CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY

The Department of Toxic Substances Control (DTSC) has completed the following document for this project in accordance with the California Environmental Quality Act (CEQA) [Pub. Resources Code, div. 13, § 21000 et seq] and accompanying Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq].

PROJECT INFORMATION

PROJECT TITLE: Centennial M1 Property Clean-Up Project Remedial Action Plan		**SITE CODING:**
PROJECT ADDRESS: 10344 Centennial Drive	**CITY:** Grass Valley	**COUNTY:** Nevada County
PROJECT SPONSOR: Rise Grass Valley, Inc.	**CONTACT:** Ben Mossman	**PHONE:** (530) 433-0188
APPROVAL ACTION UNDER CONSIDERATION BY DTSC: Remedial Action Plan		
STATUTORY AUTHORITY: California Health &Safety Code, Chapter 6.8		

DTSC PROGRAM/ADDRESS: Cleanup Program/8800 Cal Center Drive, Sacramento, California 95826	**CONTACT:** Dean Wright	**PHONE:** (916) 255-3591

Project Description:

DTSC is proposing to approve a draft Remedial Action Plan (RAP) for cleanup of the Centennial M-1 Property (Site) located at 10344 Centennial Drive in Nevada County, California 95945. The Site, approximately 56-acres in size, is vacant, partially forested open space and located immediately south of Centennial Drive and Idaho Maryland Road, and north of East Bennett Road. The draft RAP would address cleanup of mine waste (tailings and waste rock) that contain arsenic, lead, thallium, mercury, and nickel. Rise Grass Valley Inc. (Rise) entered into a Voluntary Cleanup Agreement (VCA; Docket No. HSA-FY18/19-014) with DTSC for the voluntary cleanup of soil contamination on the Site). The RAP was prepared and submitted by NV5, on behalf of Rise, and describes the proposed procedures for conducting remedial activities to ensure the Remedial Action Objectives (RAO's) are achieved.

The Site is located near the city limits of Grass Valley (City) in unincorporated Nevada County (County), California. See Figure 1, "Site Location." All six parcels that comprise the Site are owned by Rise. Site identification information is presented in Table 1, "Site Information," below.

TABLE 1
SITE INFORMATION

Site Name	Centennial M-1 Property
Address	10344 Centennial Drive, Grass Valley, CA 95945
Size	56.41 acres
DTSC Site Code	102370
Other Site Names	Idaho Maryland Mine Property (Site Code 101505)
USEPA Identification Number	CAN000908495
Cal Sites Identification Number	none
Assessor Parcel Numbers	009-550-032-000, 009-550-037-000, 009-550-038-000, 009-550-039-000, 009-550-040-000, 009-560-036-000
Section, Township and Range	E ½ Sec 26, T17N, R8E, MDM
Coordinates of site center	Latitude 39.2213°, Longitude -121.0424°
Land Use	Predominantly vacant; intermittent lumber milling operations at the Hap Warnke Mill near Idaho Maryland Road and Centennial Drive
Zoning	M1 (Light Industrial)
General Plan	Industrial

Background:

This site was historically used for disposal of mine waste (tailings and waste rock) from a former underground hardrock (lode) gold mine, the Idaho-Maryland Mine (IMM). Mine waste is present on approximately two-thirds of the site. Site investigation has identified that some of the mill tailings, waste rock, and affected soil at the site that contain lead, arsenic, mercury and other metals at concentrations exceeding background soil metals concentrations and regulatory benchmark concentrations. The following sections provide a brief history of historic mining activities on the site, its current regulatory status, and technical analysis completed to investigate and characterize site environmental conditions.

History

The site is historically associated with the IMM. The IMM was one of the most productive gold mines in the United States and was operated between 1863 to 1956. The site was used for storage of mine waste (tailings and waste rock) during IMM's operation. As depicted on Figure 2, "Simplified Historical Map," infrastructure associated with the historical mining operations were located to the northeast of the site. The underground workings were accessed primarily by Idaho Shaft No. 1 and the New Brunswick Shaft (Amec, 2017), both of which are located offsite. Ore was conveyed to the ground surface at the Idaho Shaft headframe (1) and hoist house (2). Prior to 1936, mercury was used to recover gold at the old offsite 20-stamp mill (3), and tailings from this early process, as well as tailings from "toll milling" of ore imported from other mines, were reportedly deposited as a slurry in the unlined eastern tailings pond (5) located within the site. Cyanide was used from 1936 onward at the "new" offsite mill and cyanide plant (4), and a slurry of cyanide-treated tailings were reportedly deposited as slurry in the unlined western tailings pond (6) located within the site. Tailings slurry was conveyed via ditches (7 and 10). The Northern Berm (8) was used to retain the tailings. The larger Eastern Berm (9) was previously associated with a lumber mill on adjacent property to the east.

The tailings cover an area of approximately 37 acres in the northern and central portions of the site. The tailings are not covered, and the former berms around the tailings pond have not been maintained since the mine closed.

Regulatory Status

The site is identified on the Envirostor database (DTSC, 2019 Sept) as:

- Centennial M-1 Property, DTSC Site Code 102370. VCA Docket No. HSA-FY18/19-014 was executed for DTSC oversight of a Preliminary Endangerment Assessment (PEA; NV5, 2020) and this RAP.
- Portion of Idaho Maryland Mine Property, DTSC Site Code 101505. In 2007 the Idaho Maryland Mining Corporation (IMMC), who previously leased the site from the former site owners, submitted an application for DTSC oversight of the Idaho Maryland Mine Property, which included the site and surrounding properties comprising a total of 122 acres. This historical oversight agreement was not executed.

The USEPA Identification Number for the site is CAN000908495. According to the Envirostor database (DTSC, 2019 Sept), the site was identified as an abandoned mine in 1989.

The site is not currently listed in the State Water Resources Control Board (SWRCB) GeoTracker database (https://geotracker.waterboards.ca.gov).

Site Characterization

To characterize contaminants on the site NV5 prepared and submitted a Preliminary Endangerment Assessment (PEA, 2020). The PEA, included as Appendix A, "Preliminary Endangerment Assessment," included supplemental site investigation, review of community demographics, compilation and validation of previous investigation data, delineation of assessment areas and statistical evaluation, human and ecological risk assessment, sensitive receptor survey and water quality evaluation.

Site investigation has identified mill tailings, waste rock and affected soil at the site that contain arsenic, mercury, lead and other metals at concentrations exceeding background soil metals concentrations and regulatory benchmark concentrations. Elevated metals concentrations present a potential human health risk resulting from routine, long-term exposures including ingestion, inhalation of dust or vapors, and dermal contact. In addition, contaminated mine waste presents potential risks to ecological health and water quality.

Project Activities:

The following describes the proposed remedial activities related to clean-up of soil contamination at the site. The media of concern at the site is soil, and the constituents of concern are metals, metalloids and asbestos. Constituents of concern identified to exceed site background concentrations or appropriate health and safety concentrations include lead, arsenic,

thallium, nickel and mercury. A full list of the constituents of concern are listed in section 3.2 of the RAP. Remedial action includes on-site consolidation and capping of contaminated materials that have metal concentrations above commercial/industrial use cleanup levels or background concentrations (in the case of arsenic). The contaminated material is generally found in the northern and eastern portions of the Site but also includes several small areas that the RAP identifies as "hot spots". A total of 133,800 cubic yards of contaminated soil is planned for excavation and consolidation along with cement treatment of approximately 4,200 cubic yards at one of the hot spots that is required to chemically stabilize constituents of concern at this location and reduce its water solubility (see "TP19 Hot Spot" on Figure 3, "Overview of Proposed Remedial Action," and Section 4.4. of the RAP). Stabilization includes mixing Portland cement with the mine tailings located at the "TP19 Hot Spot" area prior to placement of the tailings as engineered fill in the designated consolidation area (see Figure 3) to prevent potential water quality impacts. This stabilization effort will require the transport of approximately 335 tons (approximately 22 truckloads) of Portland cement to the site. The 5.6-acre consolidation area will be capped with approximately four to five feet of clean soil that will be obtained from the Site, so soil import is not anticipated. The capping and regrading of excavated areas will utilize approximately 129,100 cubic yards of soil from designated borrow areas on the Site as depicted in the detailed figures regarding grading activities provided in Figures E1 through E4 in Appendix H, of the RAP. This remedial action was selected as the most effective to protect human health and the environment while mitigating the traffic impacts and greenhouse gas impacts associated with offsite disposal. Figure 3 provides an overview of the areas with contaminated soil and the consolidated soils area. A comprehensive description of all remedial actions to be conducted onsite can be found in Section 7 of the RAP.

The overall goal of the remedial action is to reduce to acceptable levels the potential human health risk and water quality impacts associated with the environmental conditions identified at the site. The remedial action is intended to reduce the potential for routine contact with soil having elevated metals concentrations, and to reduce the potential for leaching and erosion, by excavation, consolidation on-site at a designated location, capping with clean engineered fill, and establishment of land use controls. As summarized in Section 3.4 of the RAP, laboratory results indicate that the potential for acid generation and leaching of heavy metals is low and the tailings can be managed as Group C mine waste as defined in CCR Title 27 Section 2248(b). The tailings are to be placed with surface and subsurface drainage controls at a location that is not subject to surface water erosion or leaching. Local groundwater well completion reports indicate that usable groundwater occurs in bedrock fractures at depths generally greater than 60 feet below the ground surface.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) requires compliance with applicable or relevant and appropriate requirements (ARARs) during remedial actions to the extent practicable. ARARs include federal, state, and local environmental laws, regulations, and standards that can be chemical-specific, location specific, or action specific. The RAP includes a list of chemical-specific, location specific, or action specific ARARs applicable to this site.

Site Preparation

A summary of the site preparatory activities required prior to surface disturbing activities is provided below.

- Underground service alert—the contractor will identify areas of disturbance and contact Underground Service Alert who is responsible for contacting public utility companies for marking the location of their onsite underground utilities.
- Wetlands Mitigation—a Biological Resources Impact Assessment identified impacts to 4.35 acres of mapped wetlands and 0.19 acres of intermittent and ephemeral streams within the site subject to remedial actions. Federal and State agency permitting, and mitigation will be required prior to disturbance of these features. Appendix G of the RAP includes the Biological Resources Impact Assessment. Analysis is provided in Section 4 of this Initial Study.
- Preconstruction Biological Surveys—the Biological Resources Impact Assessment identified potential impacts to special status plant and wildlife habitat and nesting raptors and bird species. As a result, preconstruction surveys for those species that may be impacted will be conducted.
- Planning for Unanticipated Cultural Resources Discoveries—a draft Unanticipated Discovery Plan (UDP; see Appendix B) presents actions to be taken in the event that unanticipated cultural resources are encountered during the remedial action. All onsite personnel will be informed of the provisions in the UDP prior to onsite work. A copy of the UDP will be maintained onsite. The draft UDP has been provided as part of this Initial Study to support the readers understanding of this aspect of the project, however, the UDP will undergo formal review by DTSC as part of the Remedial Design and Implementation Plan (RDIP) which follows approval of the RAP and is not considered final until approval of the RDIP document.
- Pre-Excavation Sampling and Analysis—Pre-excavation sampling and analysis of mine waste will be performed prior to excavation to refine the excavation limits and thereby streamline the remedial process. Specific methods for sampling, analysis, and statistical evaluation will be presented as part of the RDIP, which must be reviewed

and approved by DTSC prior to the remedial action. The results of pre-excavation sampling shall be submitted to DTSC for review prior to excavation.

- Culvert Extension – an existing culvert from an adjacent property daylights into the eastern area of the property in the area of the proposed consolidation area. This culvert will be extended prior to excavation, stabilization, and placement activities a location outside the boundary of the proposed consolidation area.

Excavation, Stabilization, and Placement

Upon completion of the site preparation actions described above the excavation, transport, stabilization, and placement of contaminated soil will begin. Before soil excavation removal, vegetation will be cut off at the ground surface, segregated, and removed from the work area. Removal of vegetation is to be performed using equipment that does not disturb contaminated soil prior to excavation.

Excavation includes mechanical excavation of mine waste and contaminated soil using a rubber-tired or track-mounted excavator, backhoe, scraper, or other mechanical means. Excavation is to be performed in accordance with an approved Dust Mitigation Plan (DMP) and to the depths identified by verification sampling and analysis. Excavated soil will be transported to a designated consolidation area in the eastern end of the site as shown on Figure 3. The boundary of the consolidation area will be marked to designate the extent and depth of the stabilization area. Prior to engineered fill placement, vegetation is to be removed in the consolidated soil area as described above and the subgrade surface is to be scarified, moisture conditioned and recompacted to a minimum of 90% of the American Society for Testing and Materials (ASTM) D1557 maximum dry density.

The following provides the requirements for fill placement and compaction:

- Maintain moisture content in soil to minimize the generation of visible dust during preparation, placement and compaction.
- Vegetation shall be cut off at the ground surface prior to fill placement. Avoid contact with or disturbance of contaminated soil. Remove vegetation from fill and do not incorporate organic material into the fill.
- Oversize rock (rock that is greater than 12 inches in greatest dimension) shall be incorporated into deep fill by windrowing, so that compaction is performed around the rock, as approved by a California licensed engineer.
- Soil shall be uniformly moisture conditioned to the ASTM D1557 optimum moisture content or within approximately 3 percentage points above optimum moisture content.
- Fill shall be constructed by placing uniformly moisture conditioned soil in maximum 8- inch-thick loose lifts (layers) prior to compacting.
- Fill shall be compacted to a minimum relative compaction of 90% of the ASTM D1557 maximum dry density.
- The moisture content, density and relative percent compaction of fill must be verified by a California licensed engineer during construction. The earthwork contractor shall assist the construction quality assurance monitor by excavating test pads with the onsite earth moving equipment.

The following provides the requirements for fill slopes:

- Fill slopes will be 3:1, horizontal to vertical (H:V), or flatter, unless otherwise approved by a California licensed engineer.
- For areas to receive fill that are steeper than 5:1, H:V, a keyway is to be constructed at the base of the fill at least two feet deep and an equipment-width wide, as confirmed in the field. The base of the keyway is to be founded in competent material, as determined by a California licensed engineer in the field.
- Fill is to be benched into the existing slope. Benches are to extend into competent material, as determined by a California licensed engineer in the field.
- The top of the fill is to be graded to drain away from the fill slope, and runoff is to be conveyed into natural drainage courses as shown on the design drawings in Appendix H to the RAP.
- Place fill in horizontal lifts (layers) not exceeding eight inches in thickness. Overbuild the slope face and cut back to the desired slope gradient.
- Grade the finished surface to drain away from the constructed slope face per the grading plan.

Cement stabilization will be used for those soils that pose a potential water quality impact. The location of these soils is shown as “TP19 Hot Spot” on Figure 5. Cement stabilization includes spreading, uniformly mixing the soils by rotary methods with Portland cement and water, and compaction in place. As shown on Figure 3, the area with contaminated soils identified for cement stabilization is located within the designated mine waste consolidation area. Excavation and

stabilization of these soils will occur prior to placement of the soil as engineered fill along with soil from other areas of the site.

Following completion excavation, stabilization, and placement activities disturbed areas will be hydroseeded or broadcast seeded with an erosion-control native seed mix to reduce erosion and maintain fill slope stability. Irrigation will be used as necessary to support revegetation. Table 2, "Seed List," provides a typical seed list and application rate for the area.

TABLE 2
SEED LIST[1]

Scientific Name	Application Rate (Pounds PLS/Acre)
Lotus purshianus	4.4
Nassella cernua	2.2
Bromus carinatus	13.8
Festuca rubra molate	2.4
Hordeum californicum	7.1
Leymus triticoides	3.1
TOTAL: 33 POUNDS PLS PER ACRE	

Note: PLS= Pure Live Seed.
[1] Minor species and/or quantity adjustment may be made based on availability at the time of purchase.

Schedule and Workforce

Site remedial actions are anticipated to take approximately 4-6 months following receipt of all permits and authorizations from applicable local, State, and federal agencies. Table 3, "Hours of Operation," provides the hours of operation and approximate duration.

TABLE 3
HOURS OF OPERATION

Project Element	Hours of Operation	Duration[1]
Placement, grading, and compaction of engineered fill at Centennial Industrial Site	7:00 a.m.–3:30 p.m., 7 days a week	4-6 months

Notes:
1. Durations are approximate and dependent on factors such as equipment and personnel availability, fluctuations in the economy, and technical details.

The project will employ approximately 6-10 people.

Equipment

Expected equipment associated with the project is provided in Table 4, "Typical Equipment." The type of vehicles used will vary somewhat over time depending on availability and the introduction of new models to suit different conditions.

TABLE 4
TYPICAL EQUIPMENT

Equipment[1]	Uses
Dozer (CAT D8 or similar)	Move, grade, and compact engineered fill
Grader (CAT 140H or similar)	
Excavator (CAT 385 or similar)	
Sheepsfoot compactor (CAT 815 or similar)	
Haul trucks (20 ton) or Scrapers	Haul and dump mine waste
Water truck	Water haul roads and fill areas
Rubber Tired Rotary Mixer or Mobile auger blending plant	Mobile plant for blending rock and sand

Notes:
1. Equipment will be purchased at the time it is needed and may differ from equipment listed.

Access and Vehicle Trips

Access to the site is located at Centennial Drive. Only employees and equipment will use this entrance. Project trip generation is provided in Table 5, "Project Trip Generation Estimates."

TABLE 5
PROJECT TRIP GENERATION ESTIMATES

Uses	Axles	Average Daily Round Trips	Max Daily Round Trips	Am Peak Hour Round Trips		Pm Peak Hour Round Trips	
				Entering	*Exiting*	*Entering*	*Exiting*
Employee Trips	2	6	10	6	0	0	0
Fuel trucks[1]	5	1	1	0	0	0	0
Freight Trucks	5	1	2	0	0	0	0
Outside services[2]	2	2	4	0	0	0	0

Notes:
1. Fuel trucks will come to the site to refuel heavy equipment.
2. Outside services includes vendors, deliveries, and other ancillary vehicle traffic to support operations
3. Each round trip generates 2 one-way trips.

Health, Safety, and Environmental Protection

The following plans and protections will be implemented to protect human health and safety and sensitive environmental resources:

- Health & Safety Plan: all onsite personnel will be required to follow safety measures regarding onsite potential chemical and physical hazards. Each contractor will be required to develop and implement their own health and safety plan based on the work to be conducted onsite. All personnel working on the cleanup shall have completed 40 hours of comprehensive health and safety training, which meets the requirements of 29 Code of Federal Regulations (CFR) 1910.120.
- Dust Mitigation Plan (DMP): a draft DMP is attached as Appendix C. During the remedial activities, soil moisture content is to be maintained to reduce the potential for dust generation and the need for respiratory protection. Real-time dust monitoring is to be performed to verify that the engineering controls are effective in controlling dust emissions. Dust monitoring is typically performed at a minimum during the first two days of soil-disturbing activities, and whenever a significant change in operations takes place that may result in additional dust generation. Dust monitoring will also be conducted when remedial activities are within 100 feet of the centerline of Wolf Creek. Airborne dust levels are to be monitored using active, real-time, data-logging aerosol monitors, and air sampling is to be performed for asbestos analysis. The draft DMP has been provided as part of this Initial Study to support the readers understanding of this aspect of the project, however, it will undergo formal review by DTSC as part of the RDIP and is not considered final until approval of that document.

- Environmental Awareness Program: A Worker Environmental Awareness Program (EAP) would be prepared by a qualified biologist, and all construction crews and contractors would be required to participate in EAP training prior to starting work on the project. The EAP training would include a review of the special-status species and other sensitive resources that could exist in the project area, the locations of known sensitive biological resources as well as their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all personnel trained would be maintained onsite until construction is completed.
- Wolf Creek Setback: no disturbance of the main stem of Wolf Creek, riparian habitat zone, or 100-year floodplain boundary is proposed. Temporary fencing (e.g., silt fencing) will be installed that prevents both inadvertent disturbance and potential debris/sediments that may impact aquatic resources.
- Pine Hill Flannelbush Setback: Pine Hill Flannelbush (Fremontodendron decumbens), a species listed on the federal Endangered Species Act (ESA), has been identified and mapped within the southern portion of the site. No disturbance to this area is proposed as part of the remedial action. Temporary construction fencing will be installed to prevent inadvertent disturbance.
- Unanticipated Discovery Plan: a draft Unanticipated Discovery Plan (UDP; see Appendix B) presents actions to be taken in the event that unanticipated cultural resources are encountered during the remedial action. All onsite personnel will be informed of the provisions in the UDP prior to onsite work. A copy of the UDP will be maintained onsite.

- Verification Sampling and Analysis: after excavation of contaminated soils, verification soil samples will be obtained to confirm that the remedial goals are achieved. The RAP provides a general outline and proposed frequency for collecting these samples but specific methods for sampling, analysis, and statistical evaluation will be presented as part of the RDIP, which will be reviewed and approved by DTSC prior to the remedial action. The results of verification sampling and analysis shall be submitted to DTSC for review and approval prior to completion of the remedial action.
- Groundwater Monitoring and Reporting Plan: A draft groundwater Monitoring and Reporting Plan (MRP; see Appendix D) describes procedures for routine groundwater monitoring at the location of the consolidation area. Well locations are depicted on Figures 1 and 2 of the MRP (Appendix D), and well construction details are presented as Figures 3 through 5 of the MRP (Appendix D). Groundwater monitoring includes water elevation measurement in three wells, groundwater sample collection, laboratory analysis, and reporting. Semiannual (twice yearly) groundwater monitoring and reporting are required to verify that groundwater quality is not impacted by the consolidated mine waste and soil. The draft MRP will undergo review and approval as part of the RDIP but has been provided in this Initial Study to support the readers understanding of this aspect of the project.
- Operation and Maintenance Plan: A draft Operation and Maintenance Plan (O&M Plan; see Appendix E) sets forth procedures for long-term operation, inspection, maintenance, monitoring, and regulatory reporting that are required to preserve the engineering controls (the clean cover and drainage improvements) associated with the mine waste consolidation area. The O&M Plan presents procedures for regulatory notification and management of contaminated mine waste and soil, should excavation into the consolidation area be required in the future. The primary goal of the O&M Plan is to prevent uncontrolled exposures to contaminated mine waste and soil within the consolidation area. The draft O&M Plan has been included with this Initial Study to support the readers understanding of this aspect of the project however, it will not be considered final until approval of the RDIP.
- Remedial Action Completion Report: The results of the remedial activities will be presented in a post-remediation report entitled Remedial Action Completion Report (RACR). The purpose of the report is to describe remedial activities and to document compliance with this RAP. The RACR will be presented to DTSC for review. Provided that the RAO are achieved, the post remediation report will request a No Further Action decision from DTSC.

PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED: (e.g., State Agencies, Counties, Cities, or Air Quality Districts, granting permits, financing approval, or participation agreement.)

NATIVE AMERICAN CONSULTATION: Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

***Note**: Please see the Tribal Cultural Resources Section (Section 18) for additional information.*

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist beginning on page 12. Please see the checklist beginning on page 6 for additional information.

☐	Aesthetics	☐	Agriculture and Forestry	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Energy
☐	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CERTIFICATION

I hereby certify that the statements furnished above and in the attached documentation, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Preparer's Signature	7/23/2021 Date

Dean Wright Preparer's Name	Project Manager Preparer's Title	916-255-3591 Phone #

Branch or Unit Chief Signature	7/23/2021 Date

Steven Becker Branch or Unit Chief Name	Senior Engineering Geologist Branch or Unit Chief Title	916-255-3717 Phone #

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9) The explanation of each issue should identify:
    a) the significance criteria or threshold, if any, used to evaluate each question; and
    b) the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL IMPACT ANALYSIS

1. AESTHETICS				
Except as provided in Public Resources Code Section 21099, would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

California Scenic Highway Program

In 1963, the California legislature created the Scenic Highway Program to protect scenic highway corridors from changes that would diminish the aesthetic value of lands next to the highways. The state statutes governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. State and local agencies are responsible for protecting the social and economic values provided by the State's scenic resources through the development of specific planning and design standards and procedures. A highway may be designated as "scenic" depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon travelers' enjoyment of the view. A list of state scenic highways is identified in Streets and Highway Code Section 263.

Nevada County General Plan

The County General Plan (Nevada County 2014) Aesthetics Element contains goals, objectives, and policies that address such topics as preservation of scenic resources and viewsheds, conservation of scenic roads and highways, aesthetic design, and minimization of nighttime light pollution. The following goals, objectives, and policies are relevant for consideration in association with the proposed project:

GOAL 18.2: Protect and preserve important scenic resources.

Policy 18.3: The County shall establish standards for the protection of large-scale views and viewsheds and shall incorporate such standards in the Comprehensive Site Development Standards. The standards shall provide an inventory of sensitive views and viewsheds within Nevada County, and specify protective measures and impact controls applicable through the project site review process.

Policy 18.6: Discretionary development in Rural Regions and in Community Regions near the Community Boundary shall, wherever possible, preserve natural landmarks and avoid ridge-line placement of structures.

Policy 18.7A: The County shall promote a compact development pattern to protect open space buffers between communities and to maintain a geographic distinction between communities.

Objective 18.3: Promote the conservation of scenic roads and highways.

Environmental Setting (Baseline):

The project site is in the western region of the County, in the western foothills of the Sierra Nevada mountain range. The site is approximately a half mile from State Route (SR) 49, which runs through the City. The elevation of the site ranges from approximately 2,480 feet mean sea level (msl) to 2,580 feet msl. The project site is surrounded by undeveloped open space, industrial, and commercial uses. Table 6, "Surrounding Land Uses and Closest Receptors," provides a summary of the locations of the surrounding land uses and the receptors closest to the project site.

TABLE 6
SURROUNDING LAND USES AND CLOSEST RECEPTORS

Direction	Land Use	Closest Land Use
North	Grass Valley city limits, commercial, industrial, Idaho-Maryland Road	Commercial/Industrial
West	Grass Valley city limits, commercial	Commercial
South	Open space, East Bennett Road, industrial	Industrial
East	Grass Valley city limits, Centennial Drive, industrial, commercial	Industrial/Commercial

The site is accessed from Whispering Pines Lane. No public roads exist within the property. The visual character of the site is both industrial and open space. The site includes densely vegetated areas interspersed with past disturbance (from historical mining and from the industrial structures and wood and metal materials left by the previous owner of the site) visible from the corner of Idaho Maryland Road and Centennial Drive. The main stem of Wolf Creek, a perennial stream, generally runs parallel to and immediately south of Idaho Maryland Road along the northern boundary of the site.

The site does not include light sources except from the surrounding area including light from the City, businesses, and vehicles on the surrounding roads, and SR 20-49.

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Have a substantial adverse effect on a scenic vista?

Impact Analysis:

The term “vista” generally implies an expansive view, usually from an elevated point or open area. A “scenic vista” is a view that possesses visual and aesthetic qualities of high value to the community. Scenic vistas can provide views of natural features or significant structures and buildings.

Four representative viewpoints were selected at publicly accessible locations that were considered representative of the area or of locations from which a viewer would have the potential to see the project and experience a change in visual character as a result of the project. Figure 4, “Viewpoint Locations,” provides a map showing the four viewpoint locations and direction of the view. Figure 5, “Viewpoint Photographs,” provides photographs showing the view toward the project site from each viewpoint. Table 7, “Viewpoints and Representative Attributes,” lists the viewpoints and their attributes as representative viewpoints for this evaluation.

TABLE 7
VIEWPOINTS AND REPRESENTATIVE ATTRIBUTES

No.	Description	Representative Attributes
1	Sierra Nevada Memorial Hospital Parking Lot, looking southeast	A view from northwest of the site from an elevated vantage point
2	Upper parking lot next to State Route (SR) 20-49, looking southeast	Views from SR 20-49, a major regional travel corridor
3	Halfway up Spring Hill Drive, looking south	A nearby view from north of the site, with high site visibility, from an industrial area
4	Centennial Drive, looking south	A nearby view from east of the site, with high site visibility, from an industrial area

Viewpoints 1 and 2: Sierra Nevada Memorial Hospital Parking Lot, Looking Southeast and Parking Lot below SR 20-49, Looking Southeast

The site is visible from SR 20-49 and a few locations near SR 20-49. Viewpoint 1 is a view from the Sierra Nevada Memorial Hospital parking lot above SR 20-49, looking southeast. Viewpoint 2 is a view from a parking lot just below

SR 20-49, looking southeast. Figure 4 shows viewpoint locations and Figures 5 show recent photographs from these viewpoints. Foreground views from SR 20-49 to the west are of the rooftops of industrial buildings, including storage buildings and a collision repair shop. Middleground views include a lumber company with a parking lot in front, perched on a leveled hill. Background views consist of tree-covered hills. Viewpoint 2 is the most representative view for drivers from SR 20-49.

The removal of vegetation, contaminated soil removal, and placement of the engineered fill on the eastern side of the property would be briefly visible from SR 20-49, mainly for passengers in vehicles heading northeast, and less visible from views closer to level with the highway. The views would be distant with various commercial and industrials buildings and existing vegetation partially blocking views in the fore- and middleground. The equipment and related surface disturbance would be similar to views that would be seen during the construction of a building pad and preparation for the construction of a commercial or industrial building in the area. The project has a short duration, approximately 4-6 months, after which time the equipment would be removed and the site would be revegetated with erosion control grasses. For these reasons, the potential for the project to result in a substantial adverse effect on a scenic vista would be less than significant.

Viewpoint 3: Halfway up Spring Hill Drive, Looking South

The project site is visible from Spring Hill Drive. Viewpoint 3, halfway up Spring Hill Drive, looking south, is representative of views toward the project site from this area. Figure 4 shows viewpoint locations and Figure 5 shows a recent photography from this viewpoint. Viewers consist primarily of commuters and local workers accessing the industrial businesses along the road. Existing views of the project site include vegetation in the foreground and industrial uses (e.g., metal structures, wood and other material piled on the ground, old vehicles) in the middleground, visible through the shrubs and trees. The removal of vegetation would be visible behind trees in the foreground. The foreground trees surrounding Wolf Creek would prevent clear, unbroken views of project activities. The project has a short duration, approximately 4-6 months, after which time the equipment would be removed and the site would be revegetated with erosion control grasses. Therefore, the visual impact to views from Spring Hill Drive associated with the site would be less than significant.

Viewpoint 4: Centennial Drive, Looking South

The Project site is visible from Centennial Drive and Whispering Pines Lane, looking west, southwest, and south. Viewpoint 4, on Centennial Drive looking southwest, is representative of views toward the project site from this area. Figure 4 shows viewpoint locations and Figure 5 shows a recent photograph from this viewpoint. Viewpoint 4 provides a view of the site from just before the sharp corner, looking southwest. Existing views of the project site include trees and shrubs when looking southwest at the sharp bend in the road and industrial uses (e.g., metal structures, wood and other material piled on the ground, old vehicles) in the foreground near the corner of Centennial Drive and Idaho Maryland Road.

From the south and west side of Centennial Drive views would temporarily change from vegetated open space to a graded dirt area with an elevated engineered fill area to the east. After revegetation of the disturbance areas the views would be of grasses and open space. The quality of this view could be considered similar or reduced; however, the engineered fill pad would be consistent with the graded building pads and industrial character of the surrounding area. The project has a short duration, approximately 4-6 months, after which time the equipment would be removed and the site would be revegetated with erosion control grasses. A simulation of the project from this viewpoint is provided in Figure 6, “Centennial Remedial Action Simulation—Viewpoint 4.” The visual impact to views from Centennial Drive associated with the project would be less than significant.

Conclusion:

Less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Analysis:

State Route (SR) 20-49 is a state scenic highway with a brief view of the project. No historic buildings or rock outcroppings would be removed. A limited number of trees and shrubs would be removed. As evaluated in Viewpoint 1 and 2 in the analysis above, because views would be brief and broken up by foreground trees within an area already surrounded by industrial uses, the changes on-site would comply with the site’s zoning for industrial use, and the project duration is brief, the potential for substantial damage to scenic resources within a state scenic highway would be less than significant.

Conclusion:

Less than significant.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis:

As discussed above, views of the site are partially obstructed by existing vegetation and industrial and commercial land uses. In addition, the project has a short duration, approximately 4-6 months, after which time the equipment would be removed and the site would be revegetated with erosion control grasses. This impact would be less than significant.

Conclusion:

Less than significant.

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Impact Analysis:

All work at the project site would be done during daylight hours and would not include the addition of substantial reflective surfaces that would affect the surrounding area; therefore, the potential for the project to create a new source of substantial light or glare that would adversely affect day or nighttime views in the area would be less than significant.

Conclusion:

Less than significant.

REFERENCES USED:

Caltrans. 2018. *Scenic Highways. Available*: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed July 8, 2020.

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

2. AGRICULTURE AND FORESTRY RESOURCES				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☒	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

California Land Conservation Act (Williamson Act)

The California Land Conservation Act (Williamson Act) serves to preserve open spaces and agricultural land. The specific land uses allowed on agricultural lands under Williamson Act contract are regulated by each contract and by state law (Government Code §51200 et seq.).

Farmland Mapping and Monitoring Program

The California Department of Conservation, Division of Land Resources Protection, operates the Farmland Mapping and Monitoring Program (FMMP). Government Code §65570 mandates FMMP to biennially report to the Legislature on the conversion of farmland and grazing land, and to provide maps and data to local government and the public.

FMMP farmland categories are based on local soil characteristics and irrigation status. Farmlands are classified according to soil factors, including available water holding capacity, temperature regime, acidity, depth to the water table, electrical conductivity, flooding potential, erosion hazard, permeability, rock content, and rooting depth. The FMMP categories are comprised of prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, grazing land, urban and built-up land, and other land. Only Prime Farmland, Unique Farmland, or Farmland of Statewide Importance are considered Important Farmland.

Z'berg-Nejedly Forest Practice Act of 1973

The Z'berg-Nejedly Forest Practice Act (FPA) of 1973 is the primary forest regulation statute in California and is generally referred to as the FPA. The FPA provides for a State Board of Forestry to manage forest practices and resources, and the board developed Forest Practice rules to implement the FPA. The California Department of Forestry and Fire Protection (Calfire) enforces the requirements of the FPA, and serves as lead agency for projects which fall within the scope of the FPA. If timber operations (as defined by Public Resources Code [PRC] Section 4527) are part of a project (or affected by a project), these operations must be approved by Calfire.

Public Resources Code §4526

California PRC §4526 defines forest land as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

California Government Code §51104(g)

California Government Code §51104(g) defines "Timberland production zone" or "TPZ" as "an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h)."

Environmental Setting (Baseline):

As shown in Figure 7, "Existing Conditions Aerial Photograph," most of the site is open space. The terrain is typical of the lower Sierra Nevada foothills, varying between flat ridges and valleys to gently and moderately sloping hillsides. The site includes densely vegetated areas interspersed with past disturbance (from historical mining and from the industrial structures and wood and metal materials left by the previous owner of the site) visible from the corner of Idaho Maryland Road and Centennial Drive. The main stem of Wolf Creek, a perennial stream, generally runs parallel to and immediately south of Idaho Maryland Road along the northern boundary of the site.

Table 8, "Land Use and Zoning Designations," provides the County General Plan (Nevada County 2014) and zoning land use designations for each parcel within the project site. All parcels are designated Industrial in the County's general plan. See Figure 8, "General Plan Designations." As shown in Table 8 and Figure 9, "Zoning," the project site is zoned Light Industrial.

TABLE 8
LAND USE AND ZONING DESIGNATIONS

Parcel Number	Acreage	General Plan Designation	Zoning
009-550-032	0.48	Industrial (IND)	Light Industrial (M1)
009-550-037	4.47	Industrial (IND)	Light Industrial (M1)
009-550-038	40.1	Industrial (IND)	Light Industrial (M1)
009-550-039	0.98	Industrial (IND)	Light Industrial (M1)
009-550-040	0.13	Industrial (IND)	Light Industrial (M1)
009-560-036	10.25	Industrial (IND)	Light Industrial (M1)

The project area has been classified by the FMMP of the State Department of Conservation as "Other" and "Urban and Built Up" (CDC 2020).

The California Department of Conservation (DOC) Farmland Mapping and Monitoring Program rates the project site as "Urban and Built Up" and "Other" lands. In addition, the property is not subject to a Williamson Act contract.

The project area is not designated or zoned for timberland production or other forestry related uses and is not in a designated Timberland Production Zone. Therefore, the site does not meet the definition for timberland provided in PRC Section 4526, "Z'berg-Nejedly Forest Practice Act of 1973".

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact Analysis:

The project area does not include Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project area has been classified by the FMMP of the State Department of California as “Other” and “Urban and Built Up,” both of which are not considered important farmland categories (CDC 2020). Therefore, the proposed project would not result in conversion of farmland.

Conclusion:

No Impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Impact Analysis:

The site is zoned Light Industrial. The project area’s zoning designation would not change under the proposed project. Therefore, implementation of the proposed project would not conflict with the existing zoning for an agricultural use.

The project area is not subject to a Williamson Act contract; therefore, there would be no impact related to conflicts with a Williamson Act contract.

Conclusion:

No Impact.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Impact Analysis:

No forestland (as defined in PRC Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)) are located on the project site. Therefore, no conflict with zoning for forest land, timberland, or timberland production would occur.

Conclusion:

No Impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Impact Analysis:

As discussed above, the site is not considered forest land, timberland, or timberland zoned therefore the project will not result in the loss of forest land or conversion of forest land to a non-forest use.

Conclusion:

No Impact.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses?

Impact Analysis:

As discussed above, the site is zoned light industrial and does not support agricultural uses. The site is not near or adjacent to agricultural uses. The project will not result in the conversion of farmland to a non-agricultural use.

Conclusion:

No Impact.

References Used:

DOC (California Department of Conservation). 2020. *Farmland Mapping and Monitoring Program, California Important Farmland Finder*. Available: https://www.conservation.ca.gov/dlrp/fmmp. Accessed July 2020.

Nevada County. 2020. *Williamson Act Parcel Maps*. Available: https://www.mynevadacounty.com/717/Williamson-Act-Parcel-Maps. Accessed July 2020.

3. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Federal Regulations

- Clean Air Act (1970)—The Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.
- Hazardous Air Pollutants—The 1977 federal Clean Air Act amendments required EPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals.

State Regulations

- California Clean Air Act—the Federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The NAAQS and CAAQS are presented in Table 9, “Ambient Air Quality Standards.”
- Air Toxics Program—the California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a In 1987, the Legislature enacted the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

TABLE 9
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	***Primary***[c,d]	***Secondary***[c,e]
O_3	1 hour	0.09 ppm (180 µg/m^3)	—	Same as primary standard[f]
	8 hours	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	
CO	1 hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	None
	8 hours	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m^3)
	24 hours	0.04 ppm (105 µg/m^3)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m^3	150 µg/m^3	Same as primary standard
	Annual arithmetic mean	20 µg/m^3	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m^3	Same as primary standard
	Annual arithmetic mean	12 µg/m^3	12.0 µg/m^3	15.0 µg/m^3
Lead[j,k]	30-day average	1.5 µg/m^3	—	—
	Calendar quarter	—	1.5 µg/m^3 (for certain areas)[k]	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m^3	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m^3)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m^3)	—	—
Sulfates	24- hours	25 µg/m^3	—	—
Visibility Reducing Particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	--	--

Source: CARB 2016.

Notes: O_3 = ozone; ppm = parts per million by volume; µg/m^3 = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m^3= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; PST = Pacific Standard Time.

a. California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility- reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
b. National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For PM 2.5, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
c. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
d. National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
e. National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
f. On October 1, 2015, the national 8-hour O 3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.
g. To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
h. On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]

each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

i. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour PM 2.5 standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

j. CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

k. The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Local Regulations

- Northern Sierra Air Quality Management District (NSAQMD)—The NSAQMD is the primary agency responsible for planning to meet federal and state ambient air quality standards in Nevada, Plumas, and Sierra Counties. The NSAQMD develops rules and regulations for stationary sources and equipment, prepares emissions inventories and air quality management planning documents, and conducts source testing and inspections. NSAQMD rules and regulations applicable to the project include the following:
  - Rule 205 Nuisance: This rule prohibits discharge of air contaminants or other material from any source that cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or to the public, or that endanger the comfort, repose, health, or safety of any such persons, or the public, or that cause to have natural tendency to cause injury or damage to business or property.
  - Rule 207 Particulate Matter: This rule prohibits the release or discharge of particulate matter emissions in excess of 0.1 grains per cubic foot of dry exhaust gas as standards conditions into the atmosphere from any source or single processing unit, exclusive of sources emitting combustion contaminants only.
  - Rule 226 Dust Control: This rule requires the submittal of a Dust Control Plan to the NSAQMD for approval prior to any surface disturbance, including clearing of vegetation.
  - Rule 227 Cutback and Emulsified Asphalt Paving Materials: This rule restricts the discharge of VOCs caused by the use or manufacture of Cutback or Emulsified asphalts for paving, road construction, or road maintenance, unless such manufacture or use complies with the provisions of the rule.
  - Rule 904 Asbestos Airborne Toxic Control Measure Asbestos-Containing-Serpentine: This rule incorporates by reference Title 17, Section 93106, of the California Code of Regulations (CCR) in its entirety.

- Nevada County General Plan—The County General Plan's Air Quality Element (Nevada County 1995) describe the following goals, objectives, and policies that pertain to the project:

  Goal 14.1: Attain, maintain, and ensure high air quality.

  Objective 14.1: Establish land use patterns that minimize impacts on air quality.

  Policy 14.1: Cooperate with the NSAQMD during review of development proposals. As part of the site plan review process, require applicants of all subdivisions, multi-family, commercial and industrial development projects to address cumulative and long-term air quality impacts, and request the NSAQMD enforce appropriate land use regulations to reduce air pollution.

  Objective 14.2: Implement standards that minimize impacts on and/or restore air quality.

  Policy 14.3: Where it is determined necessary to reduce short-term and long-term cumulative impact, the County shall require all new discretionary projects to offset any pollutant increases. Wherever possible, such offsets shall benefit lower-income housing.

  Policy 14.4: Encourage and cooperate with the NSAQMD, or any successor agency, to:

  D. Develop a program to regulate and control fugitive dust emissions from construction projects.

  Policy 14.5: Encourage and cooperate with the NSAQMD, or any successor agency, to develop and implement a long-term monitoring program to quantify air quality in the County. The County shall work with the District to identify areas for monitoring and to develop an implementation program to begin on-site monitoring upon project application where a proposal will result in an increase of more than 25 tons per year of nonattainment pollutants (or precursors). The County will also cooperate with the District in

developing a monitoring program for CO emissions at key intersections as a basis for consideration of short to long-term air quality in the preparation of the County Road Improvement Program.

Policy 14.6: For new construction, the County shall prohibit the installation of non-EPA certified and non- EPA exempt solid fuel burning devices.

Policy 14.7A: The County shall, as part of its development review process, ensure that proposed discretionary developments address the requirements of NSAQMD Rule 226.

Policy 14.7B: The County shall, as part of its Road Improvement Program, consider the benefits to air quality from the paving of unpaved roads.

Environmental Setting (Baseline):

The project site is located within the Mountain Counties Air Basin (MCAB). The MCAB includes portions of Amador, Calaveras, El Dorado, Mariposa, Nevada, Placer, Plumas, Sierra, and Tuolumne Counties and is composed of seven air districts. Nevada, Plumas, and Sierra Counties are part of the NSAQMD.

The following description of meteorological and topographical characteristics of Nevada County is from Nevada County's General Plan Air Quality Element (Nevada County 1995):

Nevada County exhibits large variations in terrain and consequently exhibits large variations in climate, both of which affect air quality. The western portions of the County slope relatively gradually with deep river canyons running from southwest to northeast towards the crest of the Sierra Nevada Range. East of the divide, the slope of the Sierra is steeper, but river canyons are relatively shallow. The warmest areas within the County are found at the lower elevations along the west side of the County, while the coldest average temperatures are found at the highest elevations.

The prevailing wind direction over the County is westerly. However, the terrain of the area has a great influence on local winds, so that wide variability in wind direction can be expected. Afternoon winds are generally channeled up-canyon, while nighttime winds generally flow down-canyon. Winds are, in general, stronger in spring and summer and lower in fall and winter. Periods of calm winds and clear skies in fall and winter often result in strong, ground-based inversions forming in mountain valleys. These layers of very stable air restrict the dispersal of pollutants, trapping these pollutants near the ground, representing the worst conditions for local air pollution occurring in the County.

The western portion of the County is currently designated by the EPA as a "Moderate" nonattainment area for the federal 8-hour O3 standard (EPA 2018b). However, the NSAQMD prepared and submitted the Ozone Attainment Plan Western Nevada County—State Implementation Plan for the 2008 Primary Federal 8-Hour Ozone Standard of 0.075 ppm (Ozone Attainment Plan) (NSAQMD 2018) to the EPA to request voluntary reclassification as a "Serious" nonattainment area, and revise the attainment date to December 31, 2021. Additionally, CARB has designated the County as a nonattainment area for the state O3 and PM10 standards (CARB 2019g). The County is designated as unclassified or attainment by the EPA and CARB for all other criteria air pollutants.

Applicable Thresholds of Significance:

The NSAQMD has developed a tiered approach to significance levels; a project with emissions qualifying it for Level A thresholds (i.e., all projects with emissions greater than zero) should require the most basic mitigation. Projects that qualify for Level B should require more extensive mitigation, and projects that qualify for Level C should require the most extensive application of mitigation. The tiered thresholds for Levels A, B, and C are given in Table 10, "Northern Sierra Air Quality Management District Emission Significance Thresholds," for a project's estimated emissions of criteria pollutants in pounds per day. The emissions-based thresholds for O_3 precursors are intended to serve as a surrogate for an "O_3 significance threshold" (i.e., the potential for adverse O_3 impacts to occur). This approach is used because O_3 is not emitted directly.

TABLE 10
NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT EMISSION SIGNIFICANCE THRESHOLDS

Threshold Level	ROG	NO_x	PM_{10}
	Pounds per Day		
Level A Thresholds	<24	<24	<79
Level B Thresholds	24–136	24–136	79–136
Level C Thresholds	>136	>136	>136

Environmental Studies Performed and Methodology:

DUDEK. 2020 (February). *Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Idaho-Maryland Mine Project. Sacramento*, CA. Prepared for Rise Grass Valley Inc., Grass Valley, CA.

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis:

The general criteria for determining if a project would conflict with or obstruct implementation of an Ozone Attainment Plan are (1) whether the project would exceed the NSAQMD CEQA thresholds of significance for O_3 precursors (ROG and NO_x) and could delay the timely attainment of the ambient air quality standards or interim emission reductions of the Ozone Attainment Plan, and/or (2) whether the project would result in demographic growth that would exceed the forecasts included in the Ozone Attainment Plan.

The project would not result in regional growth that is not accounted for within the Ozone Attainment Plan (NSAQMD 2018). However, per the NSAQMD, unmitigated project-generated criteria air pollutant emissions that are greater than zero (i.e., at Levels A, B, or C) are potentially significant and require mitigation. The NSAQMD has established numeric thresholds for ROG, NO_x, and PM_{10}. As presented in Threshold AQ-2, after implementation of Mitigation Measures AQ-1 and AQ-2, emissions of ROG, NO_x, and PM_{10} would be considered less than significant and would not conflict or obstruct implementation of the Ozone Attainment Plan.

Conclusion:

Less Than Significant

b) Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact Analysis:

Net Increase of Criteria Air Pollutants

Construction emissions estimated below are based on initial construction of the Idaho-Maryland Mine Project as analyzed in the Dudek *Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Idaho-Maryland Mine Project* (2020) included as Appendix F. Construction of this project was assumed to take approximately 12 months and would include substantially more equipment, vehicle trips, and surface disturbance to complete. The IMM project also included the construction of buildings and paving on internal roads that is not proposed as part of this project. A detailed list of assumptions is provided in section 2.4 of Appendix F. Table 11, "Maximum Daily Project Emissions—Unmitigated," below, shows the estimated daily unmitigated emissions associated with construction of this project.

TABLE 11
MAXIMUM DAILY PROJECT EMISSIONS—UNMITIGATED

Source	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Year 2021—Construction/Dewatering						
Off-Road Equipment[a]	6.71	53.84	50.83	0.10	2.30	2.15
On-Road Vehicles[b]	1.53	5.22	10.85	0.04	3.40	0.98
Diesel Fuel Tanks—Breathing/Working	0.12	—	—	—	—	—
Earthwork – Disturbed Areas/Material Handling[b]	—	—	—	—	1.43	0.21
Architectural Coatings	2.64	—	—	—	—	—
Asphalt Off-Gassing	0.38	—	—	—	—	—
Maximum Total Daily Emissions	11.38	59.06	61.68	0.13	7.13	3.34
NSAQMD Significance Threshold Level[c]	Level A (<24)	Level B (24-136)	N/A	N/A	Level A (<79)	N/A

Source	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Year 2021—Construction/Dewatering						
Significant (Yes/No or Potentially)?[d]	Potentially	Potentially	No	No	Potentially	No

Source: Appendix F

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; NA = not applicable; NSAQMD = Northern Sierra Air Quality Management District.

a. Accounts for APM-AQ-1 (Exhaust Emission Controls), including Tier 4 Final equipment owned by Rise Grass Valley Inc..

b. For APM-AQ-2 (Fugitive Dust Controls), a control efficiency of 55% was included when calculating the emissions of PM_{10} and $PM_{2.5}$ during grading and fill spreading to account for water truck fugitive dust control. Also, all on-site roads were assumed to be paved.

c The NSAQMD Threshold Levels are shown in Table 10.

d Significance is based on Table 10 thresholds. For Level A or B criteria, emissions are considered potentially significant and trigger mitigation. If the emissions exceed the Level C threshold, they are considered significant and require greater mitigation. After incorporation of feasible mitigation, emissions at Level A or B would be less than significant, and emissions at Level C (i.e., >136 pounds per day) would be significant and unavoidable.

The proposed project would occur over a 4-6-month period, require fewer pieces of equipment, employees, and surface disturbance. In addition, this project would not generate emissions from Diesel Fuel Tanks (Breathing/Working), Architectural Coatings, and Asphalt Off-Gassing and fuel would not be stored onsite and no buildings or pave roads are proposed. As a result, the emission estimates for the IMM project, and summarized in Table 11 above, are very conservative when used as emissions estimates for this project. To be conservative, the impact analysis for this clean-up project assumes the emissions and associated impacts presented in Table 11 above for the construction portion of the Idaho-Maryland Mine Project would be similar to the proposed project. As a result, during construction, daily unmitigated emissions of ROG, NO_x, and PM_{10} could be potentially significant (Level A or B) according to the NSAQMD significance criteria; therefore, mitigation is required. The NSAQMD does not have significance criteria for SO_2, CO, or $PM_{2.5}$. According to NSAQMD guidance, emissions exceeding the Level A significance threshold would contribute to existing nonattainment conditions and may also interfere with the region's ability to maintain ambient air quality standards if no mitigation is implemented. Per the NSAQMD, implementation of recommended mitigation measures for Level A and B thresholds would reduce project impacts from potentially significant to less than significant. Thus, ROG, NOx, and PM_{10} would be at either Level A or B and would be less than significant during project construction after mitigation.

Health Effects of Criteria Air Pollutants

ROG and NO_x are precursors to O_3, for which the MCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of ROG and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the MCAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the ROG emissions would occur because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to reliably and meaningfully assess this impact. Thus, a project's ROG and NOx emissions are evaluated in the context of the NSAQMD significance thresholds, which define the levels of emissions that can occur without causing or contributing to violations of the NAAQS or CAAQS. In turn, the NAAQS and CAAQS define the pollutant concentrations above which adverse health effects are expected to occur. Nonetheless, because ROG and NOx emissions associated with project construction would be potentially significant before mitigation, the project could minimally contribute to regional O_3 concentrations and the associated health effects.

Health effects that result from NO_x (including NO_2) include respiratory irritation. NO_x emissions from project construction would be at Level B. Construction of the project is not anticipated to contribute to exceedances of the NAAQS or CAAQS for NO_2 because the MCAB is designated as in attainment of the NAAQS and CAAQS for NO_2, and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards.

CO tends to be a localized impact associated with congested intersections. The project would result in minimal new traffic trips and would not exceed the CO screening criteria resulting in the formation of potential CO hotspots. Thus, the project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction of the project would result in PM_{10} emissions at NSAQMD threshold Level A, which would be considered potentially significant before mitigation. As such, the project would potentially contribute to exceedances of the CAAQS for PM_{10}, and would potentially obstruct the MCAB from coming into attainment for these pollutants.

The project would be required to comply with NSAQMD Rule 207, Particulate Matter, and Rule 226, Dust Control, and would implement APM-AQ-2, Fugitive Dust Controls, which would limit the amount of dust generated during construction and operation. In addition, Appendix C includes a draft DMP for project activities.

Notably, as detailed in Appendix F, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, such as the disconnect between mass emissions and concentrations due to secondary pollutant (such as O_3) generation and pollutant transport, as well as the inaccuracy of applying regional and population-wide models to a local level in order to estimate health effects, and there are currently no modeling tools endorsed by an expert agency (i.e., NSAQMD) that could provide reliable and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects.

Mitigation Measures

AQ-1: Mitigations for Use During Construction. The following measures are from the NSAQMD and are based on the significance threshold level of emissions.

For all Significance Level Thresholds (A, B, and C)

a. Alternatives to open burning of vegetative material shall be used unless deemed infeasible by the NSAQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel.
b. Grid power shall be used (as opposed to diesel generators) for job site power needs where feasible during construction.

Additional Measures for Classification as Level B Threshold

c. All controls discussed above (a and b) shall be implemented.
d. Temporary traffic control such as flagmen, barricades, land closures, and signage, shall be provided during all phases of the construction to improve traffic flow as deemed appropriate by the local transportation agencies and/or the California Department of Transportation.
e. Construction activities shall be scheduled to direct traffic flow to off-peak hours as much as practicable.

AQ-2: Construction Exhaust Emissions Minimization Plan. Rise or its designee shall submit a Construction Exhaust Emissions Minimization Plan to DTSC or its designated representative for review and approval. The Construction Exhaust Emissions Minimization Plan shall detail project compliance with the following requirements:

- Where access to alternative sources of power and alternative-fueled equipment are available, portable diesel engines shall be prohibited.
- All diesel-powered equipment with engines equal to or greater than 50 horsepower (hp) shall be powered by CARB certified Tier 4 Final engines. If 50 hp or greater engines that comply with Tier 4 Final emissions standards are not commercially available, then the project applicant shall ensure that all diesel-powered equipment equal to or greater than 25 hp will have at least CARB-certified Tier 3 engines with the most effective Verified Diesel Emission Control Strategies available for the engine type, such as Level 3 Diesel Particulate Filters (Tier 4 engines automatically meet this requirement).
  - For purposes of this mitigation measure, “commercially available” shall mean the availability of the Tier 4 Final equipment, taking into consideration factors such as critical path timing of construction and geographic proximity of the equipment location to the project site.
  - The project applicant shall maintain and submit records to Nevada County concerning its efforts to comply with this requirement.

Conclusion:

Table 12, “Maximum Daily Project Emissions—Mitigated,” shows the estimated maximum daily mitigated emissions associated with construction of the project, accounting for additional emissions reductions associated with AQ-2, which would result in a reduction in construction equipment exhaust criteria air pollutants during project construction. No additional reductions could be quantified for MM-AQ-1, which are the NSAQMD recommended mitigation measures that are applicable to the project (NSAQMD 2019a).

TABLE 12
MAXIMUM DAILY PROJECT EMISSIONS—MITIGATED

Source	ROG	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Year 2021—Construction/Dewatering						
Off-Road Equipment[a]	3.25	15.97	54.08	0.10	0.60	0.60
On-Road Vehicles[b]	1.53	5.22	10.85	0.04	3.40	0.98
Diesel Fuel Tanks – Breathing/Working	0.12	—	—	—	—	—
Earthwork – Disturbed Areas/Material Handling[b]	—	—	—	—	1.43	0.21
Architectural Coatings	2.64	—	—	—	—	—
Asphalt Off-Gassing	0.38	—	—	—	—	—
Maximum Total Daily Emissions	7.92	21.19	64.94	0.13	5.44	1.79
NSAQMD Significance Threshold Level[c]	Level A (<24)	Level A (<24)	N/A	N/A	Level A (<79)	N/A
Significant (Yes/No or Potentially)?[d]	No	No	No	No	No	No

Source: Appendix F
Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; NA = not applicable; NSAQMD = Northern Sierra Air Quality Management District.
a. Accounts for APM-AQ-1 (Exhaust Emission Controls), including Tier 4 Final equipment owned by Rise Grass Valley Inc..
b. For APM-AQ-2 (Fugitive Dust Controls), a control efficiency of 55% was included when calculating the emissions of PM_{10} and $PM_{2.5}$ during grading and fill spreading to account for water truck fugitive dust control.
c The NSAQMD Threshold Levels are shown in Table 10.
d Significance is based on Table 10 thresholds. For Level A or B criteria, emissions are considered potentially significant and trigger mitigation. If the emissions exceed the Level C threshold, they are considered significant and require greater mitigation. After incorporation of feasible mitigation, emissions at Level A or B would be less than significant, and emissions at Level C (i.e., >136 pounds per day) would be significant and unavoidable.

As discussed above, the proposed project would occur over a 4-6 month period, require fewer pieces of equipment, employees, and surface disturbance, and would not have emissions associated with Diesel Fuel Tanks (Breathing/Working), Architectural Coatings, and Asphalt Off-Gassing as compared to the IMM construction. To be conservative, the impact analysis for this clean-up project assumes the emissions and associated impacts presented in Table 11, and mitigated impacts provided in Table 12 above, for the construction portion of the Idaho-Maryland Mine Project would be similar to the proposed project. As shown in Table 12, after mitigation, this impact is less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis:

Project construction and operation activities would produce TAC emissions due to mobile equipment movement and soil excavation, stabilization, and placement. These emissions could minimally elevated concentrations of TAC emissions at nearby receptors for a short 4-6-month period, which could lead to a short-term increase in the risk of cancer or other health impacts. Similar to the criteria pollutant analysis above, assuming similar construction levels as the Idaho-Maryland Mine project, potential cancer risk, as well as chronic and acute health risks would be less than significant without mitigation. However, implementation of AQ-2 would further reduce health risk. Also, since asbestos was found in lab samples from the IMM from which these tailing were generated, an Asbestos Dust Mitigation Plan (ADMP) (AQ-3) would be required to limit potential exposure.

In regards to localized CO hotspots, the project would result in a minimal addition of on-road vehicles at proximate intersections. This impact would be less than significant without mitigation.

Mitigation Measures

AQ-3: Asbestos Dust Mitigation Plan. The Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (Title 17 of CCR Section 93105) contains specific requirements for the preparation of an ADMP. Rise Grass Valley Inc. shall submit an ADMP for NSAQMD approval before any clearing, grading, or construction begins, and the provisions of the ADMP must be initiated at the beginning of the project (before clearing or grubbing) and maintained for the duration of the project. Conditions of the ADMP shall include the following:

- Provisions of this ADMP shall apply throughout construction activities, except as specified otherwise.
- All visible track-out material (from vehicles leaving the work site) must be removed from all public roads at least once per day using wet sweeping or a HEPA-filter-equipped vacuum device.
- A gravel pad designed and maintained to effectively clean tires of exiting vehicles, a wheel wash system, or a minimum of 50 feet of pavement must be placed between the construction area and any public road, and must be used by all exiting vehicles (including personal vehicles and delivery trucks) throughout the duration of the project.
- All active storage piles shall be adequately wetted or covered with plastic to ensure that no visible dust crosses the property boundary. Potential dust emissions from disturbed surface areas and storage piles that will remain inactive for more than 7 days shall be controlled to completely prevent visible dust from crossing the property boundary by at least one of the following methods (per (e)(4)(C) of the ATCM):
  - Keeping the surface adequately wetted.
  - Applying chemical dust suppressants or chemical stabilizers according to the manufacturer's recommendations and all applicable regulations.
  - Covering with tarp(s) or vegetative cover.
  - Installing wind barriers of 50% porosity around three sides of all storage piles.
- Installing wind barriers across open areas and between the project site and any adjacent occupied residential or business property.
- The maximum vehicle speed on all unpaved parts of the project site must be clearly posted and must not exceed 15 miles per hour.
- All areas where vehicles drive on the site, at all times when the area is subjected to vehicle or equipment traffic, shall be watered every 2 hours or kept adequately wetted to prevent visible dust emissions from leaving the property boundary, except where a gravel cover has been established that has a silt content of less than 5% and an asbestos content of less than 0.25% and is at least 3 inches thick.

Conclusion:

Less than Significant After Mitigation

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis:

Land uses and industrial operations that typically are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, solid waste transfer stations, rendering plants, dairies, and fiberglass molding. The project does not propose the aforementioned odor-generating land uses and would not result in odors that would adversely affect a substantial number of people. This impact would be less than significant.

Conclusion:

No Impact.

References Used:

Nevada County. 1995. *Nevada County General Plan Chapter 14, Air Quality Element*. https://www.mynevadacounty.com/DocumentCenter/View/12586/Chapter-14-Air-Quality-1995-PDF.

NSAQMD (Northern Sierra Air Quality Management District). 2018. *Ozone Attainment Plan Western Nevada County – State Implementation Plan for the 2008 Primary Federal 8-Hour Ozone Standard of 0.075 ppm*. Proposed for Adoption October 22, 2018.

NSAQMD. 2019a. *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects*. Draft Revised August 2019.

4. BIOLOGICAL RESOURCES				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

The following provides a list of various federal, state, and local laws and policies regulating biological resources, special status species, and waters and wetlands:

Federal

- Section 401 and 404 of the Clean Water Act
- Endangered Species Act of 1973
- Bald and Golden Eagle Protection Act
- Migratory Bird Treaty Act

State

- California Endangered Species Act
- Streambed Alteration Agreements: California Department of Fish and Game (CDFG) Code Section 1600 et seq.
- Porter-Cologne Water Quality Control Act & Section 1601 and Section 1607 of CDFG Code
- State Water Resources Control Board Wetland Policy (April 2019)
- California Department of Fish and Game (CDFG) Code Sections 3503, 3503.5, and 3800: Nesting Migratory Bird and Raptors
- California Special Species of Concern, Fully Protected, and Special Status Species
- CEQA Guidelines Section 15380
- PRC Section 21083.4

Local

- Nevada County Land Use and Development Code, Chapter II; Zoning Regulations, Section L-II 4.3.18 for Trees
- Nevada County Land Use and Development Code, Chapter II; Zoning Regulations, Section L-II 4.3 17C.3 (Ordinance Number 2033)
- Nevada County Land Use and Development Code, Section L-II 4.3.12
- Nevada County General Plan, Chapter 13: Wildlife and Vegetation

Environmental Setting (Baseline):

Setting

Vegetation communities within the site are typical of the lower Sierra Nevada foothills. However, the terrain within the site is not typical of the lower Sierra Nevada foothills that normally vary between flat ridges and valleys to gently and moderately sloping hillsides. Site elevation ranges from approximately 2,500 to 2,600 feet above mean sea level (msl) and much of the site has been impacted due to historical mining and lumber mill practices, which has included the placement of large amounts of mine tailings within the site and the removal of vegetation, among other disturbances. The site is located along the main stem of Wolf Creek and the interior of the site is dominated by mixed hardwood-conifer forests, with areas of montane riparian woodland, mixed chaparral, mixed wetland types, and annual grassland.

The site includes a perennial stream, the main stem of Wolf Creek. The main stem of Wolf Creek generally runs parallel to and immediately south of Idaho Maryland Road along the northern boundary of the site. In addition, the site contains several ephemeral and intermittent streams that connect with the main stem of Wolf Creek within the northwestern section of the site. The drainages and streams located within the site are described in the Aquatic Resources Delineation Report (Greg Matuzak Environmental Consulting LLC, 2019). Drainage patterns within the site drain to the main stem of Wolf Creek located along the northern boundary of the site.

Vegetation Communities

Table 13, "Site Vegetation Communities, Mapped Acreages, and Associated Special Status Species," provides a list of the vegetation communities and associated acreages within the site. Figure 10, "Vegetation Communities," illustrates the location of the onsite vegetation communities. A full description of the vegetation communities can be found on Appendix G, "Technical Memorandum for Centennial Industrial Site: Remedial Action Plan Project – Biological Resources Impact Assessment."

Special Status Species

Special-status species were considered for the site based on a current review of the CNDDB and database information provided by the United States Fish and Wildlife Service and California Native Plant Society for the site as well as the reconnaissance-level biological surveys as outlined in Appendix G. Table 13 below includes the vegetation communities identified within the site as well as the potential special-status species that could occur within each of the vegetation communities mapped within the site. See Figure 10 for a map of the vegetation communities within the site.

TABLE 13
SITE VEGETATION COMMUNITIES, MAPPED ACREAGES, AND ASSOCIATED SPECIAL STATUS SPECIES

Vegetation Community	Mapped Acreages (Acres)	Associated Special-Status Species
Montane Hardwood-Conifer	5.29	Brandegee's clarkia (Rank 4.2), Dubious pea (Rank 3), Cedar Crest popcorn flower (Rank 3), Chaparral sedge (Rank 1B.2), Red Hills soaproot (Rank 1B.2), Sierra blue grass (Rank 1B.3), Cantelow's lewisia (Rank 1B.2), Sierra brodiaea (Rank 4.3), Humboldt lily (Rank 4.2), Butte County fritillary (Rank 3.2) Cooper's hawk and other nesting raptors and migratory birds (CDFW)
Montane Hardwood	0.48	Dubious pea (Rank 3), Brandegee's clarkia (Rank 1B.2), Cedar Crest popcorn flower (Rank 3), Chaparral sedge (Rank 1B.2), Red Hills soaproot (Rank 1B.2), Sierra blue grass (Rank 1B.3), Cantelow's lewisia (Rank 1B.2), Sierra brodiaea (Rank 4.3), Humboldt lily (Rank 4.2), Butte County fritillary (Rank 3.2) Cooper's hawk and other nesting raptors and migratory birds (CDFW)
Wolf Creek and Montane Riparian	20.07	Sierra blue grass (Rank 1B.3) Foothill yellow-legged frog (CSC), Western pond turtle (CSC), nesting migratory birds (CDFW)
Mixed Chaparral	16.24	Pinehill flannelbush (FE/CR), Stebbins' morning glory (FE/CE), Brandegee's clarkia

Vegetation Community	Mapped Acreages (Acres)	Associated Special-Status Species
		(Rank 4.2), finger rush (Rank 1B.1), Chaparral sedge (Rank 1B.2), Cantelow's lewisia (Rank 1B.2), Red Hills soaproot (Rank 1B.2), Sierra brodiaea (Rank 4.3), Humboldt lily (Rank 4.2), Butte County fritillary (Rank 3.2) Coast horned lizard (CSC), nesting migratory birds (CDFW)
Annual Grassland	9.74	Cedar Crest popcorn flower (Rank 3) and Brownish beaked-rush (Rank 2B.2)
Freshwater Emergent Marsh Wetland	0.58	Scadden Flat checkerbloom (FT/CT) and Brownish beaked-rush (Rank 2B.2) California red-legged frog (FT, CSC), Western pond turtle (CSC), and California black rail (CT)
Wet Meadow	4.01	Brownish beaked-rush (Rank 2B.2) and finger rush (Rank 1B.1)
TOTAL	**56.41**	

In addition to the potential species above, surveys of the site in 2019 identified Pine Hill flannelbush (*Fremontodendron decumbens*), a species listed in the ESA. The species has been potentially identified and mapped within the southern portion of the site. Sixty individual mature and flowering plants occupy an absolute area of 0.22 acres over approximately 4.5 acres of the site.

Waters

A total of 4.97 acres of "waters of the U.S.," including wetlands, and "waters of the State of California" was identified and mapped within the site in 2019. The 4.97 acres of wetland-waters includes 4.37 acres of mapped wetlands and 0.60 acres of mapped "other waters of the U.S.," including the main stem of Wolf Creek, as well as several unnamed intermittent and ephemeral streams.

Applicable Thresholds of Significance:

See Appendix G criteria above.

Environmental Studies Performed and Methodology:

Greg Matuzak Environmental Consulting LLC. 2020 (June). *Technical Memorandum for the Centennial Industrial Site: Remedial Action Plan Project – Biological Resources Impact Assessment.* Grass Valley, California. Prepared for Rise Grass Valley Inc., Grass Valley, CA.

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or U.S. Fish and Wildlife Service (USFWA)?

Impact Analysis:

Special Status Plant Species

As discussed above, the Pine Hill flannelbush (*Fremontodendron decumbens*), a species listed on the ESA, has been potentially identified and mapped within the southern portion of the site. As shown on Figure 11, "Pine Hill flannelbush Locations," the project avoids disturbance to these areas of the site. As discussed above, the applicant has included requirements to install temporary fencing around identified plants to avoid potential inadvertent impact. No disturbance of areas occupied by the Pine Hill flannelbush will occur. Project impacts to special status plant species is considered less than significant.

Special Status Wildlife Species

***Townsend big-eared bat*:** The Townsend's big-eared bat has the potential to roost within the abandoned structures, such as the existing decant towers, within the project site. Some of these habitat areas will be removed or disturbed as a result of remedial activities, specifically surface disturbance related to site preparation activities (e.g., vegetation removal) and soil excavation, stabilization and placement. However, the species has not been documented and it has a low potential to occur within the site. Despite this low potential, mitigation measure Bio-1 requires preconstruction surveys prior to the disturbance of any structures onsite.

Bio-1: Prior to project activities within the Centennial Industrial Site and no more than seven (7) days prior to such disturbance, a pre-construction bat roosting survey should be conducted by a qualified biologist to identify

the presence or absence of roosting bats. If any Townsend's big-eared bats (or any other species of bat, including the hoary and pallid bat) are identified during roosting surveys, passive removal the roosting bats prior to project activities should be implemented to avoid impacts to this species. Passive removal includes allowing roosting bats to freely leave the roost site (riparian and forested woodlands and any structure). Once the roosting bats have been passively removed from the structure(s) and riparian and forested woodlands, the structure(s) would be closed off from recurring bat roosting within the structure and the proposed work within the structure(s) would no longer pose a risk to individuals of the species. For riparian and forested woodlands containing bat roosts, the removal of trees associated with such woodlands would only occur once the bats leave the day roosts. Furthermore, if a maternal (breeding) roost is documented, no disturbance will occur until the breeding roost has dispersed from the structure or riparian and forested woodlands they are found in.

Coast horned lizard: There is potential suitable habitat within the sandy and rocky locations within the site. Some of these habitat areas will be removed or disturbed as a result of remedial activities, specifically surface disturbance related to soil excavation, stabilization and placement. In addition, the site includes the required open areas of exposed, sandy soils for this species. Therefore, this species has a low potential to occur within the site though the species has not been identified within the site. Despite this low potential, mitigation measure Bio-2 requires preconstruction surveys prior to the disturbance of suitable habitat.

Bio-2: Prior to disturbance within the areas of the site that contain disturbed or developed surfaces and annual grassland vegetation community and no more than seven (7) days prior to such disturbance, a pre-construction survey for the species shall be conducted prior to any disturbance within those areas of the site in order to avoid direct impacts to the species. If the species is documented during preconstruction surveys, a qualified wildlife biologist (approved by CDFW) would have the authority to move individual coast horned lizards outside of the proposed disturbance area(s) in order to avoid an impact to this species. Once the coast horned lizard(s) have been removed from the disturbance area(s) and are out of harm's way, the proposed work would no longer pose a risk to individuals of the species.

Nest Raptors & CDFW Regulated Bird Species

The site contains many larger trees and many of those trees contain suitable habitat for nesting raptors. In addition, the site also includes smaller riparian trees and shrubs as well as grasslands that provide suitable nesting habitat for other protected bird species. The breeding season for raptors and other protected bird species in the vicinity of the site is generally from February 1 to August 31 but varies depending on the species and localized weather patterns. Project vegetation removal, including tree removal, could occur during the breeding season and impact nesting raptors and other protected bird species. In addition, smaller trees and shrubs that potentially provide habitat will be removed or disturbed as a result of remedial activities, specifically surface disturbance related to site preparation activities (e.g., vegetation removal) and soil excavation, stabilization and placement. As a result, this impact is considered potentially significant but can be reduced to a less than significant level with implementation of mitigation measure Bio-3.

Bio-3: Prior to vegetation clearing or tree removal that could disturb or remove occupied nests of raptors and/or protected bird species as defined by under the Federal Migratory Bird Treaty Act and CDFW Code sections 3503, 3503.5, 3800, and 3513 would require the implementation of a pre-construction survey by a qualified biologist within seven (7) days prior to disturbance. The nesting survey radius around the proposed disturbance would be a minimum of 500 feet for raptors and 200 feet for passerines based on the habitat type, habitat quality, and type of disturbance proposed within or adjacent to nesting habitat.

If any nesting raptors or protected birds are identified during the pre-construction surveys, trees or shrubs or grasslands with active nests would not be removed or disturbed and a no-disturbance buffer should be established around the nesting site to avoid disturbance or destruction of the nest site until after the breeding season or after a qualified wildlife biologist determines that the young have fledged, are feeding independently, and the birds are no longer dependent on the nest. The extent of these buffers would be determined by a qualified wildlife biologist and would depend on the species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed by a qualified wildlife biologist to make an appropriate decision on buffer distances based on the species and level of disturbance proposed in the vicinity of an active nest.

Special Status Aquatic Species

Foothill yellow-legged frog: Suitable habitat for this species occurs within the site (main stem of Wolf Creek); however, the species has a very low potential to occur within the site given the species has not been documented

within the site or the Wolf Creek watershed. The species was not found during any of the special status species surveys. The project will not result in the disturbance of Wolf Creek or within the riparian habitat zone or 100-year floodplain boundary. As outlined in the project description above, temporary construction fencing will be installed to prevent inadvertent disturbance within these areas of the site.

Bio-4: Any proposed disturbance within or immediately adjacent to the perennial stream (riparian zone) would require a pre-construction survey for the species prior to such proposed disturbance. The pre-construction survey shall be conducted to identify the presence or absence of this species following CDFW recommended Visual Encounter Survey (VES) methods and shall be implemented no more than fourteen (14 days) prior to any disturbance within and directly adjacent to the Wolf Creek (within the riparian zone).

If this species is documented during pre-construction VES method surveys (egg masses, juveniles, or adults), disturbance to the stream and species will be completely avoided given the species is listed as Threatened under CESA. If the species is documented during the pre-construction VES surveys, CDFW shall be contacted immediately. An Incidental Take Permit (ITP) may be obtained from CDFW as part of the development of conservation measures to ensure avoidance and minimization of potential impacts to any frogs identified within Wolf Creek. The ITP may allow a CDFW-approved qualified wildlife biologist to move individuals out of the disturbance areas to minimize impacting this species and/or other potential conservation measures to avoid and minimize impacts to the species.

***Western Pond Turtle*:** The main stem of Wolf Creek, a perennial stream, and the large marsh wetlands within the eastern section of the site containing perennial water/ponding are considered suitable habitat for this species. The species has not been documented within 5 miles of the site and has not been identified on the site by any of the species surveys, it therefore has a low potential to occur within the site. The project will result in the disturbance of the large marsh wetlands within the eastern section of the site. The project will not result in the disturbance of Wolf Creek or within the riparian habitat zone or the 100-year floodplain boundary. As outlined in the project description above, temporary construction fencing will be installed to prevent inadvertent disturbance within these areas of the site.

Bio-5: Any development within these perennial water sources or within 325 feet of these perennial water sources shall not be conducted during spring and early summer (March through July) to minimize any potential impacts to this species. If these perennial water sources can't be avoided from direct impacts or if these perennial water sources can't be avoided by a minimum of 325 feet during the spring and early summer months, a pre-construction survey shall be conducted to identify the presence or absence of this species within the areas to be disturbed no more than seven (7) days prior to the proposed disturbance within the species suitable habitat. If this species is documented during pre-construction surveys, it should be allowed to move out of the way of the disturbance zone on its own or a qualified wildlife biologist with a CDFW handling permit for the species can move individuals out of the disturbance areas to avoid impacting this species.

***California red-legged frog (CRLF)*:** Potential suitable reproductive habitat for this species may occur within the large marsh wetlands with perennial water/ponding in the eastern section of the site. It is unknown if there are suitable breeding locations within 1.25 miles of the site and connected by barrier-free dispersal habitat that is at least 300 feet in width, which would be required for suitable dispersal habitat to be located within the site. However, the species has not been documented within the site, it has not been documented in the watershed, and was not documented by the species surveys conducted. Therefore, this species has a very low potential to occur within the site. The project will result in the disturbance of the large marsh wetlands within the eastern section of the site. The project will not result in the disturbance of Wolf Creek or within the riparian habitat zone or the 100-year floodplain boundary. As outlined in the project description above, temporary fencing (e.g., silt fencing) will be installed that prevents both inadvertent disturbance and potential debris/sediment that may impact aquatic resources within these areas of the site.

Bio-6: Avoid disturbance within 100 meters of potential suitable reproductive habitat, including the larger marsh wetlands with perennial water/ponding within the eastern section of the site. If found on site, and avoidance of a minimum of 328 feet (100 meters) from suitable habitat for the species within the site is not feasible, then pre-construction surveys for CRLF shall be implemented to ensure that no CRLF are present during the proposed disturbance within the species suitable habitat. A qualified wildlife biologist approved by USFWS would be required to implement the preconstruction surveys. The *Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog* (USFWS Guidance, August 2005) should be implemented as part of the pre-construction surveys to avoid disturbance and take of the species. If no CRLF are identified during the pre-construction surveys, then the proposed disturbance within 328 feet (100 meters) of suitable breeding habitat for the species could occur with no further requirements.

If CRLF are identified during the pre-construction surveys, coordination and potential consultations with the USFWS would be required through an ESA Section 7 or Section 10 process. As part of the consultation process, specific avoidance, minimization, and mitigation measures would be required to be implemented, which could include, but may not be limited to the following: additional pre-construction surveys and daily monitoring to ensure that the proposed site disturbance will not disturb individual CRLF, vehicle restrictions, restrictions on work areas and disturbance activities, environmental awareness training to contractors working within or adjacent to CRLF habitat, and exclusionary fencing installation between CRLF aquatic habitat and disturbance areas. A list of potential CRLF avoidance and minimization measures that could be implemented if CRFL are identified onsite include:

- Exclusion Fencing - exclusion fencing could be installed around the project site and staging area. After installation of the fence barrier, the qualified biologist would inspect the fencing each morning prior to the commencement of activities. If the qualified biologist determines that sensitive species are not within the work area, equipment or materials may be moved onto the work site under the observation of the qualified biologist.
- Biologist Oversight - qualified biologists shall direct and inspect all vegetation, sediment removal, and dewatering activities.
- Vegetation Disposal - vegetation removed shall be placed directly into a disposal vehicle and removed from the site. Vegetation shall not be piled on the ground unless it is later transferred, piece by piece, under the direct supervision of the qualified biologist.
- Vehicle Restrictions - any vehicle parked on site for more than 15 minutes shall be inspected by the qualified biologist before it is moved to ensure that California red-legged frog have not moved under the vehicle. Any parking areas shall be checked in advance by the qualified biologist.
- Cease Activities - if California red-legged frog enters the work area, all work shall stop until the qualified biologist relocates the animal or it leaves on its own. Only the qualified biologist shall handle and relocate California red-legged frog. Any sightings and/or injuries of this species shall be immediately reported to CDFW.
- Daily Inspection - qualified biologist shall inspect the work area and areas adjacent to the work area that will support excavation equipment prior to mobilization of excavation equipment. If the qualified biologist determines the excavation work site does not occupy sensitive species, equipment may be moved onto the site under the observation of the qualified biologist.
- Relocation - prior to the onset of any project-related activities, the qualified biologist shall identify appropriate areas to receive California red-legged frog adults and tadpoles from the project areas. These areas shall be in proximity to the capture site, contain suitable habitat, not be affected by project activities, and be free of exotic predatory species (i.e., bullfrogs, crayfish) to the best of the approved biologist's knowledge. Translocation shall only be performed by the qualified biologist.
- Stop Work Authority - the qualified biologist shall have the authority to halt work activities that may affect California red-legged frog adults, tadpoles or egg masses until they can be moved out of harm's way.

***California black rail*:** Suitable habitat for this species occurs within the large marsh wetlands within the eastern section of the site where there is permanent ponding of water and dense vegetation. Some of these habitat areas will be removed or disturbed as a result of remedial activities, specifically surface disturbance related to site preparation activities (e.g., vegetation removal) and soil excavation, stabilization and placement. The species has not been documented within the site but has been identified within 5 miles to the southeast and southwest of the site. This species has a very low likelihood of occurring within the site.

Bio-7: Avoidance of the large, perennial marsh wetlands within the eastern section of the site would ensure that the species would not be impacted if present. If these perennial marsh wetlands cannot be avoided, pre-construction surveys for the species shall occur prior to the implementation of any such disturbance within or directly adjacent to the species habitat. The pre-construction surveys for this species shall occur no more than fourteen (14) days prior to any such disturbance within or directly adjacent to the species habitat. The pre-construction surveys would include conducting call back/response surveys. This species is most active between 2 hours before and 3 hours after sunrise; therefore, surveys should start at sunrise and continue no later than 0930. If evening surveys are to be conducted, they should be paired with a morning survey, and all sites should

have surveys conducted at both time periods. The preferred method for conducting surveys via the call-back/response protocol of Evens et al (1991). If a positive call back is identified during the surveys, then the species is assumed to be present and the area should be avoided from disturbance in order to avoid impacts to individuals of the species, if feasible.

Given the species is a CESA listed and fully protected species, coordination with CDFW shall occur if a positive response to the call-back/response surveys occurs and if any proposed disturbance may impact the species. Any area containing this species would likely need to be avoided in order to avoid impacts to and take of this species, if feasible, or additional mitigation measures would be required in coordination with CDFW to minimize and avoid impacts to such species. Additional avoidance measures could include, but may not be limited to the following: environmental awareness training, daily construction monitoring by a CDFW-approved qualified biologist when disturbance related activities occur within or directly adjacent to the species habitat, and exclusionary fencing installation between the species habitat and the proposed disturbance areas.. Areas with no positive response to the call-back/response surveys are assumed to not contain individuals of the species and therefore, disturbance in those areas would have no impact on this species.

Conclusion:

Less than Significant With Mitigation

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Impact Analysis:

As identified in Table 13 above, the project contains 20.07 acres of Wolf Creek and Montane Riparian habitat. Remedial activities avoid impacts to the main stem of Wolf Creek and riparian habitat zone, and the 100-year floodplain boundary. However, project surface disturbance would encroach within the County 100-foot non-disturbance buffer to Wolf Creek and several wetlands and intermittent and ephemeral streams. In addition, as described in the impact analysis above, the project has the potential to impact state or federally listed special status species. As a result, this impact is potential significant and would require a Management Plan to comply with County Land Use and Development Code, Chapter II; Zoning Regulations, Section L-II 4.3 17C.3 (Ordinance Number 2033) and 4.3.12.

Bio-8a: Prepare a site-specific Management Plan for project related impacts within non-disturbance buffers, including areas that are within 100 feet of the high-water mark of perennial streams, watercourses, and wetlands, 50 feet from the high-water mark of intermittent watercourses, and 100 feet upslope or 20 feet downslope from an NID canal. The Management Plan shall be prepared consistent with the Nevada County 2000. Land Use and Development Code, Chapter II: Zoning Regulations. Effective July 27, 2000 and approved by the County prior to any surface disturbance. If Management Plan approval is received prior to approval of responsible agency permits, the Management Plan shall be updated to reflect any inconsistencies between responsible agency permit requirements and the Management Plan. Modifications to the Management Plan shall be reviewed and approved by the County prior to surface disturbing activities.

Bio-8b: Prior to surface disturbance, prepare a site-specific Habitat Management Plan (HMP) for any state or federally listed special-status wildlife species if documented within the site. The HMP would be developed for the special-status species as part of compliance with the County Land Use and Development Code, Section L-II 4.3.12 and it would include the avoidance, minimization, and mitigation measures outlined above and as part of any coordination or consultation with responsible agencies. The Management Plan shall be approved by the County prior to any surface disturbance. If Management Plan approval is received prior to approval of responsible agency permits, the Management Plan shall be updated to reflect any inconsistencies between responsible agency permit requirements and the Management Plan. Modifications to the Management Plan shall be reviewed and approved by the County prior to surface disturbing activities.

Conclusion:

Less than Significant With Mitigation

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Analysis:

Clean Water Act Regulated "Waters of the U.S."

Each of the mapped wetland features and stream features included as part of the Centennial Industrial Site Aquatic Resources Delineation Report (Matuzak, 2019b) are assumed to fall under Corps jurisdiction pursuant to Section 404 of the CWA. The RWQCB pursuant to Section 401 of the CWA also has jurisdiction over areas subject to regulation by the Corps under Section 404 of the CWA. As detailed in the CWA, any proposed action that would place fill or dredge material within areas identified as Corps jurisdictional wetlands or waters would require a Department of the Army Section 404 permit and a RWQCB Section 401 Water Quality Certification, or waiver thereof, prior to the placement of fill or dredge material within such features. Fill or dredge impacts to any features regulated under Sections 404 and 401 of the CWA would be required to be mitigated at a minimum of a 1:1 ratio. Compensatory mitigation would be included as a Section 404 and Section 401 permit condition to be implemented prior to the placement of such dredge and fill material within a "waters of the U.S.," including wetlands, and would ensure no net loss of such features within the site.

The estimated maximum fill from the implementation of the project includes 4.35 acres of mapped wetlands and 0.19 acres of intermittent and ephemeral streams (see Table 3.0 and Table 4.0 in Appendix G). No proposed fill or dredge material will occur within the main stem of Wolf Creek (perennial stream) as part of the Project. This impact is considered potentially significant.

Bio-9: Applicant will obtain all required federal, state, and local resource agency permit approvals prior to beginning work within potentially jurisdictional waters and wetlands, and will comply with any specific conditions of those approvals. Permit approvals may include, but are not limited to, a Section 404 Permit from the Corps, a Section 401 Water Quality Certification from the RWQCB, and a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

Impacts to jurisdictional wetlands and non-wetland waters features typically require compensatory mitigation at a minimum 1:1 ratio on a functions and values basis ("no net loss"); however, the final wetland mitigation requirements are determined by the regulatory agencies during the permitting process. Required mitigation ratios can be met by creating wetlands on-site or off-site (may require a higher than 1:1 replacement to impacts ratio) or purchasing wetland credits (1:1 ratio) from a wetland mitigation bank.

CDFW Regulated Stream and Riparian Zones

Perennial, intermittent, and ephemeral streams within the site would likely fall under CDFW jurisdiction as these areas each contain a bed and bank. Any disturbance to the bed or bank of any stream, river, or lake as defined in CDFW code section 1602 may require a Streambed Alteration Agreement from the CDFW pursuant to Section 1600 et. seq. of the CDFW Code prior to construction, including any disturbance within the main stem of Wolf Creek or other mapped streams within the site.

The proposed Project disturbance within the site would cause an estimated direct, permanent impacts to 4.35 acres of mapped wetlands and 0.19 acres of direct, permanent impacts to mapped streams. Riparian zones, adjacent to impacted mapped intermittent and ephemeral streams within the site, will also be permanently impacted by the proposed project. Project impacts to the mapped streams will be permanent and there will be no temporary impacts requiring restoration. Except for the engineered fill contaminant area, the remaining areas of the site will be regraded to an elevation ranging between approximately 2,500 and 2,52 msl. These areas will be reseeded by either broadcast seeding or hydroseeding using an erosion control seed mix. No permanent structure or impedance will be created by grading activities that would limit wildlife movement within the site.

Specific to the main stem of Wolf Creek, no direct impacts to the perennial creek are proposed. In addition, surface disturbance will remain outside of the creek's riparian habitat zone and the 100-year floodplain boundary.

This impact is potentially significant and can be mitigated by **Bio-9,** above.

Conclusion:

Less than Significant After Mitigation

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact Analysis:

The Project is surrounded by industrial, commercial, and open space land uses. The proposed Project will result in the temporary (4-6 months) conversion of land. Protect construction activities do not involve the entire site therefore native residents, if using the property for movement, could use undisturbed portions during this short construction period. The project does not propose any permanent structures or facilities that would limit wildlife movement. Upon completion of the project, the land would be returned to a similar condition as today and could be used for wildlife movement.

Conclusion:

Less than Significant

e) Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis:

Compliance with the County Code will be required to obtain permits prior to project implementation. This will include compliance with tree removal requirements, preparation of management plans, and approval of various federal, state, and local regulatory permits as outlined in **BIO-8 and 9**, above.

Conclusion:

Less than Significant

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact Analysis:

The Project is not located within the plan area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and therefore would not have the potential to conflict with any such plans.

Conclusion:

Less than Significant

References Used:

Matuzak, Greg. 2019a. *Centennial Industrial Site Biological Resources Assessment* (Greg Matuzak Environmental Consulting LLC).

Matuzak, Greg. 2019b. *Centennial Industrial Site Aquatic Resources Delineation of Waters of the United States and State of California* (Greg Matuzak Environmental Consulting LLC).

5. CULTURAL RESOURCES				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

National Historic Preservation Act

Any project that is considered a federal undertaking is subject to compliance with Section 106 of National Historic Preservation Act (NHPA) (Section 106). Section 106 requires that, before beginning any undertaking, a federal agency must take into account the effects of the undertaking on *historic properties* and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on these actions (16 U.S.C. 470f).

California Environmental Quality Act

CEQA requires public agencies to evaluate the implications of their projects on the environment and includes *historical resources* and Tribal Cultural Resources as part of the environment. If a project results in significant adverse impacts on *historical resources* or Tribal Cultural Resources, the impact should be disclosed, and mitigation measures must be considered.

Environmental Setting (Baseline):

A records search was conducted for a larger project that includes this Project's APE on February 12, 2019, at the Northern Central Information Center of the California Historical Resources Information System, located at California State University, Sacramento (See Appendix H, "Historic Properties Inventory and Finding of Effect for the Remedial Action Plan Centennial M-1 Property.). The records search indicated that only one cultural resource, components of the Idaho-Maryland Mine (P-29-1447 (WEST), had been documented within the Project APE. The resource had not been previously assessed for eligibility for either the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP).

A comprehensive description of the site's prehistory, ethnography, and history is provided in Appendix H.

Applicable Thresholds of Significance:

Under Section 106 of NHPA, an adverse effect is found when an undertaking alters, directly or indirectly, any of the characteristics of a historic property (i.e., architectural, historic, or archaeological) that qualify the property for inclusion in NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, association, or its physical integrity.

Under CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of a historical resource is materially impaired when a project:

a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources;
b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Environmental Studies Performed and Methodology:

InContext. 2020 (July). *Historic Properties Inventory and Finding of Effect for the Remedial Action Plan Centennial M-1 Property*. Fair Oaks, California. Prepared for Rise Grass Valley, Grass Valley, California.

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact Analysis:

One cultural resource, the Idaho-Maryland Mine, has been identified within the project boundary. This comprehensive description is provided in Appendix H and summarized in Table 14, "Description and Thematic Associations of Extant Cultural Resources in the APE," below.

TABLE 14
DESCRIPTION AND THEMATIC ASSOCIATIONS OF EXTANT CULTURAL RESOURCES IN THE APE

Cultural Resource	Number	Description	Thematic Association
Idaho-Maryland Mine	P-29-1447	Structural remains recorded outside but adjacent to APE in 1983	Idaho- Maryland Mine
		Temp-001: Concrete towers, penstock, access road	
		Temp-005: Penstocks, ditch	
		Temp-010: Mining ditch and rock feature	
		Temp-012: Mining ditch	

The individual resource, the Idaho-Maryland Mine (P-29-1447)—is thematically associated with a number of nearby mines (New Brunswick and Union Hill) that were originally separate but became part of the Idaho-Maryland Mine. Because of this shared association, it is most appropriate to consider the Idaho-Maryland Mine as part of a potential NRHP-eligible historic district, all of the components of which have not yet been identified. It is beyond the scope of this study to document and evaluate all of the components that may compose the proposed district or delineate its boundaries; however, for the purposes of this undertaking, the Idaho-Maryland Mine Historic District is considered significant under all of the NRHP and CRHR criteria, as described below.

NRHP/CRHR A/1: The Idaho-Maryland Mine Historic District played a prominent role as one of the major lode mines in the District that operated from 1866 to 1956.

NRHP/CRHR B/2: The Idaho-Maryland Mine Historic District is associated with the Coleman brothers and with Errol MacBoyle, who made significant contributions to local history through their development of the Idaho-Maryland Mine, and MacBoyle's community projects.

NRHP/CRHR C/3: The Idaho-Maryland Mine Historic District embodies the distinctive characteristics of the hard-rock mining industry between 1866 and 1956 in the District through its extant underground workings, which also embody the distinctive construction method of the timbering support system. The Idaho-Maryland Mine Historic District also represents a significant and distinguishable entity whose components lack individual distinction (NRHP).

NRHP/CRHR D/4: The Idaho-Maryland Mine Historic District has the potential to yield information important to history of the local area, California, and the nation through its possible archaeological deposits associated with workers, who represent the working labor class of miners locally and of the industrial age nationally.

Having established the potential eligibility for the historic district as a whole, the specific components within the current project limits can now be evaluated to determine whether they are contributing elements of the larger property or they are individually eligible for listing under each criterion, which will depend on the ability for extant physical components of each cultural resource to convey the criterion of significance. This ability to convey significance rests on the resource's historic integrity, which is expressed as location, design, setting, materials, workmanship, feeling, and association (explained above).

The Idaho-Maryland Mine has been recorded as P-29-1447 with three major components. One is the eastern loci, situated east of Brunswick Road and primarily south of Lower Banner Road. The second is the western loci, just east of the Elm Ridge Cemetery. The third is the Idaho- Maryland Ditch, which passes through both the eastern and western loci. Resources within APE are associated with newly recorded features of the western loci of P-29-1447.

Four components of P-29-1447 were identified within APE, all part of what is referred to herein as the western locus. These four components consist of the following resources: two concrete towers 30 and 40 feet tall, a section of 4-foot-diameter riveted pipe, two 1-foot-diameter pipe segments, four discontinuous segments of earthen ditch, and an earthen pile of unknown function. All but the two concrete towers and earthen pile are fragmentary remains of water conveyance features that no longer retain integrity of design, materials, or workmanship. The two concrete towers are of twentieth-century construction and appear at this location on the 1949 USGS map of the area.

Regarding Criterion A/1, these features are associated with the latest phase of work at the Idaho-Maryland Mine, however they are currently in serious disrepair and are spatially removed from what few features remain at the Mine. As such, they are unable to convey their association with the mine and thus do not meet the threshold of importance for eligibility under this criterion.

Regarding Criterion B/2, while Coleman brothers and Errol MacBoyle were important figures in the history of the Idaho-Maryland Mine as a whole, these specific locales are everyday features that do not possess any distinctive elements that could convey their importance to meet the strict and specific requirements for eligibility under this criterion.

Regarding Criterion C/3, the concrete towers are the only distinguishable entity remaining, however they are commonplace among mining locales and thus do not represent unique engineering achievements. The ditches and penstock are commonplace, and their historical alignments have been so impacted by modern land use that their connection to the larger workings can no longer be discerned.

Regarding Criterion D/4, research questions regarding mining and miners have been extensively explored, as documented in the California Department of Transportation (Caltrans) 2008 thematic study on mining sites in California (Caltrans 2008). The current four features, and the entire 28-acre project locale, do not contain information bearing deposits that have the potential to address important research questions.

In sum, none of the newly recorded components are recommended eligible for listing in NRHP or CRHR under any criterion, either individually or as contributing elements to a larger historic district.

Conclusion:

Less than Significant

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact Analysis:

See above.

Conclusion:

Less than Significant

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis:

Subsurface conditions observed during remedial activities may differ from those on which the cultural assessment is based. Therefore, it is recommended that an Unanticipated Discovery Plan (UDP) be implemented to help protect any cultural resources that may be inadvertently uncovered during construction. Employees, contractors, and subcontractors shall be informed of the UDP and contact information should be provided for officials to be notified if known or suspected cultural resources are encountered during construction. Typically, contacted officials include site owners, project managers, and an identified archaeological consultant. Contact information for the state coroner would also be included in the unlikely event human remains are encountered during project activities. Appendix B includes the UDP for the project.

Conclusion:

Less than Significant.

References Used:

InContext. 2020 (July). *Historic Properties Inventory and Finding of Effect for the Remedial Action Plan Centennial M-1 Property*. Fair Oaks, California. Prepared for Rise Grass Valley, Grass Valley, California.

6. ENERGY				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Nevada County Energy Action Plan (2019)

Environmental Setting (Baseline):

The project site does not currently support uses utilizing energy resources including renewable energy.

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Result in potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis:

The project includes the use of diesel-powered mobile equipment to conduct remedial actions at the site. Project equipment will not be supported by line power. Mobile equipment operation will comply with all applicable air quality regulations (e.g. limiting idling time) to reduce waste of fuels.

Conclusion:

No impact

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis:

The County adopted an Energy Action Plan in February 2019, which includes goals to accelerate energy efficiency, renewable energy, and water efficiency projects by residents, businesses, and public agencies. The document focuses on three energy use sectors within the community—residential, non-residential and municipal (which is a subset of non-residential). The report only evaluates energy consumed by buildings and municipal operations; other energy consuming sectors such as transportation, solid waste, etc. are not addressed. As stated above, the project includes the use of diesel-powered mobile equipment to conduct remedial actions at the site. Project equipment will not be supported by line power and no permanent structures or facilities are proposed.

Conclusion:

No impact

References Used:

Nevada County. 2019. *Nevada County Energy Action Plan*. Adopted February 12, 2019. https://files.constantcontact.com/7649fea7001/0d90164c-614a-44f1-a0d1-26cbc2a4c866.pdf. Accessed July 2020.

7. GEOLOGY AND SOILS				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Alquist-Priolo Earthquake Fault Zone Act

The State Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) of 1972 was passed to mitigate the hazards associated with surface faulting in California. Administered by the DOC, the A-P Act prevents construction of buildings used for human occupancy on the surface traces of active faults. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults.

Seismic Hazards Mapping Act

The 1990 Seismic Hazards Mapping Act and related regulations establish a statewide minimum public safety standard for mitigation of earthquake hazards. The purpose of this Act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure as well as other hazards caused by earthquakes. The Act provides the minimum level of mitigation needed to reduce the risk of a building collapse. Under this Act, the lead agency can withhold permits until geologic investigations are conducted and mitigation measures are incorporated into building plans. In addition, the Act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability. The program and actions mandated by this Act closely resemble those of the A-P Act by requiring:

- The State Geologist to delineate various “seismic hazard zones”; and
- Cities, counties, and/or other local permitting authority to regulate certain development “projects” within these zones by withholding the development permits for a site until the geologic and soil conditions are investigated and appropriate mitigation measures (if required) are incorporated into development plans.

California Building Code

The California Building Code (CBC), known as Title 24, CCR, Part 2, specifies the acceptable design and construction requirements associated with various facilities or structures. These codes are administered and updated by the California Building Standards Commission. This Code specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in the State. The CBC augments the UBC and provides information for

specific changes to various sections in it. The seismic building requirements under the CBC are more stringent than the federal UBC.

Environmental Setting (Baseline):

Geologic Conditions

According to Saucedo and Wagner (1981), the site location is underlain by gabbro and ultramafic rocks associated with the Lake Combie complex. Tuminas (1983) depicts the western quarter of the site location as being underlain by ultramafic rocks and the remainder of the site location as underlain by gabbro. Johnston (1939) depicts the western and northern edges of the site location underlain by gabbro and the remainder underlain by diabase and porphyrite.

Engeo (2017) describes the geologic formations beneath the site as Mesozoic and Paleozoic rocks of an ophiolitic melange assemblage, and describes geologic mapping of rock types at the site as andesite pyroclastic rock, ultramafic rock, massive diabase, diorite, and gabbroic rock. According to the Engeo (2017) exploration and geologic data reviewed, the rocks have been slightly metamorphosed at low or medium grade.

The Grass Valley Fault system is mapped to the southwest of the site, and the Idaho Fault is mapped to the north of the site. Engeo (2017) reports that northwest-trending lineaments of the Grass Valley fault system were mapped by IMMC representatives in the southwest portion of the site. The Grass Valley Fault is not considered active.

Soil Conditions

According to the Soil Survey of Nevada County Area, California (United States Department of Agriculture Soil Conservation Service and Forest Service, 1975), soil conditions near the southern site boundary are mapped as Secca-Rock outcrop complex, which is described as moderately well-drained soil underlain by metabasic or basic rock. According to the soil survey, weathered rock is typically encountered at a depth of approximately four feet below the ground surface in areas mapped as Secca-Rock outcrop complex, and rock outcrop typically comprises 10 to 40 percent of the mapped area. The Soil Survey maps the remainder of the site as mined land, although the Soil Survey incorrectly maps the hardrock tailings as placer tailings.

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Impact Analysis:

The project is not within a Seismic Hazard Zone (CGS 2019). As discussed above, the closest fault systems are the Grass Valley Fault system mapped to the southwest of the site, and the Idaho Fault mapped to the north of the site. The Grass Valley Fault is not considered active. The proposed project does not include the construction of permanent or temporary structures or facilities. The project includes the construction of an engineered fill pile that shall meet specific design requirements outlined in the project description above. In addition, at the completion of the project, the site will be returned to open space on private lands limiting potential exposure to the public.

Conclusion:

Less than Significant

ii) Strong seismic ground shaking?

Impact Analysis:

See above.

Conclusion:

Less than Significant

iii) Seismic-related ground failure, including liquefaction?

Impact Analysis:

The project includes the construction of an engineered fill pile that shall meet specific design requirements outlined in the project description above. The design parameters specify moisture content, density and compaction, and require monitoring by a California licensed engineer during construction. Implementation of these design and monitoring requirements make the potential for seismic ground failure, including liquefaction, less than significant.

Conclusion:

Less than Significant

iv) Landslides?

Impact Analysis:

See above.

Conclusion:

Less than Significant

b) Result in substantial soil erosion or the loss of topsoil?

Impact Analysis:

This site was historically used for disposal of mine waste (tailings and waste rock) from a former underground hardrock (lode) gold mine, the Idaho Maryland Mine. Mine waste is present on approximately two-thirds of the site. Therefore, little to no topsoil exists.

Removal of the contaminated soil and construction of the engineered fill pile will result in large areas of disturbed land that could erode during storm events. Sections 7.6 and 7.7 of the RAP outline best management practices to be implemented to reduce the potential chance of sediment discharge. After excavation, verification that RAOs have been achieved, and consultation with DTSC, the excavation areas will be re-graded to promote drainage, and erosion controls will be installed. Where appropriate, site restoration activities will include broadcasting seed, fertilizer and straw within the excavation footprint for erosion control measures. Fiber wattles and/or silt fencing will be placed along the perimeter of the down slope sides of the disturbed areas pursuant to the design drawings and the Stormwater Pollution Prevention Plan (SWPPP). Finally, an Operation & Maintenance Agreement will incorporate monitoring and reporting requirements that shall require monitoring for potential erosion and specify procedures in the event erosion is identified.

Conclusion:

Less than Significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Impact Analysis:

The project is not located on a geologic unit or soil that is unstable. The project includes the construction of an engineered fill pile that meeting specific design requirements outlined in the project description above.

Conclusion:

Less than Significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis:

The project site is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994). As discussed above, the project does not include the construction of permanent or temporary structures or facilities. The project includes the construction of an engineered fill pile that shall meet specific design requirements outlined in the

project description above. In addition, at the completion of the project the site will be returned to open space on private lands limiting potential exposure to the public.

Conclusion:

No impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact Analysis:

Septic tanks and alternative wastewater disposal systems are not proposed as part of this project.

Conclusion:

No impact.

f) Directly or indirectly destroy a unique paleontological resources or site unique feature?

Impact Analysis:

The site has been historically disturbed as a result of previous disposal of mine waste (tailings and waste rock) from a former underground hardrock (lode) gold mine, the Idaho Maryland Mine. The project will remove and relocate these waste materials to an engineered stockpile. As a result, disturbance on previously undisturbed resources will be limited and won't impact paleontological resources.

Conclusion:

No impact.

References Used:

California Department of Conservation, California Geologic Survey. 1997. *Special Publication 42, Fault Rupture Hazard Zones in* California.

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

NV5. 2019. *Geotechnical Engineering Report, Idaho Maryland Gold Project – Brunswick Industrial Site*. Nevada City, California.

8. GREENHOUSE GAS EMISSIONS				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

The following provides a list of various federal, state, and local laws and policies guiding greenhouse gas regulation and reductions.

Federal

- Energy Independence and Security Act of 2007
- Federal Vehicle Standards

State

- Executive Orders S-3-05, B-18-12, B-30-15, B-55-18, and ES-1-07
- Assembly Bill 32, 197, 1493
- Senate Bill 32, 375, 605, and 1383
- California Air Resources Board Climate Change Scoping Plan
- California Air Resources Board Regulations for the Mandatory Reporting of Greenhouse Gas Emissions
- California Air Resources Board Heavy Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025

Local

- The NSAQMD has not adopted specific guidance or thresholds applicable to the analysis of a project's contribution to greenhouse gas (GHG) emissions or associated climate change effects.

Environmental Setting (Baseline):

Global climate change is primarily considered a cumulative impact, but must also be evaluated on a project level under CEQA. A project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHG emissions. GHGs are gases that absorb infrared radiation in the atmosphere. Principal GHGs regulated under state and federal law and regulations include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). GHG emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e), which accounts for weighted global warming potential factors for CH_4 and N_2O.

No official GHG inventory has been completed for the County.

Applicable Thresholds of Significance:

At this time, neither the NSAQMD nor the County has adopted numerical thresholds of significance for GHG emissions that would apply to the project. The NSAQMD, however, recommends that all projects subject to CEQA review be considered in the context of GHG emissions and climate change impacts, and that CEQA documents include a quantification of GHG emissions from all project sources, as well as minimize and mitigate GHG emissions as feasible (NSAQMD 2019b). The project would generate GHG emissions through short-term construction activities.

Environmental Studies Performed and Methodology:

DUDEK. 2020 (February). *Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Idaho-Maryland Mine Project. Sacramento*, CA. Prepared for Rise Grass Valley Inc., Grass Valley, CA.

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis:

Construction GHG emissions estimated in this analysis are based on initial construction of the Idaho-Maryland Mine Project as analyzed in the Dudek *Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Idaho-Maryland Mine Project* (2020) included as Appendix F. Construction of the Idaho-Maryland Mine project was assumed to take approximately 12 months and would include substantially more equipment, vehicle trips, and surface disturbance as compared to the proposed project. A detailed list of assumptions is provided in section 2.4 of Appendix F.

The proposed project would occur over a 4-6 month period, require fewer pieces of equipment, employees, and surface disturbance, and would not have emissions associated with emergency generators, on-road vehicles, and PG&E supplied electricity. As a result, GHG emissions are estimated to be approximately 1,077.25 as a result of off-road equipment operation. Because no threshold has been adopted and the temporary nature of the emissions this impact is considered less than significant.

Conclusion:

Less than Significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis:

The County adopted an Energy Action Plan in February 2019, which includes goals to accelerate energy efficiency, renewable energy, and water efficiency projects by residents, businesses, and public agencies. However, the Energy Action Plan is not a Qualified GHG Emissions Reduction Plan under CEQA per the requirements outlined in the CEQA Guidelines, Section 15183.5(D); therefore, no CEQA document can tier from the County Energy Action Plan. As such, there are no mandatory GHG plans, policies, or regulations that would apply to implementation of the project. Nonetheless, the project would comply with the applicable strategies of the Energy Action Plan, as well as the growth assumptions included in the 2015–2035 Nevada County Regional Transportation Plan. In addition, to the extent these regulations are applicable to the project, the project would comply with all applicable regulations adopted in furtherance of the California Air Resources Board's Climate Change Scoping Plan and subsequent updates to the extent required by law. As such, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and this impact would be less than significant; no mitigation is required.

Conclusion:

Less than Significant.

References Used:

CARB. 2008. *Climate Change Scoping Plan: A Framework for Change*. December 2008. https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.

CARB. 2014. *First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006*. May 2014. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

CARB. 2019j. *California Greenhouse Gas Emissions for 2000 to 2017*. https://ww2.arb.ca.gov/ghg-inventory-data.

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

NSAQMD. 2019a. *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects.* Draft Revised August 2019.

9. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

The RAP (NV5, 2020) is one of two remedy selection documents that may be prepared for a hazardous substance release site pursuant to Section 25356.1 of the California Health and Safety Code (HSC). A RAP was chosen over a Removal Action Work Plan because the cost of the recommended remedial action is projected to be greater than the threshold cost of two million dollars.

The remedial action outlined in the RAP is to be conducted in a manner consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP; Title 40 Code of Federal Regulations [40 CFR] 300.400 et seq). The NCP requires the use of an Engineering Evaluation/Cost Analysis (EE/CA) or equivalent. The RAP is to serve as the equivalent of an EE/CA.

Section 25356.1 of the HSC outlines public participation requirements for the RAP. Requirements include the preparation of a community profile report to determine public interest in the remedial action, notice of the RAP in a newspaper of general circulation, provision of a minimum 30-day public comment period, and preparation of a responsiveness summary.

Pursuant to Section 25356.1.5 of the HSC, the proposed remedial action shall be based upon, and be no less stringent than:

- Requirements established under federal regulation pursuant to Subpart E of the NCP (40 CFR 300.400 et seq), as amended, which pertains to remedial action and selection of remedial alternatives;
- Regulations established pursuant to Division 7 (commencing with Section 13000) of the California Water Code, which pertains to state and regional water quality control;
- Applicable water quality control plans adopted pursuant to Section 13170 of the California Water Code;
- Article 3 (commencing with Section 13240) of Chapter 4 of Division 7 of the California Water Code, which pertains to water quality control plans and waste discharge requirements;

- Applicable state policies for water quality control adopted pursuant to Article 3 (commencing with Section 13140) of Chapter 3 of Division 7 of the California Water Code, to the extent that those policies are consistent with the federal regulations;
- Applicable provisions of the California HSC, to the extent those provisions are consistent with the federal regulations; and
- The risk assessment findings presented in the PEA (NV5, 2020).

The NCP requires compliance with ARARs during remedial actions to the extent practicable. ARARs include federal, state, and local environmental laws, regulations, and standards that can be chemical-specific, location-specific, or action specific. Chemical-specific ARARs are health-based or environmentally-based numerical limits pertaining to the amount of a contaminant released to the environment or allowed to remain in the environment as a result of the proposed remedial activity. Location-specific ARARs may restrict remedial action if the proposed action is located in an environmentally sensitive or historically significant area. Action-specific ARARs may restrict remedial action based on the specific remedial action and/or byproducts of the remedial action. The ARARs listed below pertain to hazardous materials and are further described in the RAP (NV5, 2020).

- Resource Conservation and Recovery Act Subtitle C, contained in 40 CFR, pertains to the characterization of hazardous waste;
- CCR Title 22, Division 4.5 sets forth standards for characterization and management of hazardous waste;
- CCR Title 27 Section 22480 establishes groups of mining waste;
- The California Water Code (CWC) governs the characterization of waste for disposal to land. CWC Division 7 establishes priorities for protection of water quality;
- CARB Regulation 93105 applies to disturbance of soil and rock that contain ultramafic rock, serpentinite or naturally occurring asbestos minerals;
- NSAQMD Rule 226 requires that a dust control plan be prepared for construction activity disturbing over one acre of land; and
- Pursuant to the National Pollutant Discharge Elimination System (NPDES), coverage under the Construction General Permit (Order No. 2009-0009-DWQ) issued by the SWRCB must be obtained to address discharges of storm water runoff form construction projects that encompass one acre or more in total acreage of soil disturbance

Environmental Setting (Baseline):

As described in the project description above, the site is identified on the Envirostor database (DTSC, 2019 Sept) as:

- Centennial M-1 Property, DTSC Site Code 102370. VCA Docket No. HSA-FY18/19-014 was executed for DTSC oversight of a Preliminary Endangerment Assessment (PEA; NV5, 2020) and this RAP.
- Portion of Idaho Maryland Mine Property, DTSC Site Code 101505. In 2007 the Idaho Maryland Mining Corporation (IMMC), who previously leased the site from the former site owners, submitted an application for DTSC oversight of the Idaho Maryland Mine Property, which included the site and surrounding properties comprising a total of 122 acres. This historical oversight agreement was not executed.

The USEPA Identification Number for the site is CAN000908495. According to the Envirostor database (DTSC, 2019 Sept), the site was identified as an abandoned mine in 1989.

The site is not currently listed in the SWRCB GeoTracker database (https://geotracker.waterboards.ca.gov).

Previous technical study of the property has identified contamination from historic disposal of mine wastes from adjacent gold mining operations that occurred from approximately 1863 to 1956. Site investigation has identified mill tailings, waste rock and affected soil at the site that contain lead, arsenic, mercury and other metals at concentrations exceeding background soil metals concentrations and regulatory benchmark concentrations.

Applicable Thresholds of Significance:

N/A

Environmental Studies Performed and Methodology:

Final Preliminary Endangerment Assessment, Centennial M-1 Property, Nevada County, California (NV5, 2020). The PEA presents the findings of site investigation and includes a risk assessment pursuant to DTSC guidelines.

Remedial Action Plan, Centennial M-1 Property, Nevada County, California (NV5, 2020), RAP methodology is described above under "Regulatory Setting."

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact Analysis:

As discussed in the project description above, this project proposes to remediate soil contamination that resulted from historical mine waste disposal. Remedial actions include both stabilization and on-site placement of excavated soil depending on the constituents of concern. Stabilization includes mixing Portland cement with certain contaminated soils in a designated consolidation area to prevent potential water quality impacts. Other contaminated soils that do not pose potential water quality impacts will be placed within the consolidation area as engineered fill. Diesel powered mobile equipment will be used to complete these activities.

The overall goal of the remedial actions outlined in the RAP is to reduce, to acceptable levels, the potential human health risk and water quality impacts associated with the environmental conditions identified at the site. The remedial action is intended to reduce the potential for routine contact with soil having elevated metals concentrations, and to reduce the potential for leaching and erosion. This will be accomplished by excavation, consolidation on-site at a designated location, capping with clean engineered fill, and establishment of land use controls.

The RAP includes a summary of previous technical study documenting soil contamination, provides detailed engineer design and procedures for stabilization and engineered fill. This includes the excavation and transport of contaminated soils from one area of the site to another. The soils will be placed in an engineered manner and capped with clean soil. Therefore, implementation of the RAP may temporarily increase the risk of exposure of soil contaminants to the public but, in the long-term, potential risk of exposure will be reduced.

Numerous health, safety, and environmental protection measures to limit the risk of exposure during excavation and placement of the contaminated soils will be a part of this effort. These tasks are briefly outlined in the RAP and will be finalized as part of the RDIP and include:

- Health & Safety Plan
- Dust Monitoring Plan
- Verification Sampling and Analysis Plan
- Groundwater Monitoring and Reporting Plan
- Operation and Maintenance Plan; and

In addition, a land use covenant will be required for the 5.6-acre consolidation area to limit future disturbance to the engineered fill pile, inform landowners, and prevent potential future exposure. As such, the Project will not create a significant hazard to the public or the environment through transport, use, or disposal of hazardous materials, and will actually reduce hazards by cleaning the site.

Conclusion:

Less than Significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis:

As discussed above, the RAP includes various plans to protect public and environmental health during the remediation project. The only hazardous material being introduced onsite is mobile equipment diesel fuels and lubricants. In the event of upset or accidental conditions, diesel fuels and lubricants will be clean-up consistent with applicable local, state, and federal laws including a site-specific Spill Prevention, Control, and Countermeasure Plan. This impact is less than significant.

Conclusion:

Less than Significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?

Impact Analysis:

The closest school is the Union Hill Elementary School approximately 1 mile south of the site.

Conclusion:

No impact.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis:

The project is not listed on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Conclusion:

No impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Impact Analysis:

The County Air Park is approximately 1.5 miles east of the project site. No structures or operations are proposed that would interfere with visibility for planes. In addition, the project is not a noise-sensitive use, would not pose a hazard to flight, and would not exceed the density requirements; therefore, the project would comply with the requirements of the Nevada County Airport Land Use Compatibility Plan for Zones D and E.

Conclusion:

No impact.

f) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Impact Analysis:

The project would be designed, constructed, and operated in compliance with the Occupational Safety and Health Administration requirements, including provision of an emergency action plan; the *Local Hazard Mitigation Plan*; zoning standards; the County building code; the health and safety code; Nevada County Consolidated Fire District rules; and other applicable federal, state, and County regulations.

Conclusion:

No impact.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact Analysis:

The site is located in a very high fire severity zone. All vegetation would be removed within the disturbance area prior to excavation of contaminated soil. Project activities are then limited to excavation and placement of contaminated soil using diesel powered mobile equipment. Upon completion of excavation and construction of the engineered fill area the site would be seeded with erosion control grasses. Because the site will result in the removal of significant vegetation, including large shrubs and trees, it is likely the potential fire danger will be reduced. The project would comply with the requirements of the applicable County fire prevention programs.

Conclusion:

Less than Significant.

References Used:

California Office of the State Fire Marshall. 2007. *Nevada County Fire Hazard Severity Zones in SRA*. Approved in November 7, 2007.

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

Nevada County. 2011. *Nevada County and Nevada Operational Area Emergency Operations Plan*. Approved in June 28, 2011.

10. HYDROLOGY AND WATER QUALITY				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☒	☐	☐
(i) result in substantial erosion or siltation on- or off-site;	☐	☒	☐	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☒	☐	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☒	☐	☐
(iv) impede or redirect flood flows?	☐	☒	☐	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Federal:

- Water Pollution Control Act (33 U.S.C. 1251 et seq.)
- Safe Water Drinking Water Act of 1974

State:

- Porter-Cologne Water Quality Control Act
- Central Valley Regional Water Quality Control Board
- Sustainable Groundwater Management Act (SGMA) of 2014

Environmental Setting (Baseline):

The project site is located within the Upper Wolf Creek watershed. The average water-year rainfall is 52.81 inches. The maximum water year rainfall was 95.93 inches in 2017 and the minimum water year rainfall was 18.48 inches in 1977.

Wolf Creek flows through the northern portion of the site. Much of the flow within Wolf Creek is due to releases of water by Nevada Irrigation District (NID) from the DS Canal at the DS Canal Wolf Creek Release, located near the southwest end of Success Cross Road (NID, 2013). The NID Phase II Raw Water Master Plan (RWMP; NID, 2013) indicates that the average annual release of water from the DS Canal into Wolf Creek in 2007 was about 35 cubic feet per second (cfs) and is projected to increase to over 50 cfs by 2032.

Groundwater occurs within the near surface Quaternary and Tertiary deposits and in fractured bedrock at and near the project site. According to the California Department of Water Resources (DWR) SGMA Basin Prioritization Dashboard (DWR, 2019), there are no alluvial groundwater basins in the vicinity of the Project site. The nearest groundwater basin is the South Yuba portion of the Sacramento Valley groundwater basin (DWR Basin No. 5-21.61), located more than 15 miles west of the City. The groundwater surface generally mimics the topography, but with the depth to water being somewhat greater along ridges and near drainage divides and somewhat shallower at lower elevations and near drainages. Thus,

groundwater tends to flow from the ridge areas down toward the main drainages, such that the surface topography of the watersheds also defines individual groundwater flow zones within the fractured bedrock aquifer system. The primary source of recharge is percolation of local rainfall.

This site was historically used for disposal of mine waste (tailings and waste rock) from the former IMM gold mine. Mine waste is present on approximately two-thirds of the site. Site investigation has identified mill tailings, waste rock, and affected soil at the site that contain lead, arsenic, mercury and other metals at concentrations exceeding background soil metals concentrations and regulatory benchmark concentrations. As a result, as evidenced in water quality testing, onsite surface waters contain constituents above acceptable regulatory standards that can infiltrate groundwater and surface waters (i.e. Wolf Creek.)

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project beyond the CEQA Appendix G criteria provided above.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact Analysis:

As discussed above and in the project description, the site currently contains soil contamination that results in surface waters with constituents above acceptable regulatory standards that infiltrate groundwater and surface waters (i.e. Wolf Creek.) This project proposes to excavate, stabilize, and consolidate these contaminated soils in an engineered fill area on the eastern end of the site. The contaminated soils would be capped with 4 feet of inert fill. Following completion of the construction, disturbed areas would be revegetated with erosion control grasses. The consolidation, stabilization, and capping of the contaminated soils will limit the potential for further surface and groundwater contamination by preventing surface water contact with contaminated soils resulting in improved site water quality. The RAP requires post remediation reports and monitoring that will document and confirm surface and groundwater quality.

Construction work at the site would result in disturbance of more than 1 acre of land. Thus, compliance with the SWRCB general permit to discharge storm water associated with construction activity is required. The general permit is known as the SWRCB, Order No. 2009-0009-DWQ (as amended by Orders 2010-0014-DWQ and 2012-006-DWQ), NPDES General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (Construction General Permit). Rise would be required to submit a Notice of Intent (NOI) for coverage under the Construction General Permit and prepare a construction Stormwater Pollution Prevention Plan (C-SWPPP).

The C-SWPPP would need to address any Project-related activities that have the potential to release pollutants, including sediment, in stormwater, such as:

- Excavation work;
- Material stockpiling;
- Waste and soil screening;
- Loading and hauling of materials; and
- Winterization of incomplete activities.

The C-SWPPP must identify the Best Management Practices (BMP)s that would be implemented during construction and the final closure fieldwork to ensure that polluted stormwater runoff does not leave the site. The C-SWPPP would also need to include a monitoring program to document the effectiveness of the BMPs. Compliance with the C-SWPPP and implementation of the BMPs will prevent degradation of surface water quality during construction activities.

Typical BMPs for erosion and sediment control include the preservation of existing vegetation outside of the planned areas of disturbance, the application of seed, mulch and tackifiers after soil disturbance, the installation of fiber rolls and silt fences to reduce erosion and sediment transport, the construction of storm water routing systems such as V-ditches, check dams and surface water diversion berms, and the construction of sediment traps and sediment basins to allow

for storm water retention prior to leaving the site. Routine monitoring is performed as part of as part of the C-SWPPP to verify that the BMPs are adequately controlling erosion and preserving the quality of storm water runoff, and BMPs are added and modified as needed based on the monitoring results.

Conclusion:

Less than Significant

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin?

Impact Analysis:

The Project site is not located within a groundwater basin that has been identified by DWR, and the nearest groundwater basin is located more than 15 miles to the west. Thus, the Project could not impede sustainable groundwater management within a groundwater basin, since no such basin exists in the Project vicinity.

Conclusion:

No impact.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on or off-site;

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site;

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) impede or redirect flood flows?

Impact Analysis:

The project would not alter the course of a stream or river that would substantially increase erosion, increase surface runoff, or alter flood flows. In addition, the project does not add impervious surfaces. As discussed in Section 4, Biological Resources, Impact (c), project construction will impact 0.19 acres of intermittent and ephemeral streams. Mitigation Measure Bio-9 is required to mitigate this impact. The limited disturbance to these features would not substantially site drainage or flows. No proposed fill or dredge material will occur within the main stem of Wolf Creek (perennial stream) as part of the Project. The engineered fill area would be located on the eastern portion of the site and would be graded to minimize runoff. Excavation areas would be graded to drain towards a stormwater conveyance channel that drains into an existing drainage culvert and discharge point into Wolf Creek. The stormwater conveyance channel is located over 100-feet from Wolf Creek and outside the 100-year floodplain. The project does not propose to modify the existing drainage culvert and discharge point. The stormwater conveyance channel would be constructed in accordance with County hydrology and hydraulics standards to convey the runoff from up to a 100-year storm event without causing erosion or siltation. This impact could be potentially significant without mitigation. Haz-1 requires Rise to submit and receive approval for a grading plan to the County. After mitigation, this impact is less than significant.

The Project would not discharge water to existing or planned drainage systems. Placement and grading of materials to create the usable industrial areas would occur outside of any flood hazard zones.

> **Haz-1:** Grading Plan. The applicant shall prepare a grading plan consistent with County requirements for review and approval by the County before remediation related surface disturbing activities begin. The grading plan shall be prepared by a California licensed professional.

Conclusion:

Less than Significant After Mitigation.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis:

Due to its distance from the ocean or any other large enclosed bodies of water, the Project is not located in an area that would be subject to tsunamis or seiches.

As shown on Figure 12, “FEMA Floodplain,” the only part of the project site located within a Federal Emergency Management Agency (FEMA) flood hazard zone is the northern edge of the property. All proposed remedial work will occur outside the FEMA flood zone.

Conclusion:

Less than Significant

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis:

The current water quality control plan for the region is the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, which is also referred to as the Basin Plan (CVRWQCB, 2019). As discussed above, the project would be required to comply with the SWRCB general permit to discharge storm water associated with construction activity is required. These requirements ensure that the project would not conflict with or obstruct implementation of the Basin Plan.

As discussed above, the Project is not located in or near a DWR-designated groundwater basin. Therefore, there will be no sustainable groundwater management plans developed for groundwater in the Project area.

Conclusion:

Less than Significant

References Used:

Central Valley Water Quality Control Board (CVWQCB). (2019). *Basin Planning.* https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Department of Water Resources (DWR). (2003). *California’s Groundwater, Bulletin 118 – Update 2003*.

Department of Water Resources (DWR). (2019). *Sustainable Groundwater Management Act (SGMA) Basin Prioritization Dashboard.* https://gis.water.ca.gov/app/bp2018-dashboard/p1/

Department of Water Resources (DWR). (2020). *California Open Data Portal Well Completion Reports.* https://data.ca.gov/dataset/well-completion-reports

Federal Emergency Management Agency (FEMA). (2019). FEMA Flood Map Service Center. https://msc.fema.gov/portal/search?AddressQuery=Grass%20Valley%2C%20CA#

11. LAND USE AND PLANNING				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Nevada County General Plan (2014)

Nevada County Zoning Ordinance

Environmental Setting (Baseline):

The project site is in western unincorporated Nevada County, California. The site is adjacent to the Grass Valley city limits and within the City's near-term annexation timeline. The site accessed from Centennial Drive and Whispering Pines Lane (see Figure 7).

General Plan Designation:

Table 8, included in the Agriculture and Forestry resources section above, provides the County General Plan (Nevada County 2014) and zoning land use designations for each parcel within the project site. All parcels are designated Industrial in the County's general plan. See Figure 8.

Zoning:

As shown in Table 8 and Figure 9 the project site is zoned Light Industrial.

Surrounding Land Uses and Setting (i.e. Briefly describe the project's surroundings):

The project site is surrounded by undeveloped open space, industrial, and commercial uses (as shown in Figure 7). Table 6, above, provides a summary of the locations of the surrounding land uses and the receptors closest to the project site.

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Physically divide an established community?

Impact Analysis:

The proposed project would operate on land designated for industrial use. The project does not propose any new structures and facilities that would restrict access. In addition, the project would not affect access to the nearby roadways and would not change access to a nearby community from these roadways. Therefore, the project would not physically divide an established community.

Conclusion:

No Impact.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis:

This project proposes to excavate, stabilize, and consolidate contaminated soils in an engineered fill area on the eastern end of the site. The project will take 4-6 months and apply for the necessary County permits as discussed in the appropriate resource sections of this initial study (e.g. management plans). The proposed project does not propose a change in the lands current use (open space), request approval for permanent facilities or structures, or otherwise modify the site in a permanent fashion that could affect the surrounding communities infrastructure (e.g. roadways), facilities (e.g. water treatment), or services (e.g. school). The project does not conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental impact.

Conclusion:

Less than Significant

References Used:

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

Nevada County. 2021. *Nevada County Zoning Ordinance, Chapter II of the Nevada County Land Use and Development Code*. http://qcode.us/codes/nevadacounty/view.php?topic=3-ii&frames=on

12. MINERAL RESOURCES				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

NA

Environmental Setting (Baseline):

This project is mapped in an area classified as MRZ-2b for hydrothermal deposits, where significant inferred resources are present.

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project.

Environmental Studies Performed and Methodology:

None

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis:

This project proposes to excavate, stabilize, and consolidate contaminated soils in an engineered fill area on the eastern end of the site. A land use convenient with deed restrictions will be required on the 5.2 acre engineered fill area. The proposed project does not otherwise propose permanent facilities or infrastructure that would limit access to mineral resources. Any future mineral resource excavation would require a separate land use and environmental review process.

Conclusion:

No impact.

b) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis:

See above.

Conclusion:

No impact.

References Used:

California Department of Conservation, Division of Mines and Geology, Mineral Land Classification Map, Western Neveda County (1990).

13. NOISE				
Would the project result in:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

CEQA contains noise impact assessment guidelines. In addition, California cities and counties are required to adopt a Noise Element as part of the General Plan. Cities and counties typically also adopt a noise ordinance. The County has both a General Plan Noise Element and a County Code Noise Ordinance. Applicable County noise-level criteria and appropriate criteria of other jurisdictions are discussed below.

Nevada County General Plan, Noise Element

Chapter 9 of the County General Plan contains the Noise Element. The Noise Element contains adopted Goals, Objectives and Policies pertaining to noise. A comprehensive list of those policies can be found in Appendix I, "Environmental Noise & Vibration Assessment." The Noise Element Policies with numeric noise standards is reproduced below:

Policy 9.1.2: The following noise standards, contained in Table 15, "County General Plan Noise Element Exterior Noise Limits," below (General Plan Noise Element Table 9.1), as performance standards and land use compatibility standards, shall apply to all discretionary and ministerial projects excluding permitted residential (including tentative maps) land uses.

TABLE 15
COUNTY GENERAL PLAN NOISE ELEMENT EXTERIOR NOISE LIMITS

Land Use Category	Zoning Districts	Time Period	Noise Level, dBA	
			L_{eq}	L_{max}
Rural	"A1" "TPZ" "AE" "OS" "FR" "IDR"	7 am - 7 pm 7 pm - 10 pm 10 pm - 7 am	55 50 40	75 65 55
Residential and Public	"RA" "R2" "R1" "R3" "P"	7 am - 7 pm 7 pm - 10 pm 10 pm - 7 am	55 50 45	75 65 60
Commercial and Recreation	"C1" "CH" "CS" "C2" "C3" "OP" "REC"	7 am - 7 pm 7 pm - 7 am	70 65	90 75
Business Park	"BP"	7 am - 7 pm 7 pm - 7 am	65 60	85 70
Industrial	"M1" "M2"	any time	80	90

A. Compliance with the above standards shall be determined by measuring the noise level based on the mean average of not less than three (3) 20-minute measurements for any given time period. Additional noise measurements may be necessary to ensure that the ambient noise level is adequately determined.

B. Where two different zoning districts abut, the standard applicable to the lower, or more restrictive, district plus 5 dBA shall apply.

C. The above standards shall be measured only on property containing a noise sensitive land use as defined in Policy 9.8 and may be measured anywhere on the property containing said land use. However, this

measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement or as determined in a recorded letter of agreement between all affected property owners and approved by the County.

D. If the measured ambient level exceeds that permitted, then the allowable noise exposure standard shall be set at 5 dBA above the ambient.

E. Because of the unique nature of sound, the County reserves the right to provide for a more restrictive standard than shown in the Exterior Noise Limits table contained in this policy. The maximum adjustment shall be limited to be not less than the current ambient noise levels and shall not exceed the standards of this policy or as they may be further adjusted by Policy 9.1.2.b. Imposition of a noise level adjustment shall only be considered if one or more of the following conditions are found to exist:

1. Unique characteristics of the noise source:
   a. The noise contains a very high or low frequency, is of a pure tone (a steady, audible tone such as a whine, screech, or hum), or contains a wide divergence in frequency spectra between the noise source and ambient level.
   b. The noise is impulsive in nature (such as hammering, riveting, or explosions), or contains music or speech.
   c. The noise source is of a long duration.
2. Unique characteristics of the noise receptor when the ambient noise level is determined to be 5 dBA or more below the Policy 9.1.2 standard for those projects requiring a General Plan amendment, rezoning, and/or conditional use permit. In such instances, the new standard shall not exceed 10 dBA above the ambient or the Policy 9.1.2 standard, whichever is more restrictive.

F. The above standards shall not apply to those activities associated with the actual construction of a project or to those projects associated with the provision of emergency services or functions.

G. The standards of this policy shall be enforced through compliance inspections and/or complaints.

H. Recognizing that this chapter must work toward the solution to existing noise problems, those land uses that are inconsistent with the above standards and are therefore non-conforming in nature, shall comply with said standards as these land uses are upgraded or intensified or after abandonment through the use permit or site plan process. Said standards shall apply only to that portion of the land use requiring approval. In any event, the use or portion subject to a land use permit must meet the standards in the Exterior Noise Limits table in this policy and cumulatively the noise generated from the entire site must be equal to or less than the pre-land use permit ambient noise level. All such projects will require a comprehensive noise analysis per Policy 9.1.12 and the Nevada County Noise Element Manual.

Per Footnote B, a +5 dB adjustment to the Table 15 standards above would be applicable at the residential receptors due to the differing zoning districts. However, that +5 dB adjustment would be negated by a -5 dB adjustment to the due to the project noise sources either consisting of tonal components (intermittent mobile equipment), or occurring for long durations. As a result, the only offsets applied to the Table 15 above standards were based on ambient conditions.

Table 16, "Baseline Ambient Conditions and Adjusted County Noise Standards by Receptor," below, shows the baseline ambient conditions at the 3 nearest residences to the site extrapolated from the ambient noise survey results and the corresponding maximum and average, daytime, evening, and nighttime noise level standards applicable at each representative receptor location after the appropriate adjustments have been applied to account for the ambient conditions.

TABLE 16
BASELINE AMBIENT CONDITIONS AND ADJUSTED COUNTY NOISE STANDARDS BY RECEPTOR

	Baseline Ambient Conditions[1]						Applicable Standards After Adjustment for Ambient					
	Daytime[3]		*Evening*[3]		*Nighttime*[3]		*Daytime*		*Evening*		*Nighttime*	
Receptor[2]	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
1	58	76	51	68	50	66	63	81	56	73	55	71
2	63	81	56	73	55	71	68	86	61	78	60	76
3	54	72	49	69	45	65	55	75	50	74	45	70

Notes:
1. Baseline ambient conditions at each representative receptor were established through extrapolating the data closest to each receptor using a 4.5 dB per doubling of distance decay rate.
2. Receptor locations are indicated on Figure 13, "Monitoring and Receptor Locations."

Receptor[2]	Baseline Ambient Conditions[1]						Applicable Standards After Adjustment for Ambient					
	Daytime[3]		*Evening*[3]		*Nighttime*[3]		*Daytime*		*Evening*		*Nighttime*	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}

3 Daytime = 7 am – 7 pm. Evening = 7 pm – 10 pm. Nighttime = 10 pm – 7 am

Ambient Noise

The County General Plan Noise Element and Noise Ordinance do not have a specific policy or standard for assessing noise impacts associated with ***increases*** in off-site ambient noise levels resulting from project-generated traffic on public roadways. The County's General Plan and Ordinances do contain specific numeric standards for acceptable increases over ambient, but they do not contain numeric standards for ***increases*** in off-site traffic noise levels resulting from a project.

Because CEQA requires that the significance of noise impacts be evaluated relative to the ***increase*** in noise resulting from a project, where the local jurisdiction does not have such adopted thresholds, reasonable thresholds from other jurisdictions must be considered. As a result, the following section describes Federal thresholds for assessing the significance of project-related increases in off-site heavy truck traffic using federal research conducted by the Federal Interagency Commission on Noise (FICON).

FICON has developed a graduated scale for use in the assessment of project-related noise level increases. The criteria shown in Table 17, "Significance of Changes in Cumulative Noise Exposure,**"** was developed by FICON as a means of developing thresholds for impact identification for project-related noise level increases. The FICON standards have been used extensively in recent years by the authors of this section in the preparation of the noise sections of Environmental Impact Reports that have been certified in many California cities and counties.

The use of the FICON standards are considered conservative relative to thresholds used by other agencies in the State of California. For example, the Caltrans requires a project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission considers project-related noise level increases between 5 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a very conservative approach to impact assessment for this project.

TABLE 17
SIGNIFICANCE OF CHANGES IN CUMULATIVE NOISE EXPOSURE

Ambient Noise Level Without Project (L_{dn} or CNEL)	Change in Ambient Noise Level Due to Project
<60 dB	+5.0 dB or more
60 to 65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON)

Based on the FICON research, as shown in Table 17, a 5 dB increase in noise levels due to a project is required for a finding of significant noise impact where ambient noise levels without the project are less than 60 dB. Where pre-project ambient conditions are between 60 and 65 dB, a 3 dB increase is applied as the standard of significance. Finally, in areas already exposed to higher noise levels, specifically pre-project noise levels in excess of 65 dB, a 1.5 dB increase is considered by FICON as the threshold of significance.

County Zoning Ordinance

Section L-22 4.1.7 of the County Land Use and Development Code pertains to noise. The adopted noise standards contained in Table L-II 4.1.7 (Exterior Noise Limits) are identical to those contained in the General Plan Noise Element (reproduced above in Table 15). Because the specific noise standards are identical, the Zoning Ordinance standards are not reproduced below. However, Section L-II 4.1.7.D.8 of the County Zoning Ordinance States the following with respect to construction noise:

L-II 4.1.7.D.8: The above standards shall not apply to those activities associated with the actual construction of a project or to those projects associated with the provision of emergency services or functions.

The provision above exempts construction noise from the Table 15 noise standards. An evaluation of construction noise is provided later in this analysis despite this exemption.

Vibration

The County Noise Element and Noise Ordinance do not contain criteria for acceptable vibration exposure applicable to this project. However, the Federal Transit Administration (FTA) and Caltrans provide such criteria. Table 12-3 of the FTA Noise and Vibration Manual, reproduced as Table 18, "FTA Criteria for Assessing Damage to Structures," below, provides vibration levels at which damage to structures could occur. As shown in Table 18, a vibration level of 90 VdB is the minimum at which the onset of damage to extremely susceptible buildings could occur. As a result, this level was considered to be a conservative benchmark against which project-generated vibration levels were evaluated in this analysis.

TABLE 18
FTA CRITERIA FOR ASSESSING DAMAGE TO STRUCTURES

Building Category	Level, VdB[1]
I. Reinforced-concrete, steel or timber (no plaster)	102
II. Engineered concrete and masonry (no plaster)	98
III. Non-engineered timber and masonry buildings	94
IV. Buildings extremely susceptible to vibration damage	90

Notes:
1. RMS velocity in decibels (VdB) re 1 micro-inch/second

In addition to providing guidance with respect to vibration levels which would cause damage to structures, the FTA guidelines also provide criteria for assessing the potential for annoyance related to vibration. Table 8-1 of the FTA Noise and Vibration Manual, reproduced in Table 19, "Groundborne Vibration Criteria for General Assessment," below, provides vibration criteria for general assessment of impacts.

TABLE 19
GROUNDBORNE VIBRATION IMPACT CRITERIA FOR GENERAL ASSESSMENT

Land Use Category	Impact Levels (VdB)		
	Frequent Events[a]	*Occasional Events*[b]	*Infrequent Events*[c]
Category 1: Buildings where vibration would interfere with interior ops.	65[d]	65[d]	65[d]
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Source: Federal Transit Administration, Transit Noise Impact and Vibration Assessment, May 2006.
Vibration levels are measured in or near the vibration-sensitive use.
a. "Frequent Events" is defined as more than 70 vibration events of the same source per day.
b. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.
c. "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.
d. This criterion limit is based on levels that are acceptable for most moderately-sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels.

According to Table 19, the general assessment impact level for frequent events applicable at residential uses is 72 VdB. Where vibration levels exceed this threshold, a detailed vibration assessment is recommended. Because project operations would essentially occur continuously during the proposed business hours, the FTA criteria applicable to "Frequent Events" is applied to this analysis of potential annoyance resulting from project activities. This analysis analyzes the potential vibration impacts associated with the use of mobile equipment.

Environmental Setting (Baseline):

The existing ambient noise environment in the vicinity of the site is defined primarily by local and distant traffic.

The nearest sensitive receptors to the site are residences. Residences in the vicinity of the site are very limited, and are located to the north and northeast of that site. The three nearest residences are shown on Figure 13 and were selected for the noise analysis since they represent the nearest residences to the site.

Numerical summaries of existing ambient noise levels based on project vicinity continuous noise monitoring is provided in Table 20, "Summary of Long-Term Noise Monitoring Results," below. Table 20 also contains the arithmetic mean of the

data collected on each day of the survey. Graphs of the individual hourly average (L_{eq}) and maximum (L_{max}) noise levels for each site and each day are presented in Appendix I.

TABLE 20
SUMMARY OF LONG-TERM NOISE MONITORING RESULTS

Site	Date	Ldn (dBA)	Average Measured Hourly Noise Levels (dBA)					
			Daytime[1]		*Evening*[2]		*Nighttime*[3]	
			L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
A	Tuesday, October 01, 2019	66	65	80	60	76	59	73
	Wednesday, October 02, 2019	67	65	81	60	74	59	74
	Thursday, October 03, 2019	67	65	80	60	76	59	73
	Average	67	65	80	60	75	59	73
B	Friday, December 07, 2018	59	59	79	55	75	50	73
	Saturday, December 08, 2018	57	57	76	54	77	47	69
	Sunday, December 09, 2018	55	56	76	52	74	46	68
	Monday, December 10, 2018	57	58	77	53	74	48	69
	Average	57	58	77	54	75	48	70

Notes:
1. Daytime = 7 am – 7 pm
2. Evening = 7 pm – 10 pm
3. Nighttime = 10 pm – 7 am

The Table 20 data indicates that ambient conditions vary depending primarily on the distance between the monitoring site and nearby roadways, with existing L_{dn} levels as high as 67 dBA measured near Idaho Maryland Road and lower levels (55-59 dB L_{dn}) along East Bennet Road. The ambient noise level data were used to develop thresholds for determining significant project-generated noise level increases for on-site noise sources and activities.

As with the local noise environment, the ambient vibration environment is defined primarily by traffic on the local roadway network. To quantify baseline vibration levels at representative locations in the project vicinity, short-term vibration measurements at the same locations as the ambient noise monitoring locations were taken and a summary of the results are provided in Table 21, “Summary of Short-term Vibration Results.”

TABLE 21
SUMMARY OF SHORT-TERM VIBRATION RESULTS

Measurement Site	Measured Vibration Levels, VdB rms		
	Min	*Average*	*Max*
A	31	37	48
B	31	38	54

Applicable Thresholds of Significance:

Environmental Studies Performed and Methodology:

Bollard Acoustical Consultants. 2020 (July). *Environmental Noise & Vibration Assessment*. Loomis, California. Prepared for Rise Gold Corporation, Grass Valley, California.

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis:

Activities at the site will include site clearing, excavation, grading, material transport, and compaction. Table 22, “Typical Construction Equipment Noise,” provides maximum noise levels for equipment commonly used in general

construction projects at full-power operation at a distance of 50 feet. Not all of these construction activities would be required of this project.

TABLE 22
TYPICAL CONSTRUCTION EQUIPMENT NOISE

Equipment Description	Maximum Noise Level at 50 Feet, dBA
Backhoe	80
Compactor (ground)	80
Compressor (air)	80
Concrete batch plant	83
Concrete mixer truck	85
Concrete pump truck	82
Concrete saw	90
Crane (mobile or stationary)	85
Dozer	85
Dump truck	84
Excavator	85
Front end loader	80
Generator (more than 25 kVA)	82
Grader	85
Jackhammer	85
Mounted impact hammer	90
Paver	85
Pumps	77
Rock drill	85
Scraper	85
Soil mix rig	80

Source: Federal Highway Administration (FHWA)

Construction noise is exempt from the County noise standards. In addition, project construction activities are proposed only during daytime hours and construction in any given area would be temporary. As a result, no significant construction noise impacts are identified for this project. Nonetheless, a comparison of predicted construction noise levels against the project standards of significance is provided in the following sections to determine if consideration of construction noise abatement measures may be warranted to reduce the potential for annoyance associated with project construction.

The nearest sensitive receptors (residences) to the site are receptors 1, 2 & 3. Those receptors are located approximately 500 to 1,000 feet from locations on the project site where project construction activities would take place. Based on maximum and average construction noise levels of 85 dBA L_{max} and 75 dBA L_{eq} at a reference distance of 50 feet, average and maximum noise levels were computed at the nearest receptors. Table 23, "Predicted Construction Noise Levels at Nearest Receptors," shows the predicted construction noise levels at each representative receptor.

TABLE 23
PREDICTED CONSTRUCTION NOISE LEVELS AT NEAREST RECEPTORS

Receptor	Distance	Predicted Noise Level		Daytime[1] Noise Criteria		Criteria[2] Exceeded?		Impact?
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	
1	500	54	64	63	81	no	no	no
2	600	53	63	68	86	no	no	no
3	1000	47	57	55	75	no	no	no

Source: FHWA Roadway Construction Noise Model (RCNM) reference maximum levels.
Notes:
1. As noted above, project construction activities would be limited to daytime hours. As a result, only the daytime criteria are utilized for the assessment of potential noise impacts for this activity.
2. Because the County Zoning Ordinance exempts construction activities from the County noise standards, these criteria are not applicable to this component of the project. They are provided to give an indication as to whether or not construction noise would be substantial relative to existing ambient conditions at these nearest receptors.

As indicated in Table 23, project noise levels are predicted to be below the County noise criteria at each of the nearest receptors even though those criteria are not applicable to construction activities. As a result, consideration of additional construction noise abatement measures would not be warranted for this aspect of the project.

The extent by which noise sources related to project operations will combine to result in higher noise levels than those predicted for the noise sources individually depends on the relative locations of the noise sources and their individual magnitude. When 3 noise sources of equal magnitude are combined the resulting increase in noise levels is 5 dB (4.77 dB). Because all of the on-site noise sources generate differing noise levels from different locations, the combined noise exposure of all onsite noise sources would not likely reach 5 dBA. The cumulative noise generation of the on-site noise sources at the project site is predicted to remain within compliance with the applicable noise criteria.

Conclusion:

Less than Significant

b) Generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis:

Table 24, "Vibration Levels of Heavy Earthmoving Equipment—25 Foot Residence Distance," shows reference peak particle velocity (PPV) and VdB (rms) vibration levels for the types of heavy earthmoving equipment which will be utilized for the project. The Table 24 data is provided in terms of both peak particle velocity and VdB at a reference distance of 25 feet.

TABLE 24
VIBRATION LEVELS OF HEAVY EARTHMOVING EQUIPMENT—25 FOOT REFERENCE DISTANCE

Source	Peak Particle Velocity (PPV) inches/second	RMS Velocity in Decibels (VdB)
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer - Small	0.003	58
Backhoe	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer - Large	0.089	87

Source: FTA and FHWA

The nearest receptor is approximately 350 feet from the location where the most significant vibration would be generated. To project the vibration levels from the reference distance of 25 feet to the nearest receptor, the following formula is applied:

$PPV = PPV_{ref} * (25 / D)^n$ (inches/second)

Where:

PPV = Desired vibration level at receptor located D feet from the vibration source

D = Distance from vibration source to sensitive receptor (feet)

n = Vibration attenuation rate through ground.

According to Chapter 12 of the FTA Transit Noise and Vibration Impact Assessment (FTA, 2006) manual, an "n" value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.

Using the formula provided above, the vibration level at the nearest sensitive receptor located 350 feet from the project area vibration generation computes to 0.002 inches/second ppv, or approximately 58 VdB. Because this level is well below the threshold of perception, and below measured existing maximum vibration levels at several of the ambient vibration monitoring sites.

Conclusion:

Less than Significant

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Impact Analysis:

Because the project does not proposed the development of noise-sensitive land uses assessing aircraft noise impacts for this project may not be required. The site is located outside of the future 55 dB CNEL noise contour for the County Airport. This level is well below the County's 75 dB CNEL level considered normally acceptable for industrial uses. As a result, the project site and the proposed operations will not be adversely affected by aircraft noise.

Conclusion:

Less than Significant

References Used:

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

Nevada County. 2021. *Nevada County Zoning Ordinance, Chapter II of the Nevada County Land Use and Development Code*. http://qcode.us/codes/nevadacounty/view.php?topic=3-ii&frames=on

14. POPULATION AND HOUSING				
Would the Project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Nevada County General Plan (2014)

Environmental Setting (Baseline):

The 56-acre site is located at 10344 Centennial Drive near the city limits of Grass Valley in unincorporated Nevada County, California. See Figure 1. The site is located immediately south of Centennial Drive and Idaho Maryland Road, and north of East Bennett Road and adjacent to the boundaries of the City. The project site is surrounded by undeveloped open space, industrial, and commercial uses (as shown in Figure 7). Table 6, above, provides a summary of the locations of the surrounding land uses and the receptors closest to the project site.

Applicable Thresholds of Significance:

Environmental Studies Performed and Methodology:

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Induce substantial unplanned population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact Analysis:

The project does not propose the construction of structures or facilities that would directly or indirectly result in population growth. Following completion of remedial actions the property would be returned to an open space.

Conclusion:

No impact.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis:

No existing residential structures exist on the property and project activities would not result in the displacement of individuals on surrounding properties.

Conclusion:

No impact.

References Used:

N/A

15. PUBLIC SERVICES				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Environmental Setting (Baseline):

The 56-acre site is located at 10344 Centennial Drive near the city limits of Grass Valley in unincorporated Nevada County, California. See Figure 1. The site is located immediately south of Centennial Drive and Idaho Maryland Road, and north of East Bennett Road and adjacent to the boundaries of the City. The project site is surrounded by undeveloped open space, industrial, and commercial uses (as shown in Figure 7). Table 6, above, provides a summary of the locations of the surrounding land uses and the receptors closest to the project site.

The project site is within the boundary of the various public services listed below.

Service	Service Provider
Fire District	Ophir Hill and Nevada County Consolidated
Sheriff Department	Nevada County Sheriff
School District	Union Hill and Grass Valley
Closest School	Union Hill Elementary Charter School and Union Hill Middle School
Park, Campground, or Recreation Area	Empire Mine State Park
Solid Waste	Waste Management of Nevada County
Medical	Sierra Nevada Memorial Hospital

Applicable Thresholds of Significance:

See Appendix G criteria above.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

i) Fire protection?
ii) Police protection?
iii) Schools?
iv) Parks?
v) Other public facilities?

Impact Analysis:

The project site is within the boundary of the various public services listed above and therefore already covered by their services. The project would not result in a new or altered need for these services and therefore no impact.

Conclusion:

No impact.

References Used:

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

16. RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Environmental Setting (Baseline):

The 56-acre site is located at 10344 Centennial Drive near the city limits of Grass Valley in unincorporated Nevada County, California. See Figure 1. The site is located immediately south of Centennial Drive and Idaho Maryland Road, and north of East Bennett Road and adjacent to the boundaries of the City. The project site is surrounded by undeveloped open space, industrial, and commercial uses (as shown in Figure 7). Table 6, above, provides a summary of the locations of the surrounding land uses and the receptors closest to the project site. No public parks or recreation areas are adjacent to the site.

Applicable Thresholds of Significance:

See Appendix G criteria above.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Impact Analysis:

The project does not propose any new residential, commercial, or other related structures or facilities that would result in a substantial increase in populations that may use, require the construction of, or require the expansion of neighborhood or regional parks.

Conclusion:

No impact.

b) Does the project include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis:

See above.

Conclusion:

No impact.

References Used:

N/A

17. TRANSPORTATION Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Nevada County

Vehicle Miles Traveled

The 2018 CEQA Guidelines Update includes new and revised provisions for analyzing the significance of transportation impacts using Vehicle Miles Traveled (VMT) in determining the significance of a project relative to the transportation system. The criterion considers the effect a project has on the vehicle miles traveled.

VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips (Fehr & Peers, 2019). The available measures of VMT for Nevada County include (Fehr & Peers, 2019):

- Total VMT—the sum of VMT for all vehicle trips and trip purposes.
- Residential VMT per capita—sum of VMT for trips originating from home, divided by the number of residents.
- VMT per worker—sum of VMT for trips from home to work, divided by the number of workers.

In September 2019 Fehr & Peers prepared Senate Bill 743, VMT Implementation [DRAFT] for the Nevada County Transportation Commission (NCTC). NCTC, in turn distributed the document to the various agencies within the County so that each agency can develop their own significant threshold guidelines. Fehr & Peers recommends that VMT should be expressed as a generation rate and not a ratio (Fehr & Peers, 2019). Since this project is an industrial land use project, it was determined that the preferred significance threshold metric was VMT per Worker (ie. employee).

Methodologies and Threshold Recommendations were made by Fehr & Peers (2019) and are described below:

Thresholds of Significance Recommendation—A project's or plan's VMT impact may be considered less than significant if:

- The project or plan total weekday VMT per service population is less than or equal to the subarea mean under baseline conditions; and
- The project or plan is consistent with the jurisdiction's general plan and the Nevada County Regional Transportation Plan.

The subareas, based on similar travel characteristics and proximity, are recommended to be: City of Grass Valley, City of Nevada City, Town of Truckee, Alta Sierra, Lake of the Pines, Lake Wildwood and Penn Valley, the Remainder of Western Nevada County, and the Remainder of Eastern Nevada County. The subarea threshold acknowledges the differences in VMT generation in different parts of Nevada County (Fehr & Peers, 2019). The Grass Valley subarea was used as the basis due to the project's proximity to the City. A project is considered significant if the VMT generation rate is greater than the thresholds provided below. Accordingly, the recommended VMT threshold for the Idaho-Maryland Mine Project is 18.6 per worker (Fehr & Peers, 2019

Level of Service

The County General Plan identifies Level of Service (LOS) D or better as the acceptable LOS at intersections and roadways in community regions and LOS C in rural regions. Under project conditions, a traffic impact is considered

to adversely affect an intersection or roadway segment if the conditions change from acceptable to unacceptable LOS or a project adds traffic to an intersection or roadway segment already operating at unacceptable LOS.

City of Grass Valley

The City identifies LOS D or better as the acceptable LOS at intersections and roadways. Under project conditions a traffic impact is considered to adversely affect an intersection if the conditions change from acceptable to unacceptable LOS or a project adds traffic to an intersection already operating at unacceptable LOS. The City allows LOS E conditions at the SR 49 SB Ramp / Bennett Road intersection.

Caltrans

The Caltrans *Guide for the Preparation of Traffic Impact Studies* (December 2002) states the following: "Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities. Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. Based on the recently approved Dorsey Marketplace traffic study in the City the LOS D threshold was used as the acceptable LOS and will be used for Caltrans facilities.

Environmental Setting (Baseline):

The project site is accessed via Centennial Drive at the northeastern corner of the site. The closest cross street is Centennial Drive and Idaho Maryland Road. Idaho Maryland Road provides access to closest major roadway, SR 20-49 approximately ½ mile west from the site access. All intersections between SR 20-49 and the site access operate at a level of service "C" or better.

Applicable Thresholds of Significance:

See above.

Environmental Studies Performed and Methodology:

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Impact Analysis:

The project does not propose facilities or infrastructure that would affect City of County infrastructure.

Conclusion:

No impact.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis:

A traffic impact analysis was prepared for the Idaho-Maryland Mine project. This project estimates a workforce of approximately 300 employees. The VMT analysis concluded, on a per worker basis, which is the recommended threshold of significance (Fehr & Peers, 2019), the Idaho-Maryland Mine Project is modelled to generate a daily rate per employee of 13.9 VMT under 2035 plus Project conditions. This is below the home-based VMT per worker for the Grass Valley area of 18.6 VMT per worker. This project has less than 20 roundtrips anticipated for a 4-6 month period of time. This is significantly less than the assumptions for the Idaho-Maryland Mine project and, therefore, this project's impact on Vehicle Miles Travelled is less than significant.

Project trip generation is provided in Table 25, "Project Trip Generation Estimates," below. A maximum of 6 Am peak hour trips are anticipated. This is a conservative as it is assumed work would begin at 7:00 a.m. and employees would likely travel to the site slightly earlier. The project is only anticipated to last 4-6 month. The limited amount of employees and temporary nature would not affect local roadways and intersections.

TABLE 25
PROJECT TRIP GENERATION ESTIMATES

Uses	Axles	Average Daily Round Trips	Max Daily Round Trips	Am Peak Hour Round Trips		Pm Peak Hour Round Trips	
				Entering	*Exiting*	*Entering*	*Exiting*
Employee Trips	2	6	10	6	0	0	0
Fuel trucks[1]	5	1	1	0	0	0	0
Freight Trucks	5	1	2	0	0	0	0
Outside services[2]	2	2	4	0	0	0	0

Notes:
1. Fuel trucks will come to the site to refuel heavy equipment.
2. Outside services includes vendors, deliveries, and other ancillary vehicle traffic to support operations
3. Each round trip generates 2 one-way trips.

Conclusion:

Less than Significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis:

The project does not propose facilities or infrastructure that would affect City of County infrastructure.

Conclusion:

No Impact

d) Result in inadequate emergency access?

Impact Analysis:

Emergency access to the site is provided through the existing access point off Centennial Drive. The project does not propose modification to this access.

Conclusion:

No impact.

References Used:

KD Anderson & Associates, Inc. 2019. *Traffic Impact Analysis for the Idaho-Maryland Mine Project.* Loomis, California. Prepared for Rise Grass Valley, Inc. Grass Valley, California.

18. TRIBAL CULTURAL RESOURCES				
Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Section 106 of the National Historic Preservation Act

The Project will require a permit issued by the U.S. Army Corps of Engineers (ACOE); as a result, the Project is considered a federal undertaking and, as such, is subject to compliance with Section 106 of the NHPA. Section 106 of the NHPA requires that, before beginning any undertaking, a federal agency—in this case the (State Revolving Fund (SRF) on behalf of EPA --must take into account the effects of the undertaking on historic properties and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on these actions (16 U.S.C. 470f). The Section 106 process is presented in 36 CFR 800 and consists of five basic steps:

1. Initiate process by coordinating with other environmental reviews, consulting with the State Historic Preservation Officer (SHPO), identifying the Area of Potential Effects; identifying and consulting with interested parties, and identifying points in the process to seek input from the public and to notify the public of proposed actions.
2. Identify cultural resources and evaluate them for National Register of Historic Places (NRHP) eligibility, resulting in the identification of historic properties.
3. Assess effects of the project on historic properties.
4. Consult with the SHPO and interested parties regarding adverse effects on historic properties, resulting in a Memorandum of Agreement (MOA).
5. Proceed in accordance with the MOA.

Section 106 of the NHPA requires that the federal agency carry out the process. The federal agency must consult with the SHPO and interested parties and make the determinations of eligibility and effect.

California Environmental Quality Act

The proposed Project is subject to CEQA compliance because it requires a discretionary action by DTSC. CEQA requires public agencies to evaluate the implications of their projects on the environment and includes historical resources and Tribal Cultural Resources as part of the environment. If a project results in significant adverse impacts to historical resources or Tribal Cultural Resources, the impact should be disclosed, and mitigation measures must be considered.

Environmental Setting

Prehistory

The earliest evidence of human occupation in the Sierra Nevada dates to the Terminal Pleistocene and Early Holocene [12,000–8,000 years before present (BP)], although archaeological finds from this timeframe are few, sparse, and have typically been limited to isolated stemmed points at high elevations. Sites from this time period indicate a semi-sedentary lifeway, small group size, and subsistence focused on large game hunting. Large-stemmed and corner-notched projectile points made of local basalt are common in these early assemblages, although obsidian obtained through trade with the people of the Great Basin and California Coast Ranges has been documented.

Early and middle Holocene (8,000–5,000 BP) lifeways were largely focused on hunting, and social groups remained small and semi-sedentary. Middle to late Holocene (5,000–2,000 B.P) archaeological patterns show an increase in population and economic intensification, demonstrated by an increase in settlement size; reliance on small game and labor-intensive vegetal resources, such as seeds and nuts; food storage pits; bow and arrow technology; and increased trade of obsidian and shell beads with groups to the east and west.

Late Period (2,000–450 BP) archaeological patterns reflect a waning population along the western slope of the Sierra Nevada from 1,450 to 700 BP Whether this shift was a results of changing land use practices or an actual demographic swing is a matter of debate. From 700 BP to approximately the time of European contact, the population appears to increase again, and lifeways were centered on a plant-based diet.

Ethnography

The project area is traditionally Hill Nisenan territory, who are sometimes referred to as Southern Maidu (Kroeber 1925; Wilson and Towne 1978). The Nisenan are a Maiduan-speaking people who settled in villages along major waterways, ridges, and flats. Settlements were typically organized around a central village, with family groups building homes apart from the main hub. Winter homes were conical and constructed from skins, bark slabs, and brush, while summer residences were typically brush structures. Villages tended to be located near large bedrock outcrops suitable for creating bedrock mortars used to process acorns and other plant foods, as well as small animals.

The nearest recorded ethnographic tribelet in the project area was Hi'et, southwest of present-day Nevada City, and the nearest recorded ethnographic villages were Tsekankan and Usto-ma (Kroeber 1925; Wilson and Towne 1978). No prehistoric archaeological sites or localities have been recorded in the immediate vicinity of the project (Moratto 1984). The lack of recorded prehistoric sites in the area can be attributed largely to the impacts of Euroamerican incursion into Grass Valley. Traditional lifeways were disrupted, and Native people displaced with the onset of the Gold Rush in the mid-nineteenth century.

History

Grass Valley Mining District and California Gold Production

Gold mining in the Grass Valley area began in 1848 when placer gold was discovered in Wolf Creek, but the region is best known for its high producing hard-rock (lode) mines that were productive from the 1860s through the 1950s. Although lode mining began in Grass Valley in the 1850s, it did not develop in earnest until after the Comstock rush ended in 1865 (Clark 1970). Eventually, the Grass Valley Mining District (District) was the most productive gold-bearing area in California.

Gold production from the late 1860s to 1950s in the Grass Valley District paralleled production throughout the state, but in much higher numbers. A steady increase began in the late 1860s with an infusion of capital. Another boost occurred from technological advances in the 1890s. With WWI came prosperity and higher costs of production, which slowed output. Then with the Great Depression, production costs decreased, increasing output. The 10-year span from 1930 to 1940 demonstrated a remarkable abundance within the District; nearly 2.2 million tons of ore were produced, yielded $26.76 million. During WWII, the US forced shut down of mines as non-essential to the war effort. An attempt was made after the shutdown was lifted after the war, but higher production costs again stunted output until many mines, including the largest mines in Grass Valley, closed in 1957 (Clark 1970).

Nevada County Narrow Gauge Railroad

In the late 1860s, Nevada City and Grass Valley business owners began advocating at the state and federal levels for a railroad to connect their business interests with the Central Pacific Railroad. Mine operations needed a continuous supply of timber to fuel the boilers that supplied energy to the mines, and the train line helped bring more timber. On March 25, 1874, the state legislature approved the bill allowing the CNGR between Nevada City and Colfax. Construction was completed in April 1876. The railroad did help develop other economic opportunities within the region, such as the fruit packing plants and lumber mills that ran along the railroad; however, NCNGR's main goal remained the support of the local quartz mines (Fickewirth 1992; Levy 2012).

The railroad route followed what is now East Bennet Road to the north bank of South Fork Wolf Creek, crossing the Union Hill Mine and New Brunswick Mine parcels. Passenger travel on the rail line stopped in 1938, and operations ceased

completely in 1942 at the onset of WWII. By the following year, only the grade remained because the entire line had been sold for scrap.

Thresholds of Significance:

According to the CEQA Appendix G criteria the following shall be analyzed:

- Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- Disturb any human remains, including those interred outside of formal cemeteries?

To identify historic properties as defined by Section 106 and historical resources as defined by CEQA, cultural resources within APE must be evaluated for their eligibility for listing in CRHR (for CEQA) and NRHP (for Section 106). The process of evaluation first determines whether the resources are significant under each of the eligibility criterion (see below). If the resource is significant, it is then assessed for its historic integrity. If a resource is significant and has historic integrity, it is eligible for listing on CRHR or NRHP. Although CRHR and NRHP vary slightly in language, in practice, they are virtually the same because CRHR was modeled after NRHP and NRHP provides for local significance.

A cultural resource is significant if it meets any of the criteria (NRHP a-d; CRHR 1-4) listed in the Table 26 below.

TABLE 26

NRHP AND CRHR SIGNIFICANCE CRITERIA

NRHP	CRHR
a) is associated with events that have made a significant contribution to the broad patterns of our history	1) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
b) is associated with the lives of persons significant in our past	2) is associated with the lives of persons important in our past
c) embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction	3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
d) has yielded, or may be likely to yield, information important in prehistory or history	4) has yielded, or may be likely to yield, information important in prehistory or history

Environmental Studies Performed and Methodology:

The entire APE was subject to a pedestrian survey on May 9 and 10, 2019 by two archaeologists in 20 meter transects. Approximately 80% of the ground surface has been disturbed as a result of previous mining and industrial activities and includes areas that are now graded and paved. The remaining 20% of the APE is covered by vegetation or duff.

On August 19, 2020, DTSC's Office of Environmental Equity submitted a Sacred Lands File search request, as well as a request for the list of project area Native American tribal contacts to the Native American Heritage Commission (NAHC). Subsequently, DTSC received a response from the NAHC and mailed out letters including a description of the proposed project to the list of Native American tribal contacts in late August 2020. One Tribe that was contacted does have an AB 52 Request letter on file with DTSC and therefore AB 52 processes were followed. This Tribe engaged in dialogue to gather more information but had no further concerns. AB 52 Consultation was not requested for this project. Continued outreach to the remaining tribes on the NAHC list occurred throughout August-October 2020, with no additional responses received. Information regarding the names of the Tribes contacted is available from DTSC.

Impact Analyses and Conclusions:

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or

Impact Analysis:

Construction of the proposed project would include earth-disturbing activities, such as excavation. Operation of the proposed project would not require earth-disturbing activities. No other previously identified archaeological resources associated with Native American culture that are listed or eligible for listing in the NRHP, CRHR, or local register have been identified within a 0.5-mile radius of the project area, and no tribal cultural resources were identified in the archival research and outreach to date. Outreach to Native American tribal representatives is occurred and no additional interest or known cultural sites were expressed.

Conclusion:

Less than Significant

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Analysis:

Construction of the proposed project would include earth-disturbing activities, such as excavation. As previously discussed, Native American tribes and others may have resided in the vicinity of the proposed project. The NAHC Sacred Lands File search yielded a Negative result. No other previously identified archaeological resources associated with Native American culture have been identified within a 0.5-mile radius of the project area. The implementation of Project Design Features (PDFs) below, would reduce potential impacts related to tribal cultural resources, if found during construction. As such, impacts related to tribal cultural resources that are a significant resource determined by the lead agency would be less than significant with mitigation.

Conclusion: Less than significant impact.

Project Design Features:

Because this project involves ground disturbing activities, the following information is provided as a precaution in the event of any accidental discoveries of cultural resources or human remains:

- All personnel performing the remedial activities must be observant and aware that they may potentially encounter Native American Tribal cultural or archaeological resources and/or human remains;

- In the event of accidental discovery of human remains during ground disturbing activities, suspend the ground disturbing activities in the immediate area and surrounding 150 feet, and contact the County Coroner. Failure to notify can result in the issuance of a misdemeanor. The County Coroner will determine the origin of the remains. If the remains are Native American, the County Coroner will be responsible for contacting the Native American Heritage Council (NAHC). The NAHC will identify and notify the person(s) who might be the most likely descendent (MLD) who will make recommendations for the appropriate and dignified treatment of the remains (Public Resources Code, section 5097.98). The MLD shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site (CEQA Guidelines, CCR section 15064.5(e); HSC section 7050.5).

- In the event of accidental discovery of potential Tribal cultural or archaeological resources, immediately suspend ground disturbing activities in the immediate area and surrounding 50 feet and contact [Insert local Native American contact here]. DTSC staff and property owner should also be immediately notified. After discussion with their Tribal Chairperson or respective Cultural Resources Managers or Tribal Historic Preservation Officers and in collaboration with DTSC and the property owner, implement measures deemed necessary to record and/or protect the cultural or archaeological resource(s).

Please notify DTSC Tribal Affairs Staff immediately in the event of any accidental discoveries of either potential cultural or archaeological resources or human remains.

Conclusion:

Less than Significant

References Used:

Native American Heritage Commission (NAHC), Sacred Lands Files

19. UTILITIES AND SERVICE SYSTEMS				
Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Urban Water Management Planning Act - The Urban Water Management Planning Act (Water Code Sections 10608–10656) requires every urban water supplier that either provides over 3,000 acre-feet of water annually or serves more than 3,000 connections to assess the reliability of its water sources over a 20-year planning horizon and report its progress on 20 percent reduction in per-capita urban water consumption by the year 2020, as required in the Water Conservation Bill of 2009 SBX7-7. These plans must be prepared every five years and submitted to the Department of Water Resources (DWR) for review to ensure compliance with the Water Code (DWR 2016).

Nevada Irrigation District Urban Water Management Plan NID's 2015 Urban Water Management Plan (UWMP) was adopted in 2016. The UWMP allows the District to compare its water supplies with existing and anticipated water demands, identify and implement urban water conservation practices, analyze the possibility of drought-induced urban water shortages, and plan various management procedures for implementation during normal and emergency conditions.

Clean Water Act - The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the act, the EPA has implemented pollution control programs such as setting wastewater standards for industry and water quality standards for all contaminants in surface waters.

Porter-Cologne Water Quality Control Act - The Porter-Cologne Water Quality Control Act established the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) as the principal state agencies with the responsibility for controlling water quality in California. Under the act, water quality policy is established, water quality standards are enforced for both surface water and groundwater, and the discharges of pollutants from point and nonpoint sources are regulated. The act authorizes the Central Valley RWQCB to establish water quality principles and guidelines and permits for long-range resource planning including groundwater and surface water management programs and control and use of recycled water (USDOE 2016).

State Water Resources Control Board - The SWRCB is responsible for implementing the Clean Water Act and the Porter-Cologne Water Quality Control Act. The SWRCB allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Quality Control Boards located in the major watersheds of the state. The SWRCB also issues National Pollutant Discharge Elimination System (NPDES) permits to cities and counties through the RWQCBs.

Central Valley Regional Water Quality Control Board - The Central Valley RWQCB is the regional governing agency for water quality. The board's primary duty is to protect the quality of the waters in the region for all beneficial uses. This duty

is implemented by formulating and adopting water quality plans for specific groundwater or surface water basins and by prescribing and enforcing requirements on all agricultural, domestic and industrial waste discharges. The Central Valley RWQCB also issues National Pollutant Discharge Elimination System permits.

Environmental Setting (Baseline):

The 56-acre site is located at 10344 Centennial Drive near the city limits of Grass Valley in unincorporated Nevada County, California. See Figure 1. The site is located immediately south of Centennial Drive and Idaho Maryland Road, and north of East Bennett Road and adjacent to the boundaries of the City. The project site is surrounded by undeveloped open space, industrial, and commercial uses (as shown in Figure 7). Table 6, above, provides a summary of the locations of the surrounding land uses and the receptors closest to the project site.

The project site is within the boundary of the various public services listed below.

Service	Service Provider
Fire District	Ophir Hill and Nevada County Consolidated
Sheriff Department	Nevada County Sheriff
School District	Union Hill and Grass Valley
Closest School	Union Hill Elementary Charter School and Union Hill Middle School
Park, Campground, or Recreation Area	Empire Mine State Park
Solid Waste	Waste Management of Nevada County
Medical	Sierra Nevada Memorial Hospital

Potable water is not available at the site and the site is not currently served by a wastewater treatment provider.

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project.

Environmental Studies Performed and Methodology:

N/A

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects?

Impact Analysis:

The project does not propose the construction or relocation of public utilities or service systems.

Conclusion:

No impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis:

Water will be necessary for dust control and applied using a water truck during the 4-6 month duration of the project. The water truck will purchase water from an offsite supplier.

Conclusion:

No impact.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis:

Portable facilities serviced by a third-party company will be provided for onsite personnel use.

Conclusion:

No impact.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Impact Analysis:

Portable facilities services by a third-party company will be provided for onsite personnel use.

Conclusion:

No impact.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis:

See above.

Conclusion:

No impact.

References Used:

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

Nevada County. 2021. *Nevada County Title 3 Land Use and Development Code*. http://qcode.us/codes/nevadacounty/view.php?topic=3&frames=on

20. WILDFIRE				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Regulatory Setting (Laws, Ordinances, Regulations, Standards):

Senate Bill 1241 - Senate Bill 1241 requires the legislative body of a city or county to adopt a comprehensive, long-term general plan that includes various elements, including a safety element for the protection of the community from unreasonable risks associated with among other things, wildland and urban fires. The safety element requires for state responsibility areas (SRA), as defined, and very high fire hazard severity zones (FHSZ) as defined in California Government Code (CGC) §51177 & 51178 that is not a SRA, to be updated as necessary to address the risk of fire in these areas pursuant to CGC §65302(g)(3).

Executive Order N-05-16 - On March 22, 2019, Governor Newsom proclaimed a state of emergency involving forest conditions near vulnerable communities under Executive Order N-05-19. Executive Order N-05-19 suspends State environmental Statutes, rules, regulations, and requirements to the extent necessary to complete priority fuel management projects started in the 2019 calendar year, upon the request of the Secretary for the 4.12 Wildfire Nevada City SOI Plan Update Draft Environmental Impact Report Nevada County LAFCo 4.12-6 June 2020 California Environmental Protection Agency or Natural Resources Agency, as appropriate. The proposed activities are required to be determined eligible to be conducted under the suspension. CAL FIRE subsequently requested the suspension of Division 13 [commencing with Section 21000 of Public Resources Code (PRC).

California Building Standards Codes - The State provides minimum standards for building design through the California Building Code (CBC). The CBC is based on the International Building Code (IBC), and has been modified to address particular California concerns. The primary codes with respect to development include the California Building Code, Chapter 7A “Materials and Construction Methods for Exterior Wildfire Exposure” and the California Fire Code, Chapter 49 “Requirements for Wildland-Urban Interface Fire Areas.” These codes require what materials are required to be used for construction for any Building Permit submitted after January 1, 2009 within the geographical areas with FHSZs designated as Very High, High, or Moderate in SRA’s and Very High within Local Response Areas (LRA). Maps of these areas were developed in 2007 for California and each county.

State Board of Forestry and Fire Protection 2018 Strategic Fire Plan - The State Board of Forestry and Fire Protection (SBFFP) 2018 This 2018 Strategic Fire Plan (SFP) reflects CAL FIRE’s focus on fire prevention and suppression activities to protect lives, property, and ecosystem services, and natural resource management to maintain the state’s forests as a resilient carbon sink to meet California’s climate change goals and to serve as important habitat for adaptation and mitigation. The plan also encourages collaboration among local, state, federal, tribal, and private partners remains to effectively manage the wildland urban interface and natural environment focusing on small efforts such as creating fuel break to large efforts administering the statewide, multiagency California Fire Management Agreement.

Ready Nevada County – 2019 Wildfire Preparedness Action Plan - The 2019 Nevada County Wildfire Preparedness Action Plan (WPAP) outlines specific action items that can be taken by Nevada County to reduce the risks and effects of wildland fires. The WPAP was prepared in response to escalation of the nature, frequency, and increased number of wildfires over the past decade. The WPAP is intended to support and implement specific actions outlined by the State, Nevada-Yuba Placer Unit Fire Management Plan (NEU Regional Plan), and local Community Wildfire Protection Plans (CWPP). The

various fire plans contain detailed approaches, projects, and recommendations of how local municipalities should address and prepare for wildfire hazards in their communities. The plan is managed by the County Office of Emergency Services (OES) and provides a direct response to the need for increased community education, communication, preparedness, and action in anticipation of future wildfire(s) (Nevada County, 2019).

Environmental Setting (Baseline):

Per the *Nevada County Fire Hazard Severity Zones in SRA (2007)* the site is in a "very high fire severity zone". As shown on Figure 7, and discussed in section 4 Biological Resources above, a large portion of the site has a variety vegetative cover. See Table 13 above for a description of each vegetation community.

Applicable Thresholds of Significance:

There are no applicable thresholds of significance for this project.

Environmental Studies Performed and Methodology:

None

Impact Analyses and Conclusions:

Analysis as to whether or not project activities would:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis:

The project does not propose any buildings or infrastructure that would block emergency response or evacuation plans or routes. The site has been contaminated for over 75 years and been served by fire, police, and other providers subject to adopted emergency response and evacuation plans. The project would not change application of those plans, policies, or impair routes to this property.

Conclusion:

No impact.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis:

The site is in a state-designated "very high fire" severity zone. Prior to contaminated soil excavation all vegetation would be removed within the disturbance area. Project activities are then limited to excavation and placement of contaminated soil using diesel powered mobile equipment. The project would comply with the requirements of the applicable County fire prevention programs as required by the County General Plan and Zoning Ordinance. As a result of the vegetation removal, it is likely the fire hazard for this site would be reduced.

Conclusion:

Less than Significant.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact Analysis:

See above.

Conclusion:

Less than Significant

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact Analysis:

See Hydrology & Water Quality impact. No people or structures will be located onsite after completion of the project. In the event of a fire, potential erosion and slope instability would be contained and settle within the flat portions of the property that surround the fill area.

Conclusion:

Less than Significant

References Used:

California Office of the State Fire Marshall. 2007. *Nevada County Fire Hazard Severity Zones in SRA*. Approved in November 7, 2007.

Nevada County. 2014. *Nevada County General Plan*. Approved in 1996. Nevada City, CA.

Nevada County. 2011. *Nevada County and Nevada Operational Area Emergency Operations Plan*. Approved in June 28, 2011.

21. MANDATORY FINDINGS OF SIGNIFICANCE
Based on evidence provided in this Initial Study, DTSC makes the following findings:

a) The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b) The project does not have impacts that are individually limited but cumulatively considerable. ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

c) The project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Authority: Public Resources Code 21083, 21094.5.5

Reference: Public Resources Code Sections 21094.5 and 21094.5.5