4.0 MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

MMRPs are required by the CEQA Section 21081.6 to be adopted by CEQA Lead Agencies for projects having the potential to cause significant environmental impacts. The MMRP describes changes to the project or conditions of project approval that mitigate or avoid the project's potential significant effects on the environment. This MMRP addresses the Boca Quarry Expansion Project (project) proposed by Teichert Aggregates, Inc. and being carried forward for consideration by the County of Nevada (County). A brief description of the proposed project is provided below. The proposed project is located within the County, and the County is the Lead Agency under CEQA and has discretionary authority over the proposed project.

PROJECT DESCRIPTION SUMMARY

The Boca Quarry is an existing quarry on an approximately 230-acre site that recently operated in eastern Nevada County under a Conditional Use Permit and Reclamation Plan, approved in 1983 and modified in 2007, which allows mining in a 40-acre area on Assessor's Parcel Number 48-090-12. The quarry has been idle since the 2008 operating year based on reduced aggregate demand. The applicant proposes to expand the existing operation to increase the existing 40-acre extraction area by approximately 118 acres for a total extraction area of approximately 158 acres. The proposed expanded area would be west of the currently permitted extraction area (East Pit) and would be referred to as the West Pit. The West Pit would be primarily a sidehill quarry operation and would involve excavation of the West Pit quarry floor to a depth of between 40 and 60 feet below the rim formed by the surrounding land surface. The maximum depth of mining below existing topography would be 200 feet. Mining for the proposed project would occur in three phases, beginning with the Phase I East Pit (which is nearly complete). The second and third phases would involve mining of the West Pit. During Phase II, the lower (southern) portion of the West Pit would be mined to its maximum width and depth. The upper ridge of the West Pit would then be mined (Phase III), and the overburden from the ridge would be moved to the lower area to be used as backfill in the lower pit, facilitating partially concurrent reclamation of the lowest (Phase II) bench.

The project application includes a request for an Amended Use Permit (U11-008) as well as a Reclamation Plan (RP11-001; 2011 Reclamation Plan) to correspond with the proposed mine expansion and importation of clean fill material for pit backfilling. The proposed expansion would continue to use the West Hinton Road haul route to Stampede Meadows Road for all of its aggregate transport and operating equipment access. As part of the proposed project, an approximately 1.3-mile long segment of Stampede Meadows Road from West Hinton Road to Interstate 80 (I-80) would be improved to address public concerns regarding bicyclist safety through the area, and to address existing sight-distance deficiencies at the intersection of Stampede Meadows Road with West Hinton Road. The roadway segment is referred to as the off-site roadway improvement area.

MMRP FORMAT AND IMPLEMENTATION

Mitigation measures that would reduce or eliminate potential environmental impacts of the proposed project are identified in the Recirculated Draft Boca Quarry Expansion Project EIR. These mitigation

measures will become conditions of project approval if the expansion project is approved. The County is required to verify that all adopted mitigation measures are implemented properly and to ensure compliance, this MMRP (including the checklist) has been formulated. The MMRP shall be adopted, along with CEQA Findings, by the County (Lead Agency) and must be administered by County personnel from the Planning and Public Works departments. Specific responsibilities are delineated for each measure in the attached checklist table and these responsibilities may be delegated to qualified County staff or consultants. This service is provided on a full-cost recovery basis by the County.

The checklist, which follows, is intended to be used by the applicant, grading/construction contractors, and personnel from the above-listed County Departments, as the appointed mitigation implementation and monitoring entities. Information contained within the checklist clearly identifies each mitigation measure, defines the conditions required to verify compliance and delineates the monitoring schedule. Following is an explanation of the three columns that constitute each MMRP checklist.

Column 1 — *Mitigation Measure*: An inventory of each mitigation measure is provided, with a brief description.

Column 2 — *Monitor*: Identifies the senior staff person at the County and/or applicable agencies who are responsible for determining compliance with each mitigation measure and informing the Planning Department regarding compliance. This individual may assign specific monitoring tasks to County staff or consulting specialists (e.g., biological monitor, paleontological monitor).

Column 3 — *Schedule*: As scheduling is dependent upon the progression of the overall project, specific dates are not used within the "Schedule" column. Instead, scheduling describes a logical succession of events (e.g., prior to reclamation annually, etc.) and, if necessary, delineates a follow-up program.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST

Mitigation Measure	Monitor	Schedule
GEOLOGY AND SOILS		
GEO–1. The final design of manufactured slopes in the proposed West Pit shall incorporate all available geologic/geotechnical data, with slope heights/grades and other applicable project features to reflect these data and include any applicable deviations from the recommendations provided in the August 2010 project Stability Evaluation.	County Planner; Public Works Engineer	Plans to be approved as part of the on-going reclamation plan process.
GEO–2. Manufactured slopes in the West Pit shall be regularly inspected by a qualified geotechnical engineer during mining operations, and slope performance and geological conditions shall be documented and submitted to the County as required. This information shall be used to review and, as appropriate, revise the geological and geotechnical models and slope design recommendations provided in the Stability Evaluation of the West Pit (Golder 2010a). These inspections and slope design reviews shall be performed by a qualified geotechnical engineer as follows: (1) annually at a minimum; (2) at any time mining operations encounter conditions that vary significantly from the geological and geotechnical models documented in the Stability Evaluation of the West Pit (Golder 2010a); and (3) at any time that slopes developed according to the project design based on the recommendations of the Stability Evaluation of the West Pit (Golder 2010a) show indications of significant instability. This observational and review approach, supported by strength testing of representative materials, shall be used to update or provide more appropriate FOS calculations for slopes prior to pit closure, with any and all associated modifications from recommendations contained in the Stability Evaluation of the West Pit (Golder 2010a) to be incorporated into the design and operation of mining activities at the West Pit. Specifically, such modifications would typically include standard geotechnical measures such as updating/revising individual slope heights/grades to reflect observed/tested conditions and ensure an acceptable FOS, as determined by a qualified geotechnical consultant. Specific elements of the inspection process shall include, but not be limited to, the following: (1) if, during excavation, a basalt boulders, cobbles, and rubble unit is discovered to be more than 60 feet thick, a qualified engineer shall sample and conduct laboratory testing of the material to confirm the project design based on the assumptions and recommendations in the Stability Evaluation of the West Pit (Golder 2010a), or to provide updated recommendations, including slope design as noted; (2) any highly weathered or fresh tuff and ash layer that is more than 15 feet thick shall be sampled and tested to confirm the project design based on the assumptions and recommendations in the Stability Evaluation of the West Pit (Golder 2010a), or to provide updated recommendations, including slope design as noted; and (3) if any major geological structures (i.e., faults, joints, etc.) are identified in the vicinity of the proposed new pit walls, they shall be evaluated by a qualified geotechnical engineer, and associated	Qualified Geotechnical Engineer provided by Project Operator; County Planner; Public Works Engineer	(1) Annually at a minimum; (2) at any time mining operations encounter conditions that vary significantly from the geological and geotechnical models documented in the August 2010 project Stability Evaluation; and (3) at any time that slopes developed according to the recommendations of the August 2010 project Stability Evaluation show indications of significant instability

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
GEOLOGY AND SOILS (cont.)		
recommendations shall be incorporated into the project design and operational specifications (potentially including efforts such as revising manufactured slope grades/dimensions, and/or modifying proposed excavation to avoid problematic areas).		
HYDROLOGY AND WATER QUALITY		
HYD-1. In accordance with the Surface Mining and Reclamation Act, the applicant shall adhere to all erosion and sediment control measures as identified in the Storm Water Management Plan (SWMP; Golder 2010b) and 2011 Reclamation Plan (ESRS 2011) for the project. Any revisions to the storm water management design for the project after project approval shall be prepared by a qualified registered engineer and shall be provided to the County for review and approval. The revised storm water management system shall be designed to prevent discharge of storm water from the project site. As required, the applicant shall update the SWMP based on the revised design or if required, shall file a Notice of Intent to comply with the Industrial General Permit from the Regional Water Quality Control Board (RWQCB). The applicant shall provide the County Planning Department with an updated SWMP every seven years which will also be tracked through the annual review of the Development Agreement.	Project Monitor/Operator; Qualified Engineer; County Planner; RWQCB	Prior to commencement of Phase II operations, updated SWMP submitted to County every seven years and as needed for the duration of the life of the mine when the quarry is in operation.
HYD-2. The project applicant and/or operator shall monitor precipitation levels at the project site and flows at Dobbas Spring on a monthly and annual basis. The results of this monitoring shall be documented and submitted to the County on an annual basis, along with a summary description of the resultant water balance (i.e., spring flow versus project-related use). If the noted monitoring data indicate that current or projected future project-related water demand equals or exceeds the flow at Dobbas Spring, the project applicant/operator shall adjust quarry production and/or water supply source(s) accordingly. Specifically, this could include an appropriate reduction of quarry production (with a corresponding reduction in water use), and/or the procurement of alternate water supplies, such that water use from Dobbas Spring does not exceed available supply.	Project Monitor/Operator; County Planner	Monthly monitoring submitted to the County annually for the duration of the life of the mine.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
HYDROLOGY AND WATER QUALITY (cont.)		
HYD-3. The following avoidance and minimization measures shall be implemented for the duration of operation of the project to avoid impacts to groundwater resources in the project site: • All imported fill material proposed for use as backfill at the project site shall be "clean" and free from contaminants that are potentially deleterious to surface or groundwater, public health, and the environment in general. The site operator shall visually inspect all imported fill loads for debris and foreign material and shall maintain a written log of all imported fill loads. Because the imported fill shall come from a known, clean source, a chemical • inspection would not be required. The inspection log shall include the name, source, address, phone number and vehicle license plate number associated with each fill load, with this information to be submitted to the County for review and verification on a monthly basis. • All project-related vehicles and equipment shall be regularly inspected and maintained (per manufacturer's specifications) to ensure proper operation and minimize the potential for accidental spills and leaks of associated pollutants. • The project impact footprint shall be inspected by the site operator on a daily basis to identify and (as necessary) maintained to identify/remove potential pollutant sources such as trash/debris, spills of vehicle/equipment-related pollutants, and other potential contaminants. • Storage of potential pollutants (such as fuels and lubricants), as well as maintenance of vehicles/equipment, shall not occur within the project site to reduce to potential for discharge of associated contaminants. • Appropriate containment and disposal shall be provided for project-generated solid waste (e.g., operational and office trash/debris), through efforts such as use of appropriate storage/containment facilities (e.g., enclosed dumpsters with lids, secondary containment fencing, and an impermeable base), and contracting for regular pickup and disposal of solid waste at an approved off-site facility.	Project Monitor/Operator; County Planner	Throughout project operations when quarry is open, for the duration of the life of the mine. Shall be submitted monthly.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
HYDROLOGY AND WATER QUALITY (cont.)		
• Training shall be provided at appropriate regular intervals to employees responsible for activities related to installation, operation and/or maintenance of project equipment/vehicles, mining activities, storm drain systems, and erosion/ sedimentation facilities and operations. This training shall also include spill response procedures to ensure that staff are capable of appropriately addressing issues and conditions related to pollutant discharge. • Detailed records shall be kept on-site for efforts including inspections, maintenance activities, corrective actions, material deliveries and inventories, testing/sampling results, and spills and responses.		
BIOLOGICAL RESOURCES		
BIO-1. The removal of trees, vegetation, and soil salvage from the Boca Quarry project site or off-site roadway improvement area shall be limited to only those necessary to conduct the approved activity. Tree and shrub removal or trimming and soil salvage shall occur outside of the nesting season (between August 16 and January 14). Due to challenges with conducting surveys of tall trees, it is particularly important to time removal of trees with diameter at breast height exceeding 24 inches to be removed outside of the nesting season. • If removal of trees or shrubs in the project site will occur during the nesting season (typically January 15 to August 15, or as determined appropriate on a case-by-case basis by a qualified biologist based on the habitat being removed), or if construction of the off-site roadway improvement area is expected to be initiated during the nesting season, surveys for nesting birds shall be conducted by a qualified biologist prior to removal of potentially suitable nesting habitat. The surveys shall cover the proposed work area (off-site roadway improvement area), or area of tree removal within the ultimate disturbed area and areas within 300 feet. The nesting surveys shall take place at the time birds are most active, typically between dawn and 11 a.m. The surveys may not occur more than 7 days prior to the activities. If no nesting activity is observed during the surveys or within 300 feet of the tree or vegetation to be removed or trimmed or soil to be salvaged, then no further mitigation is necessary.	Qualified Biologist; County Planner	Prior to construction of the off-site roadway improvements. Prior to commencement of each phase of site preparation for Phase II and Phase III operations. If feasible, removal of trees or shrubs will occur outside of the nesting season, between August 16 and January 14.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
BIOLOGICAL RESOURCES (cont.)		
• If nesting raptors or other nesting migratory birds are identified during the surveys, then a 100-foot buffer shall be established for nesting passerines, and a 300 to 1,000-foot buffer shall be established for nesting raptors at the discretion of the qualified biologist. Temporary exclusionary fencing with signs describing the sensitivity of the area shall be installed to establish the no-disturbance buffer around the nest. o No trees or vegetation shall be removed or trimmed and no other earth-moving activity shall occur within the established buffer until it is determined by a qualified biologist that the young have fledged (that is, left the nest) and have attained sufficient mobility to avoid project construction/mining zones. o The size of the non-disturbance buffer may be altered if a qualified biologist conducts behavioral observations and determines the nesting raptors or other migratory birds are well acclimated to the disturbance. If this occurs, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to nesting birds. If the buffer is reduced, the qualified biologist shall remain on site to monitor the birds' behavior during heavy construction. The biologist shall have the authority to stop work if it is determined the project is adversely affecting nesting activities.		
BIO-2. Ground disturbing activities and placement of fill in the Boca Quarry project site have been designed to avoid all identified aquatic habitats in the project site. No impacts to aquatic habitats shall occur without first obtaining the appropriate permits and approvals from the appropriate agency (U.S. Army Corps of Engineers [USACE], RWQCB, and/or California Department of Fish and Wildlife [CDFW]). The roadway improvements in the off-site roadway improvement area should be designed to avoid all aquatic habitats identified in Figure 4.3-1b of the EIR for the project by a minimum of 30 feet (Truckee River, Lemmon's Willow Thicket, Wet Meadow, in the off-site roadway improvement area). The mapping of these habitats shall be included in the roadway design plans with the distances from the edge of habitat to the cut/fill line shown. If the project design is unable to avoid those habitats, then the applicant shall prepare a formal wetland delineation including, at a minimum, the areas where improvements would be constructed within 30 feet of the mapped aquatic habitats. In the event that wetlands that fall under the jurisdiction of the USACE or the Lahontan RWQCB are found where excavation, fill, or vegetation removal would be	Qualified Biologist; County Planner; USACE, RWQCB, CDFW	Prior to issuance of grading permits for the off-site roadway improvement area.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
BIOLOGICAL RESOURCES (cont.)		
required for the improvements, the applicant shall modify the improvement designs so as to minimize or eliminate direct impact. If the design of the improvements cannot be revised so as to avoid all direct impact on wetlands, the applicant shall obtain applicable authorizations and water quality certification and implement compensatory or other mitigation actions that are required by the approvals. At a minimum, the mitigation actions shall ensure that there is no net loss of wetland acreage or values. Prior to issuance of the grading permit for the roadway improvements, the applicant shall demonstrate to the County that: (1) all aquatic habitats are being sufficiently avoided, as described above; or (2) the appropriate permits and approvals have been obtained to impact waters of the U.S. and State and CDFW jurisdictional areas, if present, and any necessary compensatory mitigation has been secured.		
BIO-3. Mitigation measures HYD-1 and HYD-3 shall be implemented to reduce potentially significant impacts on biological resources from reduced water quality to a level of less than significant.	Project Monitor/Operator; County Planner	Applies for the duration of operation of the mine.
BIO–4. During and following all mining and reclamation activities, all exterior lighting adjacent to undisturbed habitat shall be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from undisturbed habitat to the maximum extent practicable. All exterior lighting shall be manual on/off and shall be turned on only for the duration of allowable, occasional night time operations. No exterior lighting shall be allowed while the site is not in use.	Project Monitor/Operator; County Planner	Applies for the duration of operation of the mine.
BIO–5. Mitigation Measure AQ-3 shall be implemented to reduce the effects of dust on surrounding vegetation to less than significant levels.	Project Monitor/Operator; County Planner; NSAQMD	Applies for the duration of operation of the mine.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
AESTHETICS		
AES–1. Potential impacts to visual resources shall be offset by spraying "Rock Varnish" (aka desert varnish) such as Nantina or PERMEON or other functional equivalent on exposed upper cut face slopes immediately following the completion of each phase of mining, to blend visually with undisturbed rock face and talus following mining operations. The PERMEON (desert varnish) or approved equal, shall be mixed with water in a 5:1 solution (i.e.: 20 gallons of PERMEON to 100 gallons of water). A compressor shall be used to pressurize the spray to approximately 200 psi for application with an agricultural-type hand-held nozzle sprayer. The desert varnish color can range from almost black to a light tan, depending on the concentration of PERMEON and the number of coats to be made. The solution shall be sprayed on until saturation. When first applied, the PERMEON mixture would not have a tint, and the exposed rock initially returns to its original color as it dries. The desired coloration process is activated by exposure to ultraviolet light from sunshine.	Project Monitor/Operator; County Planner	Immediately following the completion of each phase of mining.
TRAFFIC AND CIRCULATION		
TRANS–1. Prior to the County issuing an encroachment permit for the off-site roadway improvements, the Contractor shall prepare and submit to the County for approval a traffic control plan consistent with County requirements regarding traffic control during construction of the off-site roadway improvements. In all instances, traffic flow through the off-site roadway improvement area shall be maintained for the duration of construction.	Construction Contractor; County Planner; Public Works Engineer	Prior to issuance of the grading permit for the off-site roadway improvement area. For implementation during construction of the off-site roadway improvement area.
TRANS-2. The applicant shall maintain the Road Use Permit with the U.S. Forest Service (USFS) for use of West Hinton Road through USFS lands for the duration of operation of the quarry. The applicant shall submit documentation to the County prior to operation of the West Pit and annually thereafter (or for another duration, based on the duration of the issued Road Use Permit) which demonstrates the permit is valid.	Project Monitor/Operator; County Planner; Public Works Engineer	For the duration of the life of the mine. Shall be submitted annually.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
TRAFFIC AND CIRCULATION (cont.)		
TRANS-3. The authorized haul route for operation of the quarry is along Stampede Meadows Road and West Hinton Road between the I-80/Hirschdale Road interchange and the quarry. The applicant shall not alter the haul route without prior authorization from the County. No haul trucks shall be permitted to enter or leave the quarry from the southern entrance of the project site, through the Community of Hirschdale. To prevent haul truck traffic from inadvertently attempting to use the southern entrance or otherwise traveling into residential communities south of I-80, temporary signs shall be installed at the I-80/Hirschdale Road interchange off-ramp which shall depict the authorized haul route to the quarry. The applicant shall maintain the signs for the duration of operation of the mine.	Project Monitor/Operator; County Planner; County Director or Public Works Engineer	Throughout project operations when quarry is open, for the duration of the life of the mine.
TRANS-4. Prior to issuance of an encroachment permit for the off-site roadway improvements, the proposed signage, roadway widening, and sight distance improvements shall be reviewed and approved by the Nevada County Department of Public Works. As a condition of approval, the applicant shall be required to construct the proposed off-site roadway improvements along Stampede Meadows Road between the I-80/Hirschdale Road interchange and West Hinton Road prior to implementation of operations in the West Pit. The off-site roadway improvements including the intersection improvements at Stampede Meadows Road and West Hinton Road, and the proposed roadway widening shall be complete and operational prior to the addition of traffic associated with operations in the West Pit. The applicant shall not implement operations in the West Pit prior to receiving County approval that the off-site roadway improvements are complete.	Project Applicant; County Planner; Public Works Engineer	Prior to issuance of a construction permit for off-site roadway improvements. Prior to commencement of Phase II operations.
TRANS-5. The final design for the roadway widening along Stampede Meadows Road shall include a smooth pavement transition where West Hinton Road meets Stampede Meadows Road. The transition shall be achieved by paving the approach to the paved road (Stampede Meadows Road) from the unpaved Road (West Hinton Road). The distance of the paved approach and the transition at the intersection shall be designed in accordance with County standards. The design shall be incorporated into the roadway widening plans and shall be reviewed and approved by the Nevada County Department of Public Works prior to issuance of an encroachment permit.	Project Applicant; County Planner; Public Works Engineer	Prior to issuance of a construction permit for off-site roadway improvements.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
NOISE		
NOI-1. Future residential development proposed at any nearby parcels shall not be exposed to operational noise levels exceeding 55 dBA L_{EQ} (or 65 dBA L_{MAX}) during daytime hours, or 50 dBA L_{EQ} (or 65 dBA L_{MAX}) during evening hours, or 50 dBA L_{EQ} (or 60 L_{MAX}) during nighttime hours. Residential development within 1,250 feet of the ultimate disturbed area may be exposed to elevated noise levels. If a residence is proposed within this setback, an acoustical analysis shall be provided paid for by the applicant or the current operator of the facility. The noise analysis shall be conducted by a qualified acoustical engineer to demonstrate that any future residences satisfies the exterior and interior noise standards established by Nevada County. The analysis shall include an ambient noise survey to quantify baseline conditions at a future residence which shall then be used to develop offsets to the Nevada County noise standards, as appropriate. Updated setback distances shall be established accounting for topography and equipment used at that time. The acoustical analysis shall identify additional noise control measures to be incorporated into the project operations at that time. Such measures could include the use of equipment noise shielding, sound berms or barriers, or other feasible measures. If excavation activity is not shown to be reduced to appropriate levels following mitigation, excavation activity within the determined setback distances shall not occur.	Project Monitor/Operator; County Planner; Qualified Acoustical Engineer	This measure applies if noise sensitive land uses are developed at Receptor 14 during the life of the mine. Upon commencement of nighttime quarry operations; ongoing throughout nighttime project operations until Planning Department confirms monitoring is no longer required.
NOI-2. Future residential development proposed at any nearby parcels shall not be exposed to heavy traffic noise levels exceeding 55 dBA L_{EQ} during daytime hours, or 50 dBA L_{EQ} during evening or nighttime hours. Future residences shall not be exposed to noise levels exceeding 65 dBA L_{MAX} during daytime hours, 65 dBA L_{MAX} during evening hours, or 60 dBA L_{MAX} during nighttime hours. Future residential development proposed within 300 feet of the haul route may be exposed to elevated noise levels. If a residence is proposed within these setbacks, an acoustical analysis shall be provided and paid for by the applicant or the current operator of the project. The noise analysis shall be conducted by a qualified acoustical engineer to demonstrate that any future residences satisfies the exterior and interior noise standards established by Nevada County. The analysis shall include an ambient noise survey to quantify baseline conditions at a future residence which shall then be used to develop offsets to the Nevada County noise standards, as appropriate. In addition, heavy truck passby noise level measurements shall be conducted from the locations of the proposed residences to determine if haul truck noise levels would exceed the	Project Monitor/Operator; County Planner; Qualified Acoustical Engineer	This measure applies if noise sensitive land uses are developed at Receptors 12, 13, and/or 14 during the life of the mine. Upon commencement of quarry operations; ongoing throughout project operations.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
NOISE (cont.)		
adjusted noise level standards. The acoustical analysis shall identify additional noise control measures to be incorporated into the project operations at that time. Such measures could include the use of sound berms or barriers, relocation of the haul road to create additional setbacks from the proposed residences, or other feasible measures.		
NOI-3. Noise levels from operation of the mine shall not exceed the adjusted evening and nighttime County noise standard of 48 dBA Leq at Receptor 7. Mining activities other than the occasional haul out shall be prohibited between the hours of 9 p.m. and 6 a.m. Operational activities (e.g., excavation and processing) associated with the West Pit shall be limited to between the hours of 7 a.m. and 7 p.m. unless operational noise monitoring demonstrates that nighttime quarry operation does not exceed the adjusted evening and nighttime County noise standard at Receptor 7 (see Mitigation Measure NOI-2).	Project Monitor/Operator; County Planner; Qualified Acoustical Engineer	Upon commencement of quarry operations; ongoing throughout nighttime project operations.
NOI-4. Once the West Pit is operational, additional noise monitoring may be performed at Receptor 7 at the operator's expense. If this monitoring can confirm, to the satisfaction of the Nevada County Planning Department, that operational noise levels do not exceed the evening and nighttime noise standard of 48 dBA Leq at Receptor 7, then the County may extend the operating timeframe (including excavation and processing) to between 6 a.m. and 9 p.m. If the intervening topography and vegetation effectively reduce the operational noise limits to at or below the nighttime 40 dBA L_{EQ} standard, then this mitigation measure shall replace Mitigation Measure NOI-1. If applicable, any operations that extend between 10 p.m. and 7 a.m. shall be limited to truck loading and unloading only. Adherence to this mitigation measure will reduce the project's nighttime noise impacts to less than significant.	Project Monitor/Operator; County Planner; Qualified Acoustical Engineer	Upon commencement of quarry operations; ongoing throughout nighttime project operations until Planning Department confirms monitoring is no longer required.
NOI-5. The hours of operation for off-site roadway improvement construction activities, including grading, roadway construction and vegetation clearance, shall be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday. Grading and improvement plans shall reflect the limited hours of operation.	Construction Contractor; County Planner	Prior to issuance of a construction permit for off-site roadway improvements. For the duration of construction of the off-site roadway improvement area.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
AIR QUALITY		
AQ-1. Prior to any open burning of vegetation, the Project Applicant shall obtain a burn permit in accordance with the NSAQMD Regulation III, Open Burning. All applicable requirements established for obtainment of a burn permit, notification of the air district or other entities, and execution of burning authorized by the permit shall be followed in accordance with NSAQMD Rules: • 308 – Land Development Clearing • Rule 312 – Burning Permits • Rule 313 – Burn Day • Rule 314 – Minimum Drying Times • Rule 315 – Burning Management Requirements • Rule 316 – Burn Plan Preparation	Project Monitor/Operator; County Planner; NSAQMD	Prior to open burning. Applies for the duration of the life of the mine.
AQ–2. Diesel control measures including, but not limited to the following, shall be incorporated by the applicant into contract specifications for all on- and off-road equipment: • To minimize potential diesel emission impacts on nearby receptors (pursuant to NSAQMD Regulation 2, Rule 205, Nuisance), heavy duty diesel equipment shall be properly tuned. A schedule of tune-ups shall be developed and performed for all equipment operating within the project area, particularly for haul and delivery trucks. A log of required tune-ups shall be maintained and a copy of the log shall be submitted to County for review every 2,000 service hours. • To minimize diesel emission impacts, contracts shall require off-road compression ignition equipment operators to reduce unnecessary idling with a two-minute time limit. • On-road and off-road material hauling vehicles shall shut off engines while queuing for loading and unloading for time periods longer that two minutes. • Off-road diesel equipment shall be fitted with verified diesel emission control systems (e.g., diesel oxidation catalysts) to the extent reasonably and economically feasible. • Off-road diesel equipment shall utilize alternative fuel equipment (i.e., compressed or liquefied natural gas, biodiesel, electric) to the extent reasonably and economically feasible.	Project Monitor/Operator; County Planner; NSAQMD	Verification of contract language to be approved prior to commencement of Phase II operations. Prior to commencement of Phase II operations; applies for the duration of the life of the mine.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
AIR QUALITY (cont.)		
AQ–3. The applicant shall comply with NSAQMD Rule 226, which requires implementation of feasible dust control measures which may include, but are not limited to the following: • Ensure no visible dust emissions occurs beyond the property line; • Ensure no dust emissions exceeding 20 percent opacity occur anywhere on the property; • Ensure no offsite increase in ambient PM_{10} concentrations greater than 50 $\mu g/m^3$ occur; • Ensure no track-out exceeding 25 feet from the property occurs; • Employ a dust control supervisor who has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance; • Water to maintain soil moisture at 12 percent on haul roads and other active unpaved surfaces that are not chemically stabilized; • Water to prevent visible dust more than 100 feet from any earth moving or mining activity; • Utilize watering, dust suppressants, larger aggregate cover, and revegetation in inactive, disturbed areas to prevent wind driven dust; • Water unpaved roads daily, and limit the speed on unpaved roads to 15 mph; • Utilize chemical stabilization, watering covering, and enclosure of storage piles; • Conduct sweeping of paved roads at the end of each workday shift, utilizing certified sweepers; • Conduct prompt cleanup of any spilled material and stabilization of any spilled material storage piles at a minimum frequency of daily at the end of each work day; • Utilize dust suppressants or other dust control methods on conveyors, loading, unloading, or transferring activities; • Utilize baghouse emission controls on screening and crushing activities or other dust control measures to meet the visible emission limits; • Conduct chemical stabilization of unpaved haul roads; • Cover or otherwise stabilize aggregate loads (i.e., loads to remain 6 inches from the upper edge of the container area) to avoid dust emissions from product transport trucks in compliance with California Vehicle Code No. 23114; and	Project Monitor/Operator; County Planner; NSAQMD	Applies for the duration of the life of the mine.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
AIR QUALITY (cont.)		
• Utilize wheel washers, rumble grate, and paving of internal roads or use of dust palliatives on roads to eliminate track out. • Suspend excavation and grading activity when sustained winds make reasonable dust control difficult to implement, e.g., for winds over 25 miles per hour. • Limit the area subject to blasting, mining, and other operational activity at any one time, as feasible.		
AQ-4. Prior to issuance of the encroachment permit for the off-site roadway improvements and prior to commencing operations in the West Pit, the work area shall be evaluated by a qualified individual to determine the presence/absence of asbestos containing materials. The results of the analyses shall be provided to the Nevada County Department of Environmental Health (NCDEH), Certified Unified Program Agency (CUPA). If naturally occurring asbestos is found at the project site, the Project Applicant shall prepare an Asbestos Health and Safety Program and an Asbestos Dust Control Plan for approval by CUPA. The Asbestos Health and Safety Program and Asbestos Dust Control Plan may include, but is not limited to, the following: • Equipment operator safety requirements: protective clothing, breathing apparatuses to prevent inhalation of airborne asbestos fibers, • Dust mitigation measures: continually water site to prevent airborne dust migration, cover all vehicle that haul materials from the site, • Identification of CUPA-approved disposal areas for all excavated materials.	Project Applicant; Qualified Asbestos Inspector; CUPA	Prior to issuance of encroachment permit for the off-site roadway improvement area. Prior to commencement of Phase II operations.
HAZARDS AND HAZARDOUS MATERIALS		
HAZ-1. Should the hazardous materials used for operation of the mine be relocated and stored on the project site, the applicant must adhere to all applicable codes and regulations regarding the storage of hazardous materials and the generation of hazardous wastes set forth in the California Health and Safety Code Sections 25500 – 25519 and 25100 – 25258.2 including the electronic reporting requirement to the California Environmental Reporting System. The applicant shall apply for and obtain a permit for the storage of hazardous materials and the generation of hazardous wastes from the NCDEH, CUPA. The operator shall secure and annually renew the permit for this facility within 30 days of becoming subject to applicable regulations.	Project Monitor/Operator; County Planner; Occupational Safety and Health Administration (OSHA); County Environmental Health	Applies for routine transport, use, or disposal, and if hazardous materials are stored on the site. Prior to commencement of Phase II operations; ongoing throughout project operations.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
HAZARDS AND HAZARDOUS MATERIALS (cont.)		
The building's design for the storage of ammonium nitrate or other blasting materials shall meet the criteria for such buildings as designated by OSHA and the Bureau of Alcohol, Tobacco, Firearms and Explosives.		Shall apply for permit within 30 days of becoming subject to the permit and obtain permit annually for duration of life of the mine.
HAZ-2. In order to protect the public from potential release of hazardous materials, the project applicant shall prepare and implement a Hazardous Materials Business Plan (HMBP) in accordance with the requirements of the County Public Health Department Environmental Services Division and the Hazardous Materials Release Response Plan and Inventory Act of 1985. Under this state law, the applicant is required to prepare an HMBP to be submitted to the County Public Health Department, Environmental Health Services Division, which is the Certified Unified Program Agency for the County, or can be filed through the California Environmental Reporting System. The HMBP shall include a hazardous material inventory, emergency response procedures, training program information, and basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of at the proposed project site. The HMBP shall include an inventory of the hazardous waste generated on-site, and would specify procedures for proper disposal. As required, hazardous waste would be transported by a licensed hauler and disposed of at a licensed facility. According to the HMBP reporting requirements, workers must be trained to respond to releases of hazardous materials in accordance with State and federal laws and regulations governing hazardous materials and hazardous waste (e.g., HAZWOPER training required by OSHA). Any accidental release of small quantities of hazardous materials shall be promptly contained and abated in accordance with applicable regulatory requirements and reported to the Environmental Health Services Division. As the Certified Unified Program Agency for the County, the Environmental Health Services Division of the County Public Health Department is responsible for implementation and enforcement of HMBPs.	Project Monitor/Operator; County Planner; County Environmental Health	Applies of hazardous materials are stored on the site. Prior to commencement of Phase II operations; ongoing throughout project operations. Applies for the duration of the life of the mine.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
HAZARDS AND HAZARDOUS MATERIALS (cont.)		
HAZ-3. Construction contractors and/or the site operator shall ensure that during construction and/or during vegetation clearing of the mine, all areas of the construction site and/or the mine in which spark-producing equipment and vehicles may operate shall be cleared of dried vegetation or other materials that could serve as fuel for combustion. This includes parking areas, staging areas, and the construction zone. The contractor shall keep these areas clear of combustible materials for the duration of construction.	Construction Contractors; Project Monitor/Operator; County Planner	Prior to and during construction of the off-site roadway improvement area. Prior to commencement of Phase II operations; ongoing throughout project operations. Applies for the duration of the life of the mine.
HAZ-4. Construction contractors and/or the site operator shall ensure that all equipment with internal combustible engines will be equipped with a spark arrester that shall be maintained in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.	Construction Contractors; Project Monitor/Operator; County Planner	Prior to and during construction of the off-site roadway improvement area. Prior to commencement of Phase II operations; ongoing throughout project operations. Applies for the duration of the life of the mine.
CULTURAL AND TRIBAL RESOURCES		
CUL-1. It is possible that ground-disturbing activities during construction may uncover previously unknown resources that meet the criteria for historical resources under CEQA. In the event that buried cultural resources are discovered during construction, operations shall stop within 50 feet of the find and a qualified archaeologist shall be consulted to determine whether the resource is potentially eligible for listing on the CRHR. The Washoe Tribe shall also be notified of the discovery. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the archaeologist determines that construction activities could damage a potential historical resource, mitigation will be implemented in accordance with Section 15126.4 of the State CEQA Guidelines. If avoidance of the site is not feasible, a qualified archaeologist will prepare and implement a detailed treatment plan in consultation with the County. Treatment for most historical resources would consist of (but would not be not limited to) documentation of the resource on the appropriate DPR 523-series forms, sample excavation and artifact collection (if appropriate), and historical research. The treatment plan will include provisions for analysis of	County Planner; Registered Archeologist, Project Monitor/Operator	Prior to and during construction – this mitigation measure shall be included in all construction documents for implementation during construction. Prior to commencement of Phase II operations; ongoing throughout project operations. Applies for the duration of the life of the mine.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
CULTURAL AND TRIBAL RESOURCES (cont.)		
data in a regional context, reporting of results in a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.		
CUL-2. In the event that archaeological resources are discovered during construction, Mitigation Measure CUL-1 shall first be applied. If the qualified archaeologist determines that the find does not meet the criteria of a historical resource under CEQA, the criteria of a unique archaeological resource described in Public Resources Code (PRC) Section 21083.2(g) shall be applied. If the archaeologist determines that construction activities could damage a resource that meets the criteria of a unique archaeological resource, mitigation will be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Consistent with Section 15126.4(b)(3), mitigation may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist will prepare and implement a detailed treatment plan in consultation with the County. Treatment of unique archaeological resources may consist of (but would not be not limited to) sample excavation, artifact collection, site documentation on DPR 523 forms, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan will include provisions for analysis of data in a regional context, reporting of results in a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.	County Planner; Registered Archeologist, Project Monitor/Operator	Prior to and during construction – this mitigation measure shall be included in all construction documents for implementation during construction. Prior to commencement of Phase II operations; ongoing throughout project operations. Applies for the duration of the life of the mine.
CUL-3. In the event a fossil is discovered during construction for the proposed project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist in accordance with Society of Vertebrate Paleontology standards. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement.	County Planner; Registered Paleontologist, Project Monitor/Operator	Prior to and during construction – this mitigation measure shall be included in all construction documents for implementation during construction.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
CULTURAL AND TRIBAL RESOURCES (cont.)		
		Prior to commencement of Phase II operations; ongoing throughout project operations. Applies for the duration of the life of the mine.
CUL-4. In the event of the accidental discovery or recognition of any human remains, State CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; PRC Section 5097.94 and Section 5097.98 must be followed. If during project development there is accidental discovery or recognition of any human remains, the following steps shall be taken: a. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the California Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" (MLD) of the deceased Native American(s). The MLD shall make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. b. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of MLD or on the project site in a location not subject to further subsurface disturbance: i. The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. ii. The descendant identified fails to make a recommendation. iii. The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.	County Planner; Registered archaeologist, Project Monitor/Operator	Prior to and during construction – this mitigation measure shall be included in all construction documents for implementation during construction. Prior to commencement of Phase II operations; ongoing throughout project operations. Applies for the duration of the life of the mine.

BOCA QUARRY EXPANSION PROJECT – MITIGATION MONITORING CHECKLIST (cont.)

Mitigation Measure	Monitor	Schedule
CUMULATIVE		
CUM-1A. To offset cumulatively considerable impacts on mule deer migration and foraging habitat, the applicant shall incorporate reclamation planning objectives and specifications to include re-vegetation with species known to be used as browse or herbaceous forage by migrating or summer-resident mule deer into the Reclamation Plan for the project. The species incorporated into the Plan shall be prepared or reviewed by a qualified biologist and approved by the County.	County Planner; Qualified Biologist	Prior to commencement of Phase II operations, and for duration of project operations. This measure will be incorporated into the Reclamation Plan for the project.
CUM-1B. The Reclamation Plan for the project shall identify the following phasing: Prior to commencement of year five of the operation within Phase 2, the Phase 1 quarry area (excluding the processing and stockpile areas) reclamation and re-vegetation activities shall be fully installed. This mitigation would allow the re-vegetation in Phase 1 to establish itself before encroachment into the Phase 3 area begins, thereby providing new habitat, as required in Mitigation Measure CUM-1A, for the local mule deer herd. Prior to commencement of operations in the West Pit, the applicant shall submit to the County a monitoring plan for monitoring the success of the revegetation efforts as they relate to the mule deer. The monitoring plan shall include provisions for monitoring and annual reporting to the County and shall include provisions for adjusting the reclamation efforts as needed, before the end of the active mining activities	County Planner; Qualified Biologist	Prior to commencement of Phase II operations, and for duration of project operations (including post reclamation monitoring). This measure will be incorporated into the Reclamation Plan for the project.