthetic liner) is proposed, the RCE should include all associated costs for construction of the cover.
    c. If any water quality issues are anticipated with a WRSF, such as acid drainage that may require specific operational, reclamation, closure and monitoring/mitigation activities, costs need to be included for such.
11. Landfills
    a. The RCE should include costs for all closure and reclamation activities that will be required for the anticipated maximum size of the landfill.
12. Tailings Impoundments
    a. The RCE should include the costs for all projected activities required to reclaim and close the tailing impoundment, including but not limited to:
        - Embankment regrading and/or placing material against the embankment to provide a stable

and productive final reclaimed slope.

- Surface regrading activities required to impede ponding and diversion of storm water from the reclaimed surface of the tailings.
- Breaching the embankment and construction of a spillway, and any other surface drainage controls that may be necessary.
- The costs for the closure cover should reflect growth media depth, volume, origin of material, and haul distance.

13. Yards
    a. The RCE should reflect the reclamation activities that will be required for the proposed yard disturbances, including but not limited to regrading, cover and growth media applications, ripping and scarification, and seeding.
    b. The costs must reflect growth media depth, volume, origin of material, and haul distance.
14. Drainage and Sediment Control
    a. Costs should be included for revegetation and maintenance of operational storm water controls that would be left in place after operations. This would include installation of riprap in erosion-prone areas of ditches and channels.
    b. Permanent structures that will not be constructed to engineered specifications within the first year of operations should have the construction costs included in the reclamation cost estimate until the time the facilities are constructed.

Process Fluid Stabilization, Water Treatment and Disposal of Wastes

15. Heap Leach and Tailings Storage Facilities
    a. Costs should be included for process fluid stabilization of the solution collection system for each heap leach facility and/or tailings storage facility. These costs should include calculations for estimating the time and quantity of solution to be recirculated and evaporated (actively and/or passively). The Heap Leach Draindown Estimator spreadsheet, the Process Fluid Cost Estimator spreadsheet, or other approved calculations may be used. Provide supporting documentation in the form of a technical memorandum or calculations sheet to include, but not limited to, a discussion of the procedures required for fluid stabilization, input parameters, input assumptions, calculations of all inputs, a list of all associated ponds with their sizes and capacities, number of pumps and the pump capacities required for recirculation, and associated figures on 8 ½ by 11 inches or 11 by 17 inches.
    b. Costs should be included for converting existing ponds into evaporation cells (E-cells) or evapo-transpiration cells (ET-cells) or constructing new ones. Provide supporting documentation in the form of a technical memorandum or calculation sheet to include, but not limited to, a discussion to identify ponds proposed for conversion to an E or ET-cell, plans for constructing new cells (if required), if any existing ponds will require sediment/sludge removal, liner replacement, and/or piping modifications, assumptions, calculations, and associated figures on 8 ½ by 11 inches or 11 by 17 inches.
    c. The plan needs to identify which existing ponds will be used for process fluid stabilization, and identify ponds proposed for conversion to evapotranspiration cells. Additionally, the plan needs to identify if new ponds will be required, or if any existing ponds will require sediment/sludge removal, liner replacement and/or piping modifications at the end of operations for use as active, passive and long-term fluid management facilities.
16. Surplus Water Disposal
    a. A comprehensive site water balance needs to be developed that includes all facilities within the project area that retain either process fluids, other water from treatment facilities, stormwater

ponds, and pit water that may require disposal.

17. Monitoring and Miscellaneous
    a. The RCE should include costs for the following process fluid stabilization related activities. The activities may also require bonding under a long-term funding mechanism (LTFM):
        - Evaporation cell replacement or rehabilitation due to mass loading of solids over time.
        - Periodic maintaining of access roads, fencing and gates and other public safety facilities.
        - All other process fluid stabilization and water disposal activities and facilities which are not included elsewhere in the RCE or LTFM.
18. Solid Waste Disposal
    a. The RCE should include costs for proper disposal of all solid waste types that may be required during reclamation and closure activities. If special handling or pretreatment is required prior to disposal, the cost for such should be included.
19. Hazardous Materials Disposal
    a. The RCE should include costs for all activities required for disposal of the maximum volume of hazardous waste that may be present on site. The RCE should include the costs associated with any pre-treatment, transport, and proper disposal of any mercury-bearing waste product or contaminated equipment that would need to be removed from site during reclamation and closure activities.
20. Hydrocarbon Contaminated Soils (HCS)
    a. The RCE should include costs for proper disposal of the maximum volume of HCS that would need to be disposed off-site or would be present in the HCS storage facility at any time.

Structure, Equipment, Facility Removal, and Miscellaneous

21. Foundations and Buildings Areas
    a. The RCE must include all costs for demolition and disposal of buildings and foundations. If foundations are proposed to be buried in-place, assume a minimum 3-foot burial depth for broken foundations and a minimum 5-foot burial depth over unbroken foundations. Provide and reference a figure that locates and identifies all buildings and structures that will require demolition and/or removal after operations.
    b. Include a table and figure that lists and locates all of the facilities requiring demolition will be useful in developing the costs. See example Buildings and Foundations Inventory Table and Figure at the end of this document.
22. Other Demolition
    a. Costs should be included for any other demolition and disposal activities of facilities and/or equipment.
    b. The RCE should reflect any special handling required prior to demolition.
23. Equipment Removal
    a. Costs should be included for any equipment that will require removal from the project area during reclamation activities that has not been addressed elsewhere in the cost estimate.
    b. The RCE should reflect any special handling required prior to removal from the site.
24. Fence Removal and Installation
    a. The RCE should include costs for fencing that will require relocation, installation, and/or removal after operations.
    b. If fencing around process and event ponds will require temporary removal for equipment access

to convert ponds to evaporation cells, costs should be included for fence reinstallation.

25. Culvert Removal
    a. All culverts proposed to be removed during site reclamation activities need to be included in the RCE.
    b. Costs should be included for earthwork and erosion stabilization activities that may be required to reestablish a natural drainage channel in the locations were culverts will be removed.
26. Pipe Removal
    a. The RCE should include costs for all major process fluid and other piping systems that will be removed or cut and capped and left buried in place after operations.
    b. The RCE should also account for installation and burial of any pipelines during reclamation and closure activities to transition the process fluid stabilization facilities to a passive system. No piping systems should remain on the surface during long-term passive fluid management.
    c. Costs should be included for any special handling, such as triple-rinsing prior to removal and disposal.
27. Powerline and Transformer Removal
    a. The RCE should include costs for removal of powerlines and transformer stations. Provide and reference a figure that locates and identifies all power lines and transformer stations that will be present within the project area.
    b. The reclamation plan should discuss which powerlines and transformer stations are proposed to remain within the project area after operations and the responsible party for the facilities after operations.
28. Rip-rap, Rock Lining, and Gabion Installation
    a. Costs should be included for sediment and erosion control measures after operations and reclamation has been completed.
    b. The RCE should reflect the costs required to stabilize facilities from long-term erosion. Facilities to consider include constructed storm water channels, culvert removals in drainages, tailing embankment rock spillways.
29. Other Miscellaneous Costs
    a. This category includes costs that have been calculated for other activities proposed in the reclamation plan. For example, the installation and removal of temporary and/or permanent erosion control structures (or BMPs-best management practices), such as straw bales, silt fencing, erosion mats, willow wattles, etc.

Monitoring

30. Reclamation Monitoring and Maintenance
    a. The RCE should include costs for anticipated site monitoring and periodic maintenance of reclaimed areas that may require additional site work to stabilize areas where erosion may have occurred. The RCE should include cost for reseeding a minimum of the percent (10 %) of the total project disturbance area that will be seeded.
31. Ground and Surface Water Monitoring.
    a. The RCE should include cost to perform at least two inspections per year to monitor post-reclamation and seeded areas for erosion and revegetation success for a minimum of three growing seasons after a facility has been recontoured and seeded.
    b To calculate surface and ground water monitoring costs the Plan should include a table that lists all monitoring points in the Water Pollution Control Permit that will require sampling for a minimum of five years after mining and processing is completed. The table should include and quantify the

type, and number, and frequency of analytical samples that will be required. See example Post-mining Water Monitoring table at the end of this document.

32. Other Mitigation and Monitoring
    a. Any mitigation and monitoring requirements not included elsewhere in the RCE should be accounted for. Some examples of mitigation and monitoring often required by the federal land manager may include the following:
        - Monitoring regional hydrogeologic conditions.
        - Wetland and riparian area mitigation.
        - Biological monitoring and reporting, and habitat maintenance or restoration.

Construction Management and Support

33. Construction Management
    a. More than one construction manager may be required on larger project sites, or if the site reclamation/closure schedule indicates significant process fluid management activities will occur at the same time other significant reclamation activities will be performed. More than one construction manager may also be required if a site has several facilities that are located significant distances from each other, and the reclamation schedule indicates reclamation regrading activities will occur at several facilities at the same time.
    b. Construction management should be included for subsequent activities that will not be completed during the initial reclamation campaign.
34. Construction Support
    a. Costs for facilities such as temporary office space, bathrooms, water and power supplies that will be needed during reclamation and closure activities need to be included.
    b. The costs should also include the security staff required during reclamation and closure activities.
35. Road Maintenance
    a. The RCE needs to include cost for road maintenance during reclamation activities. The equipment productivity rates are based on roads being maintained in good condition. Road maintenance typically will require a grader, a water truck, and an identified water source.
36. Equipment Mobilization and Demobilization
    a. The reclamation cost estimate needs to include mobilization costs for all equipment identified to be on site at the same time, and be consistent with the assumptions and timeframes used to determine construction management costs, and the reclamation schedule. For example, mobilization for multiple fleets may be required if the reclamation schedule indicates a multiple fleets will be working simultaneously on different facilities within the project area.
    b. Cost for multiple equipment mobilization and demobilization events may be required to perform subsequent site activities after the initial reclamation campaign may be finished, such as converting open ponds to evaporation cells, final earthwork and seeding on heap leach pads and tailings impoundments, removing and reclaiming power facilities, roads and monitoring wells.

Note: Tables are a practical and preferred method of providing comprehensive inventories all mine facilities, and quantifying required reclamation activities and material volumes. Tables are also readily adjustable as needed over the life of the operation, and for required periodic reviews of the RCE. Each plan should develop tables as appropriate to the individual project site. For process and event ponds this information may also be used to support the process fluid stabilization and closure activities. Tables should include column headers in a general layout to identify information that is required to develop the RCE. Some table types may include:

- Soil Inventory and Project Requirements.

- Growth Media Stockpile Inventor.
- Access and Haul Road Inventory.
- Production, Dewatering, Infiltration and Monitoring Well Inventory.
- Process and Other Ponds Inventory.
- Buildings, Pads and Other Structures Inventory.
- Post-mining Water Monitoring Requirements.

Example Figures:

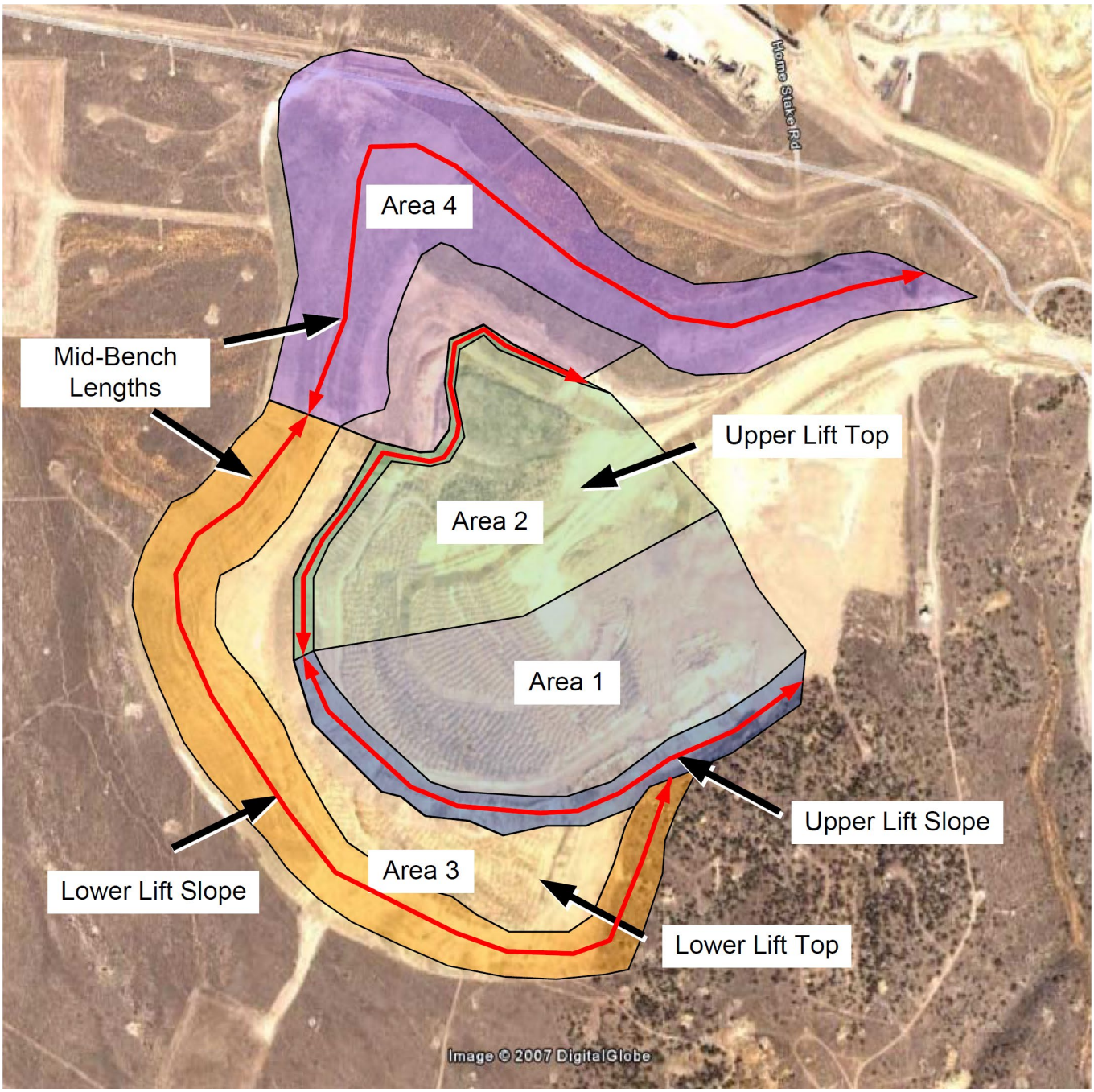
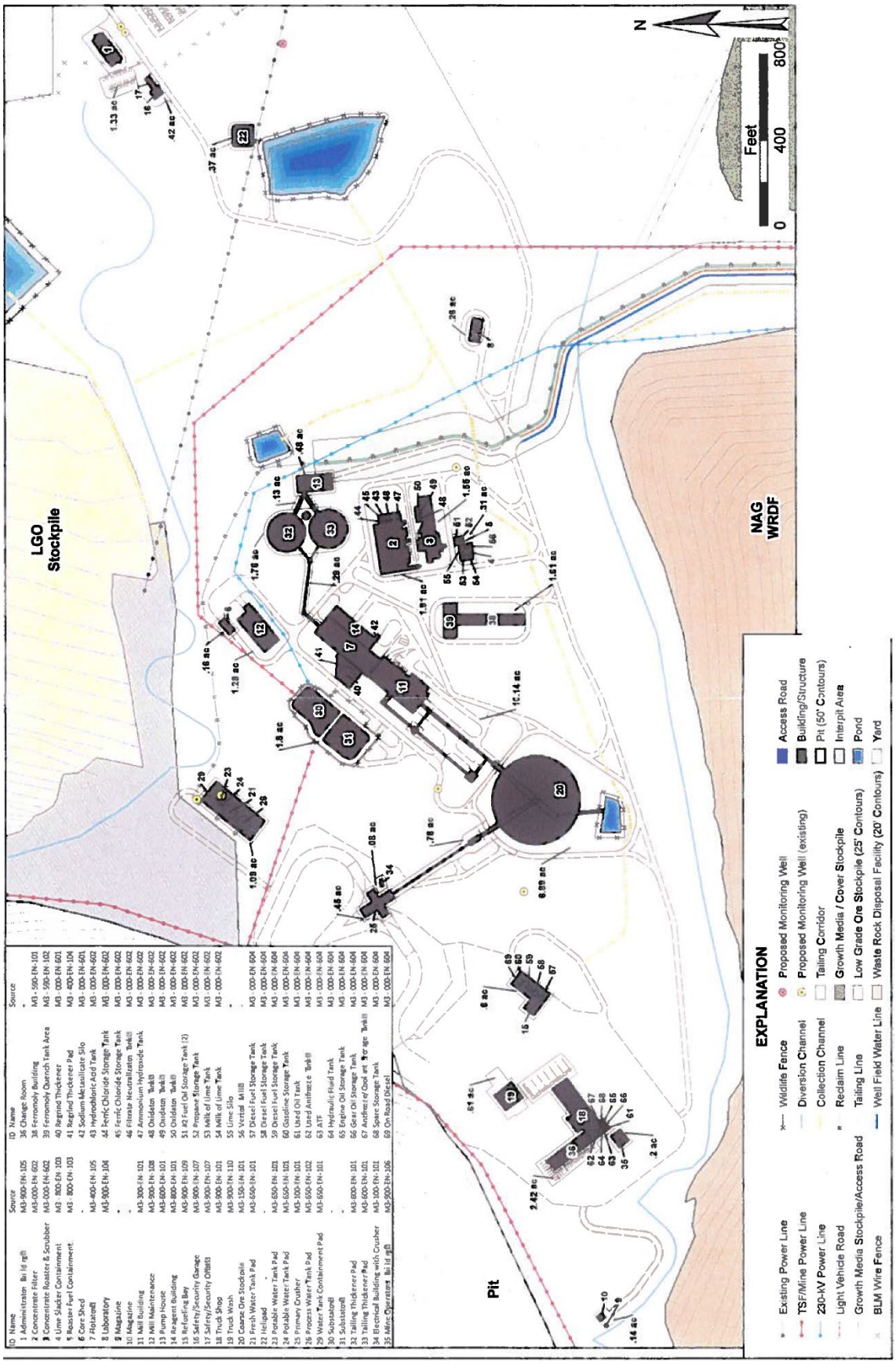


Figure 1: Example of a mine site disturbance map.



ID	Name	Source
1	Administration Building	M3-900-EN-105
2	Concentrate Filter	M3-000-EN-602
3	Concentrate Roaster & Scrubber	M3-000-EN-602
4	Lime Slacker Containment	M3 - 800-EN-103
5	Roaster Fuel Containment	M3 - 800-EN-103
6	Core Shed	-
7	Flotation	M3-400-EN-105
8	Laboratory	M3-900-EN-104
9	Magazine	-
10	Magazine	-
11	Mill Building	M3-300-EN-101
12	Mill Maintenance	M3-900-EN-108
13	Pump House	M3-600-EN-101
14	Reagent Building	M3-800-EN-101
15	Refueling Bay	M3-900-EN-109
16	Safety/Security Garage	M3-900-EN-107
17	Safety/Security Offices	M3-900-EN-107
18	Truck Shop	M3-900-EN-101
19	Truck Wash	M3-900-EN-110
20	Coarse Ore Stockpile	M3-150-EN-101
21	Fresh Water Tank Pad	M3-650-EN-101
22	Helipad	-
23	Potable Water Tank Pad	M3-650-EN-101
24	Potable Water Tank Pad	M3-650-EN-101
25	Primary Crusher	M3-100-EN-101
26	Process Water Tank Pad	M3-650-EN-102
29	Water Tank Containment Pad	M3-650-EN-101
30	Substation	-
31	Substation	-
32	Tailing Thickener Pad	M3-800-EN-101
33	Tailing Thickener Pad	M3-600-EN-101
34	Electrical Building with Crusher	M3-100-EN-101
35	Mine Operations Building	M3-900-EN-106
36	Change Room	M3 - 590-EN-101
38	Ferromoly Building	M3 - 590-EN-102
39	Ferromoly Quench Tank Area	M3 - 000-EN-601
40	Reagent Thickener	M3 - 400-EN-104
41	Reagent Thickener Pad	M3 - 000-EN-601
42	Sodium Metasilicate Silo	M3 - 000-EN-602
43	Hydrochloric Acid Tank	M3 - 000-EN-602
44	Ferric Chloride Storage Tank	M3 - 000-EN-602
45	Ferric Chloride Storage Tank	M3 - 000-EN-602
46	Filtrate Neutralization Tank	M3 - 000-EN-602
47	Ammonium Hydroxide Tank	M3 - 000-EN-602
48	Oxidation Tank	M3 - 000-EN-602
49	Oxidation Tank	M3 - 000-EN-602
50	Oxidation Tank	M3 - 000-EN-602
51	#2 Fuel Oil Storage Tank (2)	M3 - 000-EN-602
52	Propane Storage Tank	M3 - 000-EN-602
53	Milk of Lime Tank	M3 - 000-EN-602
54	Milk of Lime Tank	M3 - 000-EN-602
55	Lime Silo	-
56	Vertical Mill	M3 - 000-EN-604
57	Diesel Fuel Storage Tank	M3 - 000-EN-604
58	Diesel Fuel Storage Tank	M3 - 000-EN-604
59	Diesel Fuel Storage Tank	M3 - 000-EN-604
60	Gasoline Storage Tank	M3 - 000-EN-604
61	Used Oil Tank	M3 - 000-EN-604
62	Used Antifreeze Tank	M3 - 000-EN-604
63	ATF	M3 - 000-EN-604
64	Hydraulic Fluid Tank	M3 - 000-EN-604
65	Engine Oil Storage Tank	M3 - 000-EN-604
66	Gear Oil Storage Tank	M3 - 000-EN-604
67	Antifreeze/Coolant Storage Tank	M3 - 000-EN-604
68	Spare Storage Tank	M3 - 000-EN-604
69	On Road Diesel	M3 - 000-EN-604

Figure 2: Example of a mine site facility map.

Attachment 1

Contractor and Operator Certification of Mining Operation Reclamation Cost Estimate for Federal and Private/State Lands

I (contractor)_____

of (company)_____

hereby certify under penalty of 18 USC 1001, that I am a Licensed Nevada Contractor, number

_____

I certify that I am licensed by the State of Nevada to provide bids and estimates for the type and scope of mine reclamation work to be performed as outlined in my estimate. My submitted reclamation cost estimate and hourly rates are based on **Davis-Bacon (federal land) or Nevada Labor Commission (private land)** labor rates and include Federal Insurance Contributions Act (FICA), Medicare, State Workers Compensation Insurance, State Unemployment Insurance, Federal Unemployment Tax (FUTA), Liability Insurance, Bond Premium Costs (if applicable) and my overhead and profit.

Signed:_____ Title: _____

Date:_____

I (mine operator)_____

of (company) _____

hereby certify under penalty of 18 USC 1001, that I have reviewed, or caused to have reviewed, the above contractor's reclamation cost estimate for my project and I concur with the material facts and statements contained therein.

Signed:_____ Title: _____

Date:_____

NOTE: Title 18 USC § 1001 provides that:

"Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up any by any trick, scheme, or devise a material fact, or makes any false, fictitious, or fraudulent statements or representations, or makes or uses any false writing or documents knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than five years, or both."