SAN BERNARDINO COUNTY

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

PROJECT LABEL:

APN: 0424-171-16.17

APPLICANT: Hi-Grade Materials

COMMUNITY: Barstow

LOCATION: Bordered on the north and west by the

Marine Corps Logistics Base Barstow

PROJECT NO: AP20170001

STAFF: Reuben Arceo, Contract Planner

REP('S): Webber and Webber Mining Consultants
PROPOSAL: Mine sand and gravel aggregates up to

Mine sand and gravel aggregates up to 1.25 million tons per year for forty (40)

years on 62.4 acres

USGS Quad: Daggett

T, R, Section: T: 9N R:1W Sec: 13

Thomas Bros.: Page 3760, Grld: J-3

Planning Area: Barstow

Land Use Zoning: Resource Conservation

Overlays: None

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino

Land Use Services Department - Current Planning

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Project Sponsor: Hi-Grade Materials Company

c/o Webber & Webber Mining Consultants Inc.

101 E. Redlands Boulevard, Ste. 240

Redlands, CA 92373

Phone No: (909) 793-3416

PROJECT DESCRIPTION:

This application is for approval of a Mining Conditional Use Permit and Reclamation Plan on 62.4 acres of a privately owned land located in NEBO, California within the Resource Conservation (RC) land use zoning district of San Bernardino County. Hi-Grade Materials Company is the applicant proposing to mine sand and gravel aggregates up to 1.25 million tons per year for forty (40) years. Approximately 12 - 14 million tons may be excavated during the life of the project. If depletion of material occurs before the proposed 40-year life of the Project, mining will cease and final reclamation of the site will commence. Mined products will include high quality aggregates for use in concrete, asphalt and general specification construction aggregates to meet regional and local construction demand. The proposed site would provide a localized source for PCC Aggregate material to area construction projects.

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Mining Operations

The rate of excavation is dictated by market demand and no phasing of mining activities is proposed. Generally the sand and gravel aggregate materials will be excavated directly with a front-end loader, loaded into haul trucks and deposited directly into the processing plant or loaded into street legal trucks for export off-site. Stockpiles of excavated material will be located near the processing plant and fed to the crushing/screening plant or loaded into street legal haul trucks. Plant operating hours at the mine may be up to 24-hours per day and seven days per week as required to meet local and Caltrans project schedules.

Prior to excavating in undisturbed areas, the top 6-12 inches of "overburden" material, including any vegetation, will be removed and placed into stockpiles for use as growth media during reclamation activities. The existence of this growth media material is not consistent throughout the site because of historic disturbance. This material will be removed from the surface where it exists and stockpiled for subsequent use during revegetation.

During any period of non-operation or limited operations for a period of 12 months or greater, the operator (or his representative) will prepare and submit an Interim Management Plan to San Bernardino County for review and approval.

A portable crushing and screening rock plant will be located as practical near the working face of excavations to minimize haul distance, dust emissions and greenhouse gasses. Onsite excavations will result in slopes no steeper than 2:1 (horizontal: vertical) with a maximum slope height of 100 feet. Excavations will adhere to standard hillside mining and grading techniques \ to comply with the Surface Mining and Reclamation Act of 1975 (SMARA) and Mine Safety and Health Administration (MSHA) requirements.

Volume of truck traffic will depend on type and duration of various construction market activities. Average annual excavation amounts of 200,000 – 400,000 tons will result in approximately 40-50 truck trips per day for exporting material from the mine site. During a maximum probable production year, up to 200 truck trips per day may occur. There may be periods of inactivity in the absence of market demand.

Mine Waste

Mining activities may produce three types of waste: overburden (topsoil), waste oils/solvents, and domestic garbage.

Overburden on the project site primarily will be removed from the surface where it exists, and stockpiled for subsequent use during reclamation. Equipment and vehicle maintenance servicing may produce waste oils, lubricants and solvents. It is projected that maintenance of processing equipment will generally occur offsite, but occasionally it may take place onsite. When onsite maintenance does occur, all servicing of equipment will be performed consistent with San Bernardino County Department of Environmental Health Services regulations for draining/collecting waste oils and other hazardous materials. All collected waste oils, lubricants and solvents shall be placed in covered containers and stored within secondary containment structures while onsite. These collected materials will continue to be transferred to a County-approved hazardous waste handler for proper disposal or to an approved reuse facility. Ordinary refuse will continue to be collected in bins and disposed of at permitted landfills.

Other chemicals or hazardous materials are not anticipated during normal operating conditions at the project site. No flotation, amalgamation, smelting, leaching or other processes are necessary for this

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type the project.

Planned Ore Processing Methods Onsite

Generally the sand and gravel aggregate material will be excavated directly by loader and loaded into haul trucks for delivery to the on-sight processing plant or loaded into street legal haul trucks for export off-site. Stockpiles of excavated material will be located near the processing plant and fed to the crushing/screening plant. Aggregates will be processed utilizing a semi-portable crushing and screening plant. A series of screens, crushers, and conveyors will comprise the various processing circuits that will produce a variety of aggregate products, depending on the market requirements. The processing plant may be altered in the future to increase efficiency or produce customer-specific products. No Blasting or drilling is proposed and no explosive materials will be handled or stored on-site.

Production Water Data

Fresh Water

Water will be acquired from the existing on-site well and will be utilized for dust suppression and aggregate material washing. During proposed processing operations up to 80,000 gallons per day may be required. Over 60% of aggregate wash water will be recycled through a sedimentation pond system. Recycling of process water will reduce fresh water consumption to approximately 30,000 gallons per day. Bottled water will be provided for employee use.

Wastewater

Water will be recycled to the extent practical, minimizing any potential excess processing water. Minimal amounts of water will be lost through seepage from the sedimentation pond. Possible contamination of the percolated water would be turbidity. Onsite storm water runoff will be directed into an onsite containment area within the quarry excavations where it will evaporate or percolate to the water table. No contaminants such as processing chemicals, detergents, acid drainage, fuel oil or gasoline will be exposed to water flows onsite throughout the life of the project. No septic systems are, or will be, installed on-site.

Erosion and Sedimentation Control

Drainage from the Project area will be self-contained within the project site. The proposed quarry is designed to provide for complete retention of water flows. A small drainage channel courses south to north under Interstate 40 and will direct infrequent flows into the site. The nearest blue-line stream terminates approximately one-half (1/2) mile southeast of the Project site on the south side of Interstate 40. Groundwater is not expected to be encountered during excavation activities. As the quarry expands in size, retention area(s) will be maintained to prevent water from discharging to offsite areas. Required engineering for drainage control will address headward erosion concerns. Any erosion sediments will be retained onsite and will not affect offsite properties. All active Project areas will continue to be graded, inspected monthly and maintained to minimize erosion during heavy precipitation events. At the end of mining, any water retained within the Project boundary will evaporate and percolate. Accumulated sediments will add to reclamation.

Product stockpiles, quarry roads, and active quarry slopes will continue to be periodically wetted to reduce potential for wind erosion. Any stockpiles or mined materials that may remain inactive for extended periods of time will be addressed with coarse aggregate or vegetation to minimize wind/water erosion. Other potential Project areas subject to wind/water erosion will receive the same treatment.

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Reclamation

The goal of reclamation of the Project site is to return the site to privately-owned vacant open space consistent with the Resource Conservation Land Use District. Complete reclamation of the site will include:

- Complete removal of all processing/miscellaneous equipment, scale/scale house, and refuse
- Final grading of Project slopes
- Mitigation of any potential hazards
- Revegetation with indigenous species

Reclamation of disturbed areas will commence as soon as practical after mining has commenced. Final reclamation will occur within five years of the termination of the excavation activities and may continue longer if baseline success criteria are not met within that timeframe.

Reclamation will commence with the placement of soil islands within a designated initial revegetation test plot area. A designated Revegetation Manager will monitor a small area in the northern portion of the site that will be utilized to test revegetation methods while active excavations are occurring. Results of the initial revegetation test plots will form the basis for final revegetation of all disturbed Project areas. The following details the projected schedule to reclaim all disturbed areas, present and future as shown on Table 1 below.

Table 1. Reclamation Schedule

Timeframe	Activity
Spring 2017	Initiate the revegetation test plot in the area shown on the Reclamation Plan Map.
2017 - 2026	Monitor/evaluate initial revegetation test plot activities and make adjustments, if required, per recommendations of the designated Revegetation Manager in coordination with officials from San Bernardino County.
2026 - 2056	Scarify and place growth media soil Islands over 25% of any finished, level- disturbed project areas. Revegetate based on results of initial revegetation activities.
Jan. 1 2057	Mining excavations cease.
2057 – 2061	Continue placement of soll Islands on disturbed quarry areas until natural vegetative propagation commences.
2061	Finalize all revegetation activities. Site closure.

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Revegetation

The goal of revegetation of the Project site is to accelerate the reestablishment of native vegetation subsequent to land disturbance, eventually leading to vegetative conditions that existed prior to mining. Once the surfaces are scarified, the revegetation process will begin with the placement of soil islands over 25% of all accessible level- areas. Soil islands will basically consist of vegetative growth media, including any stockpiled topsoil material, fine-textured waste tailings from the screening operation, and any site collected organics (shrubs, bushes, grasses). The soil island concept was developed by the National Park Service and has been successful in revegetation projects at the Joshua Tree National Monument, as well as other locations. The Park Service research concluded that desert vegetation has a much better chance of success developing naturally from an established soil island. The soil island essentially acts as a base from which naturally-occurring seed stock can spread.

Results from the revegetation test plot(s) will provide the most effective composition and method of seeding that will be used to revegetate the remainder of the site subsequent to mining activities. The soil islands should average 6-12 inches in thickness, depending on available stockpiled soil/organics. Depending on the results of the revegetation test plots, it's projected that revegetation efforts will not include any irrigation, fertilizers, mulch, lime or other non-native constituents unless recommended by the Revegetation Manager upon unsatisfactory results.

Under the supervision of the designated Revegetation Manager, a seed mixture described in the Revegetation Plan will be implanted in the soil islands. Native seed stock will be obtained from a Bureau of Land Management/State-recommended list of commercial seed suppliers, or collected from the Project site and nearby areas. Progress of the revegetation activities will be assessed regularly by a qualified individual and the County. If necessary, recommendations for adjustments to the seed mixture/seeding method will be made so the desired results can be achieved in coordination with officials of San Bernardino County.

Successful revegetation of the site will be achieved when the success criteria set forth in the Revegetation Plan is met. This will result in enough native plant cover reestablished to resist the incursion and spread of invasive annual grasses and forbs, help reduce erosion, and to reestablish appropriate habitat for the local desert wildlife.

Cleanup

Upon cessation of mining activities all mobile equipment not required for further revegetation activities will be removed from the site. This would include all loaders, dozers, crushing and screening plant equipment, conveyors, etc. Refuse in any form will not remain on site and will be appropriately disposed of in permitted landfills. Any structures/foundations will also be completely removed from the site.

Post Reclamation

Upon completion of final reclamation activities, the Project site will visually appear as a moderately-sized enclosed quarry with the quarry floor situated somewhere between 40-100 feet below the existing surrounding surface. The quarry floor will be enclosed by the excavated slopes which will blend with the surrounding natural topography. All accessible slopes and horizontal areas will be vegetated with area-indigenous plants. There are no residences or commercial developments within the vicinity that will be negatively affected by the Project after reclamation.

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Future mining of the reclaimed site or nearby properties will not be precluded by this proposed mining development. This alluvial deposit is capable of supplying sand and gravel material beyond the 40 years of Project life. Future mining of the Project site could occur if desired and permitted. The proposed end use of the reclaimed site will be privately-owned vacant open space.

Slopes and Slope Treatment

All final excavated quarry slopes will remain after cessation of mining activities, as long as they achieve an acceptable factor of safety. All final 2:1 (horizontal: vertical) reclaimed slopes should remain stable both statically and dynamically pursuant to conventionally accepted standards. Should any final quarry slopes fail to attain the minimum factor of safety standards, the operator will implement such measures necessary to bring the slopes into compliance stable condition. No fill slopes or waste/tailings stockpiles will remain subsequent to reclamation.

Ponds, Reservoirs, Tailings, Wastes

There will be no reservoirs, dams, or embankments established throughout the life of the project for purposes of major water retention. Ponding will occur within the quarry floor during heavy rainfall as the proposed drainage is self-contained with virtually 100% water/sediment retention upon completion of reclamation. Retained storm waters will then be allowed to percolate toward the natural groundwater table below and any deposited sediments will be incorporated into reclamation.

If a sedimentation pond system is established to recycle processing water during site operations, it will be drained and re-graded immediately following completion of mining. Much of the sediments (tailings) produced from the pond will be utilized in aggregate products supplied to area projects. Any remaining tailings that are not sold as product will be utilized to help produce the growth media required for the soil islands. The soil islands are an integral part of the proposed revegetation activities and will benefit from these fine-textured materials.

Soils and Fine-Textured Waste

Very little topsoil is expected to be encountered during site excavations as the surface material has been largely depleted by previous mining activities. Topsoil that still exists will be removed and stockpiled prior to aggregate extraction activities. Topsoil will be removed only to allow advancement of the working excavations, so as to preclude any unnecessary surface disturbance. All topsoil that exists will be stored within topsoil stockpiles located as shown on the Mining Plan Map. This secured topsoil will be utilized to enhance the composition of the growth media for the revegetation soil islands discussed previously.

Any unsold fine-textured tailings comprised of fine material produced by the crushing/screening operations will be blended with stockpiled topsoil material to aid production of the growth media for the soil islands.

Drainage and Erosion Controls

The drainage system remaining after mining activities cease will essentially be engineered confinement of any flows entering the site. Erosion occurring within the quarry area during and after reclamation will be minimized and confined to the site with the quarry design. Any water retained within the quarry will not impact local roads or adjacent properties due to the lack of discharge from the Project site.

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Additionally, revegetation of all appropriately finished slopes will minimize any erosion that may occur on site.

Public Safety

During all proposed mining and reclamation activities, the site will be secured from public access via a locked gate and barriers such as boulders across access points and/or fencing of Project areas above the quarry slopes. Additionally, conspicuous signs will be posted warning the public of site operations. The extraction site will comply with all federal (MSHA) and California OSHA mine safety regulations concerning operating standards. Workers, including contract labor, will be trained in mine safety and first aid with annual refresher courses as required by Federal and State Regulations. Any elevated quarry roads will have safety berms, where required, to prevent equipment operators trespassing onto adverse slopes.

Upon cessation of mining activities, any over-steepened slopes will be graded down and remain secured from public access. Any other potential hazards within the Project site will be removed prior to final reclamation. Fencing, blocked access points, and warning signs will remain to discourage public access. After reclamation activities have been completed, the site will return to vacant open space managed by the legal land owner.

Monitoring and Maintenance

Throughout proposed Project operations, Hi-Grade will be responsible for carrying out the Maintenance and Monitoring Program based on the San Bernardino County-approved Reclamation Plan and Conditions of Approval. The Monitoring and Maintenance Program typically consists of an annual inspection and report that assesses compliance with the Conditions of Approval, including revegetation, public safety measures, water quality, erosion controls/treatments, etc. Hi-Grade, Inc.'s implementation of mitigation measures and the status and success of revegetation will be verified. In addition, Hi-Grade, Inc. will continue to submit Mining Operation Annual Reports to the California Division of Mine Reclamation as required by SMARA. The monitoring of active and reclaimed slopes, revegetation activities, and other reclamation activities will be accomplished by San Bernardino County Officials as an essential part of their SMARA implementation.

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ENVIRONMENTAL/EXISTING SITE CONDITIONS:

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as "...the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or if no Notice of Preparation is published, at the time the environmental analysis is commenced..." (CEQA Guidelines §15125[a]).

The Project does not require the preparation of an Environmental Impact Report and a Notice of Preparation is not required. Thus, the environmental setting for the Project is the approximate date that the Project's Initial Study Checklist commenced in February, 2017.

The existing Project site is located between the 2020 and 2130 foot elevations adjacent to the southeast sector of the Marine Corps Logistics Base. The Base operates within the limits of the City of Barstow, California. Several structures are located on the Marine Corps Logistics Base Barstow and one small structure is located approximately 18 feet west of the western Project boundary of the proposed Project. Immediately south, and adjacent to the Project, is Interstate 40. A privately owned vacant land parcel is located to the east. The proposed site and the privately owned properties to the east as well as additional parcels south of Interstate 40 are designated by San Bernardino County as Resource Conservation (RC).

Access to site will be provided from National Trails Highway then south on an unnamed dirt road to the Project site as shown on the Project exhibits. The site is undeveloped. The nearest residence is located approximately 0.50 miles northeast of the site.

The Project site has been disturbed by previous mining activity and much of the natural vegetation has been removed. The undisturbed portions of the Project site reflect the dominant perennial as Creosote Bush (Larrea tridentata) with co-dominants that include burrobush (Franserie dumosa), ephedra (Ephedra nevadensis), Cooper's lycium (Lycium cooperi), and indigo bush (Parosela schottii). Additionally, a few pencil cholla (Opuntia ramosissiuma) and beavertail cactus (Opuntia basilaris) were observed onsite. Dominant annuals were limited to buckwheat (Eriogonum fasciculatum) and schismus (Shcismus barbatus). Natural revegetation was beginning to occur on the disturbed Project areas with burrobush and ephedra the most common species

Drainage flows currently enter the site through an underpass channel under Interstate 40 located immediately south of the Project site. This drainage originates from the dissected older alluvium south of Interstate 40 on the Marine Corps Firing Range territory.

Surrounding land uses are shown on Table 2.

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Table 2. Existing Land Use and Land Use/Overlay Districts

AREA	EXISTING LAND USE	LAND USE/OVERLAY DISTRICT
Site	Nebo Pit	RC (Resource Conservation)
North	Marine Corps Logistic Base	Military Zone (MZ)
South	Interstate 40	None
East	Vacant Land	RC (Resource Conservation)
West	Marine Corps Logistic Base	Military Zone (MZ)

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

Federal: None

State of California: None

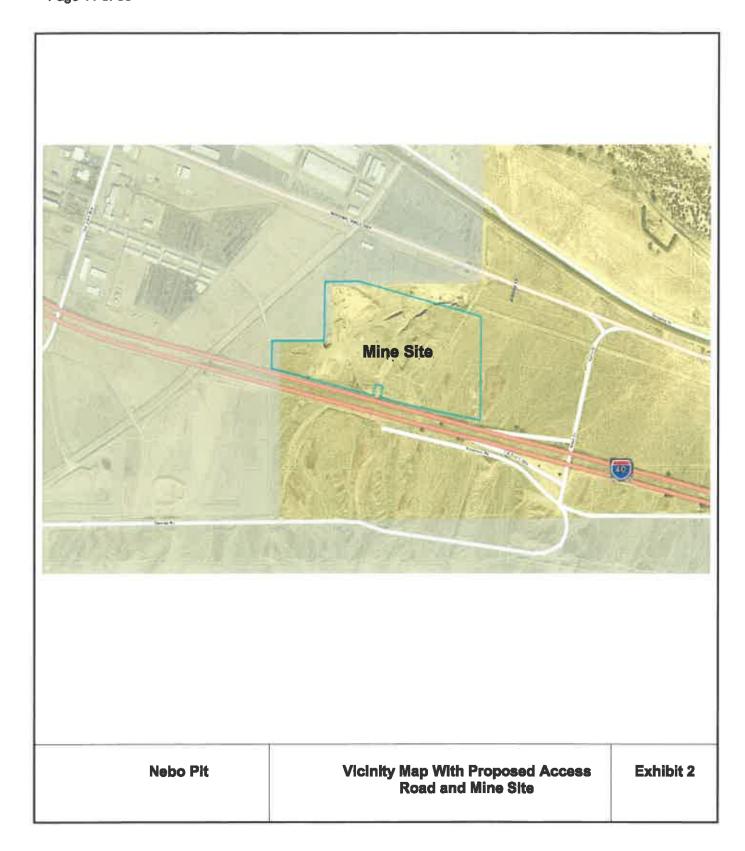
County of San Bernardino: Land Use Services Department-Planning

Regional: Mojave Desert Air Quality Management District

Local: None



Nebo Pit Regional Location Map Exhibit 1



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EVALUATION FORMAT

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on seventeen (17) major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant	No Impact	
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Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

- 1. No Impact: No impacts are identified or anticipated and no mitigation measures are required.
- 2. Less than Significant Impact: No significant adverse impacts are identified or anticipated and no mitigation measures are required.
- 3. Less than Significant Impact with Mitigation Incorporated: Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List of mitigation measures)
- 4. **Potentially Significant Impact**: Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (List of the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

			would be potentially affected by this pact" as indicated by the checklist or		
	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Geology / Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	☐ Land Use/ Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation / Traffic		Utilities / Service Systems		Mandatory Findings of Significance
th Di	ecause none of the environmente preparation of an Environmente ETERMINATION: (To be completed to the basis of this initial evaluation	i tal l i ed by	the Lead Agency)	Projec	t does not require
	DECLARATION shall be prepare	d	have a significant effect on the e		
×	significant effect in this case be project proponent. A MITIGATED	aus NE	have a significant effect on the en e revisions in the project have bee GATIVE DECLARATION shall be p	n mad repare	e by or agreed to by the d.
	IMPACT REPORT is required.		significant effect on the environment		
	mitigated" impact on the enviror earlier document pursuant to a measures based on the earlier	men pplic ana	"potentially significant impact" or it, but at least one effect 1) has b able legal standards, and 2) has alysis as described on attached s nust analyze only the effects that re	een ad been sheets	dequately analyzed in an addressed by mitigation. An ENVIRONMENTAL
	significant effects (a) have been pursuant to applicable standards	ana , and dudir	nave a significant effect on the envi lyzed adequately in an earlier EIR I (b) have been avoided or mitigate ng revisions or mitigation measure quired.	or NE d purs	GATIVE DECLARATION uant to that earlier EIR or
F	Reuben Arces, Contract Planner We July	rd			Benil 17, 2019 4 11 2017
	Dave Prusch, Planning Supervisor				Date

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Appendices: (On Compact Disk or Under Separate Cover)

- A. Air Quality Modeling PrintoutsB. General Biological Resources Assessment

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	ISSUES	Significant impact	Significant with Mitigation Incorp.	Significant	Impact
1.	AESTHETICS - Would the project				
a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
b)	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			\boxtimes	
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			\boxtimes	
SUBST	ANTIATION (Check if project is located within listed in the General Plan):	the view-	shed of any	y Scenic Ro	oute

Detentially Lass than Lass then

- I a) No Impact. The County General Plan Open Space Element, Policy OS 5.1. states that a feature or vista can be considered scenic if it:
 - Provides a vista of undisturbed natural areas;
 - Includes a unique or unusual feature that comprises an important or dominant portion of the viewshed; or,
 - Offers a distant vista that provides relief from less attractive views of nearby features such as views of mountain backdrops from urban areas.

The Project site has been highly disturbed by past mining activities. The Project site itself does not meet the criteria for a scenic vista pursuant to County General Plan Open Space Element Policy OS 5.1.

- l b) **No Impact.** According to The San Bernardino County General Plan the Project site is not within a scenic route (Ref. General Plan Pg. VI-15). Therefore, no impact is anticipated
- Less than Significant Impact. The proposed mine design is intended to reduce visibility. The proposed Project will quickly be mined below the existing surface, which will minimize exposure of activities visually. Upon completion of final reclamation activities, the Project site will visually appear as a moderately-sized enclosed quarry with the quarry floor situated somewhere between 40-100 feet below the existing surrounding surface. The flat quarry floor will be enclosed by the excavated slopes which will blend with the surrounding natural topography. All accessible slopes and horizontal areas will be vegetated with site-indigenous plants. There are no residences or commercial developments within the vicinity that will be negatively affected by the Project after reclamation.

Based on the analysis above, the project will not significantly impact the existing visual

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character of the area. Therefore, impacts are a less than significant.

I d) Less Than Significant Impact. New light sources may be introduced for nighttime operations. The project is required to comply with Section 83.07.040 Glare and Outdoor Lighting - Mountain and Desert Regions of the Development Code which requires lights to be shielded in order to preclude light pollution or light trespass. As such, the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

		issues	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less then Significant	No impac
II.		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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
	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?				\boxtimes
	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))?				\boxtimes
	d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
	ө)	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?				
SUE	3ST	ANTIATION (Check if project is located in the Impo	rtant Farmla	ands Overla	ıy):	

- II a) No Impact. The site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. As such, the Project has no potential to convert such lands to a non-agricultural use and no impact would occur.
- II b) No Impact. Generally, a conflict with existing zoning for agriculture use would occur if a project would intrude into agricultural areas and create conflicts between agriculture uses and non-agriculture uses. The Project site is zoned RC (Resource Conservation). The RC land use zoning district allows mining as a conditional use. There are no agricultural uses on the Project site or in the vicinity of the Project site. As such, there are no impacts to agricultural

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uses.

Pursuant to the California Land Conservation Act of 1965, a Williamson Act Contract enables private landowners to voluntarily enter into contracts with local governments for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive lower property tax assessments based upon farming and open space uses as opposed to full market value. The Project site is not under a Williamson Act Contract. As such, there is no impact with respect to a Williamson Act Contract.

- II c No Impact. The Project site is zoned RC (Resource Conservation). The Project site does not contain any forest lands, timberland, or timberland zoned as Timberland Production, nor are any forest lands or timberlands located on or nearby the Project site. Because no lands on the Project site are zoned for forestland or timberland, the Project has no potential to impact such zoning.
- II d No Impact. The Project site and surrounding properties do not contain forest lands, are not zoned for forest lands, nor are they identified as containing forest resources by the General Plan. Because forest land is not present on the Project site or in the immediate vicinity of the Project site, the proposed Project has no potential to result in the loss of forest land or the conversion of forest land to non-forest use.
- Il e) No Impact. The Project site is not being used for agricultural uses and is adjacent to the Marine Corps Logistics Base to the north and west, Interstate 40 to the south, and vacant land to the east. As such, the Project would not result in conversion of Farmland to non-agricultural use and no impacts would occur.

	ISSUES	Potentially Significant Impact	Less then Significant with Mitigation Incorp.	Less than Significant	No Impaci
11.	AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			\boxtimes	
c)	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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?			\boxtimes	
d)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e)	Create objectionable odors affecting a substantial number of people?				\boxtimes

The Project Site is located in the Mojave Desert Air Basin The Mojave Desert Air Quality Management District (MDAQMD) has jurisdiction over air quality issues and regulations within the Mojave Desert Air Basin. To assist local agencies to determine if a project's emissions could pose a significant threat to air quality, the MDAQMD has prepared the California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, August 2016. The air and dust emissions from the operational use of the Project were evaluated and compared to the MDAQMD standards and evaluated against the most recent thresholds applicable.

III a) Less than Significant Impact. The MDAQMD is responsible for preparing and updating an Air Quality Management Plan. The primary purpose of an Air Quality Management Plan is for controlling emissions to maintain all federal and state ambient air standards for the MDAQMD. The MDAQMD has adopted a variety of attainment plans for a variety of non-attainment pollutants which together comprise the Air Quality Management Plan for the MDAQMD.

A Project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable MDAQMD rules and regulations, complies with all proposed control measures that are not yet

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adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that the Project is consistent with the land use plan that was used to generate the growth forecast.

The Project is consistent with the zoning and land use classifications that were used to prepare the variety of Attainment Plans, (Resource Conservation/RC). In addition, based on Table 3 below, Project-generated emissions generated will not exceed emission thresholds. Therefore, the Project's emissions are in compliance with the thresholds established by the MDAQMD. The Project would not significantly increase local air emissions and therefore would not conflict with or obstruct implementation of the Attainment Plans. Therefore, no impact is anticipated.

III b) Less Than Significant Impact. Mining activities will utilize standard open pit sand and gravel techniques to accomplish mineral extraction via dozers and front-end loaders. Emissions associated with the Project were screened for emissions generation using MDAQMD guidelines, and based on the following equipment as shown in Table 3 below.

Table 3. Equipment List

Equipment Type	Number of Units	Hours/D ay	Horse Power
Rubber Tired Loader	2	8	247
Dumper/Tender	1	8	16
Crushing/Proc. Equipment	2	8	85
Hauling Trucks	200		

As shown in Table 4 below, operational related emissions would not exceed MDAQMD criteria thresholds without control measures.

Table 4. Operations – Maximum Output (Without Control Measures- Pounds per Day)

Source	ROG	NO _x	CO	PM ₁₀	PM ₂
Mining Operations (Loaders, Processing/Conveyors, Dumps)	3.00	27.21	15.02	14.04	5.37
Hauling Trucks	0.004	0.16	0.02	0.27	0.03
Worker Trips	0.11	0.08	0.95	4.84	0.51
Totals (lbs/day)	3.114	27.45	15.99	19.15	5.91
MDAQMD Threshold (lbs/day)	137	137	548	82	65
Significant	No	No	No	No	No

Compliance with MDAQMD Regulation II and Rules 402 and 403

Although the Project does not exceed MDAQMD thresholds, the Applicant is required to comply with all applicable MDAQMD rules and regulations as the MDAB is in non-attainment status for ozone and suspended particulates (PM10 and PM2.5 (state)). To limit dust production, the Applicant must comply with Rules 402 nuisance and 403 fugitive dust, which require the implementation of Best Available Control Measures (BACM) for each fugitive dust source. This would include, but not be limited to the following BACMs:

- 1. The Project proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.
- 2. The Project proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading and mining activity on the site. Portions of the site that are actively being mined shall be watered to ensure that a crust is formed on the ground surface, and shall be watered at the end of each workday.
- 3. The Project proponent shall ensure that all disturbed areas are treated to prevent erosion.
- 4. The Project proponent shall ensure that all mining and processing activities are suspended when winds exceed 25 miles per hour.
- 5. Exhaust emissions from vehicles and equipment and fugitive dust generated by on-site activities, would slightly increase NOX and PM₁₀ levels in the area. Although the Project would not exceed MDAQMD thresholds during operations, the Applicant would be required to implement the following conditions as required by MDAQMD:
 - All equipment used for mining must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.
 - The operator shall maintain and effectively utilize and schedule on-site equipment and haul trucks in order to minimize exhaust emissions from truck idling.
 - The operator shall comply with all existing and future CARB and MDAQMD regulations related to diesel-fueled trucks and equipment, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment. MDAQMD rules for diesel emissions from equipment and trucks are embedded in the compliance for all diesel fueled engines, trucks, and equipment with the statewide CARB Diesel Reduction Plan.

These measures will be implemented by the California Air Resources Board (CARB) in phases with new rules imposed on existing and new diesel-fueled engines and truck and equipment fleets. With compliance restrictions pursuant to the existing rules and regulations and conditions stated above, operational PM10 emissions are reduced by 26.1% and operational PM2.5 emissions are reduced by 37.2% as shown on Table 5 below.

Table 5. Maximum Output (With Control Measures- Pounds per Day)

iable of Maximum Carpat	Assist On	ILI OI III OUG	mi 40- 1 00	HIGO POL	J 1
Source	ROG	NOx	CO	PM ₁₀	PM _{2.5}
Mining Operations (Loaders, Processing/Conveyors, Dumps)	3.00	27.21	15.02	9.05	3.17
Hauling Trucks	0.004	0.16	0.02	0.27	0.03
Worker Trips	0.11	0.08	0.95	4.82	0.51
Totals (lbs/day)	3.114	27.45	15.99	14.14	3.71
MDAQMD Threshold (lbs/day)	137	137	548	82	82
Significant	No	No	No	No	No
Source: Emissions Data from CalEEMoo	d 2016.3.1				

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III c) Less than Significant Impact. The Project is located in a region that has been identified as being in Non-Attainment for Ozone and PM10 (State) according to the California Air Resources Board Area Designation Maps. This means that the background concentration of these pollutants have historically been over the Federal and/or State Ambient Air Quality Standards. With respect to air quality, no individual project would by itself result in Non-Attainment of the Federal or State Ambient Air Quality Standards. However, a project's air pollution emissions although individually limited, may be cumulatively considerable when taken in combination with past, present, and future development projects. In order to be considered significant, a project's air pollutant emissions must exceed the emission thresholds established by the regional Air Quality Management District.

As shown in Tables 4 and 5 above, the thresholds for the above referenced criteria pollutants would not be exceeded by the Project. Therefore, impacts from the Project are not cumulatively considerable when included with other past, present, and future probable projects.

- III d) Less Than Significant Impact. The nearest residence (i.e. sensitive receptor) is located approximately 0.50 miles northeast of the site. In addition, as shown in Tables 4 and 5 above, Project emissions will not exceed MDAQMD thresholds. As such, impacts are less than significant
- III e) No Impact. The generation of objectionable odors is typically not associated with surface mining operations and there are no sensitive receptors within the Project vicinity. Therefore, no impact is anticipated.

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	ISSUES	Potentially Significant Impact	Less then Significant with Mitigation Incorp.	Less then Significant	No Impact
IV.	BIOLOGICAL RESOURCES - Would the project:				
a)	Have substantial adverse effects, 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 Game or U.S. Fish and Wildlife Service?			\boxtimes	
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 Wildlife or US Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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?				\boxtimes
9)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				\boxtimes
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?				\boxtimes

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SUBSTANTIATION	(Check ☐ if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database):☐
The following responses are based	in part on the General Biological Resources Report by RCA Associates, Inc.

The following responses are based in part on the General Biological Resources Report by RCA Associates, Inc. dated October 27, 2017. Please reference this document for further details (Appendix B).

IV a Less Than Significant Impact.

Vegetation

A fairly significant portion of the Project site has been disturbed by previous unauthorized mining activity and much of the natural vegetation has been removed. The undisturbed portions of the Project site reflect the dominant perennial as Creosote Bush (*Larrea tridentata*) with co-dominants that include burrobush (*Franserie dumosa*), ephedra (*Ephedra nevadensis*), Cooper's lycium (*Lycium cooperi*), and indigo bush (*Parosela schottii*). Additionally, a few pencil cholla (*Opuntia ramosissiuma*) and beavertail cactus (*Opuntia basilaris*) were observed onsite. Dominant annuais were limited to buckwheat (*Eriogonum fasciculatum*) and schismus (*Shcismus barbatus*). Natural revegetation was beginning to occur on the disturbed Project areas with burrobush and ephedra the most common species

Wildlife

The General Biological Resources Assessment survey results were limited to a few jackrabbits (Lepus californicus) observed onsite. Also noted were a few small rodent burrows that are probably utilized by species such as Merriam's kangaroo rat (Dipodomys merriami) and antelope ground squirrels (Ammospermophilus leucurus). Western whiptail lizards (Cnemidophorus tigris), desert spiny lizards (Sceloporus magister), and side-blotched lizards (Uta stansburiana) have been observed in the area and may occur on the Project site. No distinct wildlife corridors were identified on the site or in the immediate surrounding areas, and no breeding activities were observed among any of the wildlife.

Conclusions:

Most of the property has been significantly disturbed in the past due to mining activities. Only about 8-acres of native vegetation (i.e., creosote bush community) are present in the eastern and southeastern portion of the site. Operating an asphalt batch plant and a concrete batch plant within those areas which were previously disturbed will have minimal impacts on the general biological resources. Some perennial shrubs and annuals will be removed during future activities; however, the native undisturbed creosote bush community in the eastern and southeastern portion of the site will not be affected by Project activities. Only a few wildlife species are expected to be impacted by the proposed Project, and those which are present on the site will be displaced into adjacent habitats. Habitats to the south and east are relatively undisturbed and wildlife displaced into these areas is not expected to experience any significant increases in mortality. Impacts to wildlife are expected to be negligible.

No Impact. Based on the *General Biological Resources Assessment*, the Project will not impact 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 Wildlife (CDFW) or US Fish and Wildlife Service (USFWS).

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- IV d) No Impact. Based on the General Biological Resources Assessment, the Project will not substantially interfere 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 as none exist on the site.
- IV e) No Impact. The County of San Bernardino Development Code includes Section 88.01.060 (Desert Native Plant Protection Ordinance) and Section 88.01.080 (Riparian Plant Conservation). There are no biological resources on the site that are afforded protection under the above mentioned County of San Bernardino Development Code sections. (Also Refer to Response to Issue IVa).
- IV f) No Impact. The Project Site is located within the planning area of the West Mojave CDCA Plan Amendment. The West Mojave CDCA Plan Amendment was adopted by the BLM in 2006. The Record-of-Decision applies only to 3.3 million acres of BLM-managed lands. To date no approvals have been issued for the Habitat Conservation Plan component by the USFWS or the CDFW. The Project Site is located on private property outside of the BLM management; therefore the West Mojave Plan does not apply.

Additionally, the Project Site is located within the boundaries of the Desert Renewable Energy Conservation Plan (DRECP) NCCP/HCP. Phase I of the DRECP was approved on September 14, 2016 and applies to BLM land only and does not apply to the Project. Phase II which would apply to non-federal land is an on-going process and no implementing agreements have been issued. As such, no conflicts related to applicable land use plans or NCCPs/HCPs are anticipated. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

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	ISSUES	Potentially Significant Impact	Less then Significant with Mitigation Incorp.	Less then Significant	No impact		
V.	CULTURAL RESOURCES - Would the project						
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?						
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?						
c)	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?				\boxtimes		
d)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		\boxtimes				
е)	Disturb any human remains, including those interred outside of formal cemeteries?			\boxtimes			
Va)	remnants associated with a significant historic event or person(s) and/or have a historically significant style, design, or achievement. Damaging or demolition of historic resources is typically considered to be a significant impact. Impacts to historic resources can occur through direct impacts, such as destruction or removal, and indirect impacts, such as a change in the setting of a historic resource. CEQA Guidelines §15064.5(a) clarifies that historical resources include the following: 1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources. 2. A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements [of] section 5024.1(g) of the Public Resources Code. 3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.						
\ m \	The site has been highly disturbed by previous mining a impact to historical resources as a result of the Project required.	ct and no	mitigation	measures	are		
Vb)	Less Than Significant Impact With Mitigation Inco- locations that contain resources associated with former						

such resources as human skeletal remains, waste from tool manufacture, tool concentrations, and/or discoloration or accumulation of soil or food remains.

Although the site has been largely disturbed by past mining activities, there is a possibility that archaeological resources could be discovered in areas where no disturbance has occurred. The following Mitigation Measure is required:

CR-1: The developer/property owner shall submit a letter to the County Land Use Services Department- Planning Division (County) agreeing to adhere to the following requirements:

• In the event archaeological resources are uncovered during earthmoving activities, all work in that area shall cease immediately and the County shall be notified. A qualified archeologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded, excavated, and/or recovered as necessary. Earthmoving shall be allowed to proceed on the site when the archaeologist, in consultation with the appropriate Native American Tribe(s), the County, and the qualified archaeologist determines the resources are recovered to their satisfaction.

With implementation of Mitigation Measure CR-1, impacts are less than significant.

- Vc) No Impact. On July 1, 2015 AB 52 (Gatto, 2014) went into effect. AB 52 established "Tribal Cultural resources" as a resource subject to CEQA review. Tribal Cultural Resources are either of the following:
 - (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
 - (2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
 - AB 52 also created a process for consultation with California Native American Tribes in the CEQA process. Tribal Governments can request consultation with a lead agency and give input into potential impacts to tribal cultural resources before the agency decides what kind of environmental assessment is appropriate for a proposed project.

On February 10, 2017, the County Land Use Services Department notified the following California Native American Tribes per the requirements of AB52:

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- Morongo Band of Mission Indians
- Gabrieleño Band of Mission Indians Kizh Nation
- Soboba Band Luiseño Indians
- Colorado River Indian Tribe
- Serrano Nation of Mission Indians

Upon receipt of a project notice, tribes have thirty (30) days to request consultation on a project. The 30-day response period concluded on March 13, 2017 since the 30th day fell on a Saturday. The County Land Use Services Department did not receive a request for consultation from any of the tribes who were sent notices. As such, it is concluded that no tribal cultural resources will be impacted by the Project.

Vd) Less Than Significant Impact With Mitigation Incorporated: Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine- to medium grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils. They are also found in coarse-grained sediments, such as conglomerates or coarse alluvium sediments. Fossils are rarely preserved in igneous or metamorphic rock units. Fossils may occur throughout a sedimentary unit and, in fact, are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance, amateur collecting, or natural causes such as erosion.

Although the site has been largely disturbed by past mining activities, there is a possibility that paleontological resources could be discovered in areas where no disturbance has occurred. The following Mitigation Measure is required:

CR-2: The developer/property owner shall submit a letter to County Land Use Services Department- Planning Division (County) agreeing to adhere to the following requirements:

a) In the event paleontological resources are uncovered during earthmoving activities, all work in that area shall cease immediately and the County shall be notified. A qualified paleontologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded, excavated, and/or recovered as necessary. In consultation with the Project proponent, the County, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.

With implementation of Mitigation Measure CR-2, impacts are less than significant.

Ve) Less Than Significant Impact. The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. In the event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code

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Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

If the Coroner determines the remains to be Native American, the California Native American Heritage Commission (NAHC) must be contacted and the NAHC must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

	ISSUES	Potentially Significant Impact	Less then Significant with Mitigation Incorp.	Less then Significant	No Impa		
VI.	GEOLOGY AND SOILS - Would the project:						
a)	 Expose people or structures to potential sub adverse effects, including the risk of loss, in death involving: 						
	i. Rupture of a known earthquake fault, as del on the most recent Alquist-Priolo Earthquak Zoning Map Issued by the State Geologist area or based on other substantial evidence known fault? Refer to Division of Mines and G Special Publication 42	e Fault for the se of a			×		
	ii. Strong seismic ground shaking?				\boxtimes		
	iii. Seismic-related ground failure, in liquefaction?	cluding			\boxtimes		
	iv. Landslides?			\boxtimes			
k	Result in substantial soil erosion or the loss of top	osoil?		\boxtimes			
C	Be located on a geologic unit or soil that is unsta that would become unstable as a result of the and potentially result in on or off site landslide, spreading, subsidence, liquefaction or collapse?	project,		\boxtimes			
C	Be located on expansive soil, as defined in Table of the California Building Code (2001) of substantial risks to life or property?				\boxtimes		
€	Have soils incapable of adequately supporting to of septic tanks or alternative wastewater of systems where sewers are not available for the of of wastewater?	lisposal			\boxtimes		
SUBS	(Check if project is local District):	ted in the Geologic	Hazards C	verlay			
	Sources: California Department of Conservation, Cou Maps, Source: Nebo Mine Mining & Reclamation Plan,	inty of San Bernardin	o Geologic	Hazards Ove	rlay		
\/ a\	ai) No Impact The Project site is not located wi	thin an Alguist-Prio	lo Farthqua	ake Fault 7d	ne		

Fault rupture can be a potential hazard to structures and infrastructure but are not

aii) No Impact. Seismic ground shaking is influenced by the proximity of the site to an

generally considered to be hazardous to open-pit aggregate mines.

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earthquake fault, the intensity of the seismic event, and the underlying soil composition. The Project site is not located in close proximity to an earthquake fault zone. The Project site is to be used for a mining operation and seismic ground shaking is not generally considered to be hazardous to open-pit aggregate mines.

aiii) No Impact. The site is not located within a liquefaction hazard area. The Project would not build permanent structures or construct facilities with foundations that could fail as a result of liquefaction during an earthquake.

aiv) Less Than Significant Impact. Onsite excavations will result in slopes not steeper than 2:1 (horizontal: vertical) with a maximum slope height of 100 feet. Excavations will adhere to standard hillside mining techniques and will comply with Mine Safety and Health Administration (MSHA) requirements. Therefore, the Project site would not be expose people to landslide hazard.

VI b) Less Than Significant Impact.

Topsoil

Very little topsoil is expected to be encountered during site excavations as the surface material has been largely depleted by previous mining activity.

Erosion

As the quarry expands in size, retention area(s) will be maintained to prevent water from discharging to offsite areas. No headward erosion from the quarry areas is anticipated. Any erosion sediments will continue to be retained onsite and will not affect offsite properties. All active Project areas will continue to be graded, inspected monthly and repaired with compacted non-erodible rock materials to prevent erosion during potentially heavy precipitation events. At the end of mining, any water retained within the Project boundary will remain until such time that evaporation and percolation have reduced the quantity of standing water onsite. Any accumulated sediments that may be deposited in the Project basin area will be removed and stockpiled for use during reclamation activities.

Product stockpiles, quarry roads, and active quarry faces will continue to be periodically wetted to reduce potential wind erosion. Any stockpiles or mined materials that may remain inactive for an extended period of time will be covered with coarse aggregate or planted with native vegetation to prevent wind/water erosion. Other potential project areas subject to wind/water erosion will receive the same treatment.

All storm water discharge is regulated by the Lahontan Regional Water Quality Control Board pursuant to site specific Storm Water Pollution Prevention Plans to manage soil erosion.

Control of surface drainage, erosion, and sedimentation of planned operations involves the following typical components:

- Limiting surface disturbance to the minimum area required for active operations.
- Diverting run-off from undisturbed areas around the active mining area as necessary.
- Using berms, ditches, sediment basins, and localized control and maintenance measures to intercept and control disturbed area drainage as necessary.
- Stabilizing disturbed areas through grading or revegetation.

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The revegetation program is designed to reestablish a self-sustaining native plant community upon the conclusion of mining.

Based on the above, impacts are less than significant

VI c-d) Less Than Significant Impact. The Project site is situated adjacent to the southern shelf of the Mojave River bed at near the 2100-foot elevation. The Project site aggregate deposit is essentially Mojave River undifferentiated alluvium including fanglomerate, alluvium, colluvium, and some older alluvium, given the river bed meandered during the recent and Pleistocene. There are no major fault lines within the Project boundary. Southerly of the site, across the Interstate 40 highway corridor, are higher elevation extensive dissected alluvium fan deposits located under the Marine Corps Firing Range. West of the Project site is the Marine Corps Logistics Base with underlying alluvium deposits of the Mojave River. East of the site is the Atchison Topeka railroad and the curved Mojave River bed.

The mine site will be subject to ground shaking during earthquake events. There are no other local geologic conditions that could adversely affect the project such as Special Studies Zones, County Fault Hazard Zones, landslides, mudflows, Liquefaction Hazard Areas, differential settlement, hydroconsolidation, collapsible or expansive soils, wind erosion, water erosion, sedimentation, or inundation due to earthquake-induced dam failure.

Therefore, impacts related to landslide, lateral spreading, subsidence, liquefaction or collapse is considered less than significant.

VI e) **No Impact.** Septic tanks and/or alternative water supply systems are not proposed as part of the Project. Therefore, no impacts are anticipated.

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	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less then Significant	No impact
VII	GREENHOUSE GAS EMISSIONS - Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				

SUBSTANTIATION

VII a) Less Than Significant Impact. In December September 2011, the County of San Bernardino adopted the "Greenhouse Gas Emissions Reduction Plan" ("GHG Plan"). The purpose of the GHG Plan is to reduce the County's internal and external GHG emissions by 15 percent below current (2011) levels by year 2020 in consistency with State climate change goals pursuant to AB32. The GHG Plan has been designed in accordance with Section 15183.5 of the State CEQA Guidelines which provides for streamline review of climate change issues related to development projects when found consistent with an applicable greenhouse gas emissions reduction plan.

According to CEQA Guidelines section 15064.4, when making a determination of the significance of greenhouse gas emissions, the "lead agency shall have discretion to determine, in the context of a particular project, whether to (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." Moreover, CEQA Guidelines section 15064.7(c) provides that "a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts" on the condition that "the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

According to the County of San Bernardino GHG Plan, measurable reductions of GHG emissions will be achieved through the County's GHG Development Review Process by applying appropriate reduction requirements as part of the discretionary approval of new development projects. A review screening guidance standard of 3,000 MTCO₂e is applied to all land uses when the County is the lead agency. Projects that exceed 3,000 MTCO₂e per year of GHG emissions are required to calculate GHG reduction measures and the determination of a significant findings using the County's GHG Plan Screening Tables. Projects that garner 100 or more points on the Screening Tables do not require quantification of project specific GHG emissions.

The County may also consider the Mojave Desert Air Quality Management District (MDAQMD) guidance and incorporate all applicable standards. The MDAQMD significance threshold for GHGs (100,000 tons/yr), while higher than the County's GHG Plan of 3,000 MTCO2e/yr is more applicable to this type of project. Upon review of the Screening Tables, it was determined that the GHG reduction measures listed are related to typical long-term residential, commercial, and industrial structural development and the project activities do not

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apply.

The CEQA threshold of 100,000 MTCO₂e per year has been utilized by the MDAQMD as potentially significant to global warming. Utilizing this threshold, proposed operations of the mine project would be well below the threshold. In addition, the GHG emissions generated from project activities are less than the County's GHG Plan Screening Guidance Standard of 3,000 MTCO₂E. Project-related GHG emissions from on-site equipment, power generators, and trucks are shown in Table 6.

Table 6. Project Annual Greenhouse Gas (GHG) Emissions (MTCO2e)

		GHG	Emissions M	T/yr			
Source	N2O	CO2	CH4	CO2e			
Mining Operations	0.000	1,101.34	0.32	1,109.45			
Haul & Worker Trips	0.00	50.87	.0025	50.93			
TOTAL			_	1,160.38			
County GHG Threshold				3,000			
MDAQMD Threshold				100,000			
Exceed Threshold?				NO			

The following Performance Standards apply to all Projects, including those that are emit less than 3,000 MTCO2E/YR, and will be included as Conditions of Approval for the Project.

The following are the Performance Standards (Conditions of Approval) that are applicable to the Project:

- 1. The developer shall implement the following as greenhouse gas (GHG) mitigation during the operation of the approved project:
 - a) Waste Stream Reduction. The "developer" shall provide to all project employees County-approved informational materials about methods and need to reduce the solid waste stream and listing available recycling services.
 - b) Select construction equipment based on low-emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or CNG equipment.
 - c) All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.
- VII b) Less Than Significant Impact. The State and local regulatory programs for GHG emissions and climate change are described in the response to Question VIIa above. The Performance Standards described above will ensure that there would be no conflict with any applicable plan, policy, or regulation; therefore, impacts will be less than significant, and no mitigation would be required.

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	ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
VIII.	HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
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?			\boxtimes	
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?				\boxtimes
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 for people residing or working in the project area?				\boxtimes
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			\boxtimes	

SUBSTANTIATION

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- VII a-b) Less Than Significant Impact. Equipment and vehicle maintenance servicing may produce waste oils, lubricants and solvents. It is projected that maintenance of processing equipment will generally occur offsite, but occasionally it may take place onsite. When onsite maintenance does occur, all servicing of equipment will be performed consistent with San Bernardino County Department of Environmental Health Services regulations for draining/collecting waste oils and other hazardous materials. All collected waste oils, lubricants and solvents shall be placed in covered containers and stored within secondary containment structures while onsite. These collected materials will continue to be transferred to a County-approved hazardous waste handler for proper disposal or to an approved re-use facility. Ordinary refuse will continue to be collected in bins and disposed of at permitted landfills. Other chemicals or hazardous materials are not proposed during normal operations at the project site. No flotation, amalgamation, smelting, leaching or other processes are proposed throughout the life of the project. Based on the analysis above, impacts are less than significant.
 - VIII c) Less Than Significant Impact. The Project involves the use of materials common to the mining industry and includes the transport, storage and use of fuels, and lubricants. The operator would continue to comply with all applicable federal and state safety rules and regulations regarding hazardous materials. During operation, diesel exhaust would be generated by heavy construction equipment; however, no school facilities or proposed school facilities are located within one-quarter mile radius of the Project Site. Therefore, impacts are less than significant.
 - VIII d) No Impact. The Project Site is not identified on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The operator would comply with all applicable federal and state safety rules and regulations regarding hazardous materials. Therefore, less than significant impact is anticipated.
 - VIII e) No Impact. The Project site is not located within the boundaries of an airport land use plan or within the vicinity of a private airstrip. The Barstow-Dagget County Airport is located approximately 8.5 miles east of the Project site. The proximity of the airport would not result in a safety hazard for people working at the mine site.
 - VIII f) No Impact. The Project site is not located within the vicinity of a private airstrip
 - VIII g) Less Than Significant Impact. Activities associated with the Project would not impede existing emergency response plans for the Project Site and/or other land uses in the Project vicinity. Access to site will be provided from National Trails Highway then south on an unnamed dirt road to the Project site. All vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Therefore, implementation of the Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.
 - VIII h) Less Than Significant Impact. As shown on San Bernardino County General Plan, Hazards Overlay Map, the Project site is not located within Fire Safety Overlay District. Because the site is proposed for surface mining and will not contain permanent habitable structures, it would not result in any safety hazard impacts from wild fires. As such, there is no impact.

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		ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impec
IX.		HYDROLOGY AND WATER QUALITY - Would the project:				
	a)	Violate any water quality standards or waste discharge requirements?				
	b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?		\boxtimes		
	c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?			×	
	d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			\boxtimes	
	e)	Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			⋈	
	f)	Otherwise substantially degrade water quality?			\boxtimes	
	g)	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				\boxtimes
	h)	Place within a 100-year flood hazard area structure that would impede or redirect flood flows?				\boxtimes
	i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				\boxtimes

j) Inundation by seiche, tsunami, or mudflow?		\boxtimes
SUBSTANTIATION		

- Less Than Significant Impact. Mining waste discharges are regulated under Article 7 of Chapter 15 (Cal. Code of Regs.). Further regulations for mines are contained in the California Water Code, Section 13260. All mining operations are subject to the Surface Mining and Reclamation Act (SMARA, CA Public Resources Code, Title 14, Division 2, Chapter 9). The Project's Mining and Reclamation Plan contains the following measures and design features to meet waste discharge requirements:
 - Erosion of the banks due to natural rainwater run-off will be minimized by cutting to a 2:1 slope and corrected by removal of any material carried into the excavation.
 - Stockpiles of topsoil and fill-dirt shall be managed to minimize water erosion.
 - Limiting surface disturbance to the minimum area required for active operations.
 - Stabilizing disturbed areas through grading or revegetation.
 - Final reclamation shall include adequate provisions to intercept and conduct off-site tributary drainage flow around or through the site to minimize erosion.

With implementation of the above, impacts are less than significant.

Less Than Significant Impact With Mitigation Incorporated. Water will be acquired via an existing on-site well and will be utilized for dust suppression and aggregate material washing. For management purposes under the Mojave Basin Judgment, the Mojave Water Agency (MWA) split the Mojave River watershed and associated groundwater basins into five separate "Subareas." The locations of the five Subareas are; 1) Oeste, 2) Este, 3) Alto, 4) Centro and 5) Baja.

The Nebo Mine is managed within the adjudicated Centro hydrologic subarea by the MWA, which is a State Water Project contractor, a regional groundwater management agency, and serves as Watermaster for the adjudicated Mojave Basin.

Water Code Section 10910(f)(5) does not mandate a detailed "basin-wide" analysis to compare all existing and projected future groundwater pumping against the safe yield of the entire groundwater basin nor specify a particular methodology for a sufficiency analysis, and in that respect, affords the County substantial discretion in determining how to measure groundwater sufficiency.

The MWA has been granted authority to regulate groundwater withdrawal and charge for replenishment water. The Adjudication established a "physical solution" for the Mojave Basin Area Judgment, wherein, limits were set on the amount of groundwater production that can occur in each subarea without incurring an obligation to buy imported water.

According to the MWA, (2015 Urban Water Management Plan) water levels within the Centro Subarea have been relatively stable with seasonal fluctuations and declines during dry years followed by recovery during wet periods. Projected groundwater pumping within the Centro Subarea is summarized in Table 3-7 of the MWA 2015 Urban Water Management Plan and shown on Table 7 below.

Table 7. Centro Basin Area Projected Groundwater Production (AFY)

Subarea	2015	2020	2025	2030	2035	2040
Centro	20,100	20,576	20,555	20,551	20,557	20 549

The applicant has indicated the surface mining operation will obtain its principal source of water from groundwater beneath the site. During proposed processing operations up to 80,000 gallons per day may be required. Over 60% of aggregate wash water will be recycled through a sedimentation pond system. Recycling of process water will reduce fresh water consumption to approximately 30,000 gallons per day. As such, operations are estimated to consume approximately 50,000 gallons per day.

The applicant is allowed to produce as much water as needed to meet the Project's demand as long as the operation is subjected to compliance with the "Physical Solution" set forth in the Mojave Basin Area Judgment (Final Judgment after trial in the Riverside County Superior Court (Case No. 208568, January 10 1996). The underlying assumption of the Adjudication was that sufficient water will be made available to meet the needs of the Moiave Basin producers in the future from a combination of natural supply, imported water, water conservation, water reuse and transfers of Free Production Allowance (FPA) among parties. If a project applicant stipulates to the Adjudication, the resulting impact of increased pumping to meet the proposed Project's demand is legally considered a "net zero impact" on the available water supplies. The Physical Solution defines individual rights of all water producers with the adjudicated Basin area in a manner which will equitably allocate the natural water supplies and which will provide for equitable sharing of costs for Supplemental Water. The Judgment provided sufficient information and data to formulate a reasonable and just allocation of existing water supplies as between the individual hydrologic Subareas within the Basin Area and as among the water users within each Subarea to proceed with orderly water resource planning and development.

In order to ensure compliance with the "Physical Solution" set forth in the Mojave Basin Area Judgment (Final Judgment after trial in the Riverside County Superior Court (Case No. 208568, January 10 1996), the following mitigation measure is required.

HYD-1. The following requirements shall be met:

- d) Prior to the commencement of mining activities evidence shall be submitted to the DEHS/Water Section for approval, that the well is constructed to public water supply standards, will provide the quantity of water projected as required for the Project, meets quality standards for domestic and industrial use, and the well is properly permitted with the County. For information, call DEHS/Water Section at (909) 387-4666.
- b) During mining operations, the operator of the on-site well shall abide by the terms of the Stipulated Judgment for the Mojave River Basin Adjudication and shall coordinate with Mojave Water Agency to ensure compliance.
- c) After mining operations have concluded, any well, exploratory hole or test hole which is abandoned, out of service, or otherwise left unattended shall have a temporary cover over the well or opening which prevents the introduction of undesirable material into the well or hole, and ensures public and wildlife safety pursuant to Section 115700 of the California Health & Safety Code.
- d) Upon final reclamation, evidence shall be provided to the DEHS/Water Section

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that all wells, exploration holes or test holes, as defined by DWR Bulletin 74-81 as revised in 1988 or the latest revision are destroyed in accordance with DEHS regulations and in such a manner that will no longer be a hazard to the health and safety of people and wildlife.

With implementation of Mitigation Measure HYD-1, the Project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level

- IX c-f) Less Than Significant Impact. Drainage from the Project site will be self-contained within the Project area. The proposed quarry is designed to provide for complete retention of water flows. A small drainage channel courses south to north under the Interstate 40 and will direct infrequent flows into the site from the south. The nearest blue-line stream terminates approximately one-half (1/2) mile southeast of the Project site on the south side of Interstate As the quarry expands in size, retention area(s) will be maintained to prevent water 40. from discharging to offsite areas. No headward erosion from the quarry areas is anticipated. Any erosion sediments will continue to be retained onsite and will not affect offsite properties. All active Project areas will continue to be graded, inspected monthly and repaired with compacted non-erodible rock materials to prevent erosion during potentially heavy precipitation events. At the end of mining, any water retained within the Project boundary will remain until such time that evaporation and percolation have reduced the quantity of standing water onsite. Any accumulated sediments that may be deposited in the Project basin area will be removed and stockpiled for use during reclamation activities. Therefore, impacts are less than significant.
- IX g/h) No Impact. The Project does not occur within a 100-year flood plain, nor does it include the construction of housing or would place housing within a flood plain. No impacts are anticipated.
- No Impact. The Project Site and surrounding area is located outside of any designated dam inundation area. The Project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the fallure of a levee or dam, as no levee or dam is proposed as part of the this Project. Therefore, no impacts are anticipated.
- No Impact. A seiche is an oscillating surface wave in a restricted or enclosed body of water generated by ground motion, usually during an earthquake. Inundation from a seiche can occur if the wave overflows a containment wall or the banks of a water body. As the Project site is not located adjacent to any body of water that has the potential of seiche or tsunami, no impacts are anticipated.

		ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impaci
X.		LAND USE AND PLANNING - Would the project:			112 475	
	a)	Physically divide an established community?		<u></u>		\boxtimes
	b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			\boxtimes	
	c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes
SUE	STA	INTIATION				

- X a) No Impact. The site is bordered on the north and west by the Marine Corps Logistics Base Barstov Interstate 40 to the south; and vacant land to east. As such, the Project would not physically divid an established community.
- X b) Less Than Significant Impact. The analysis contained in this Initial Study Checklist addressed the potential conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect.

As demonstrated throughout this Initial Study Checklist/Mitigated Negative Declaration, the Project would otherwise not conflict with any applicable goals, objectives, and policies of the County's General Plan or the County's Development Code. Additionally, the Project would not conflict with any applicable policy document, including, without limitation, the Mojave Desert Air Quality Management District's Air Quality Management Plan and the San Bernardino County Greenhouse Gas Emissions Reduction Plan*. The purpose of these plans is to avoid or mitigate an environmental effect.

Based on the above, it can be determined that the Project is not in conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect.

X c) No Impact. The Project Site is located within the planning area of the West Mojave CDCA Plan Amendment. The West Mojave CDCA Plan Amendment was adopted by the BLM in 2006. The Record-of-Decision applies only to 3.3 million acres of BLM-managed lands. To date no approvals have been issued for the Habitat Conservation Plan component by the USFWS or the CDFW. The Project Site is located on private property outside of the BLM management; therefore the West Mojave Plan does not apply.

Additionally, the Project Site is located within the boundaries of the Desert Renewable Energy Conservation Plan (DRECP) NCCP/HCP. Phase I of the DRECP was approved on

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September 14, 2016 and applies to BLM land only and does not apply to the Project. Phase II which would apply to non-federal land is an on-going process and no implementing agreements have been issued. As such, no conflicts related to applicable land use plans or NCCPs/HCPs are anticipated. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

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		ISSUES	Potentially Significant Impact	Less then Significant with Mitigation Incorp.	Less then Significant	No Impact
XI.		MINERAL RESOURCES - Would the project:				
	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?				\boxtimes
	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?				
SUE	BST	ANTIATION (Check if project is located within	the Minera	al Resource	Zone Ove	lay):

XI a-b) No Impact. Mined products will include high quality aggregates for use in concrete, asphalt, and general specification construction aggregates to meet regional and local construction demand. The proposed Project would provide a localized source for PCC Aggregate material to area construction projects. Therefore, the Project would not result in the loss of availability of a mineral resource that would be of value to the region and the residents of the State because the Project is providing mineral resources for the benefit of the region.

		ISSUES		Potentially Significant Impact	Less then Significant with Mitigation Incorp.	Less than Significant	No Impact
XII.		NOISE - Would the	project:				
	a)	excess of standard	s to or generation of noise levels in s established in the local general nance, or applicable standards of			\boxtimes	
	b)		ns to or generation of excessive on or groundborne noise levels?			\boxtimes	
	c)		anent increase in ambient noise vicinity above levels existing without				
	d)		rary or periodic increase in ambient project vicinity above levels existing			\boxtimes	
	e)	where such a plan miles of a public air	d within an airport land use plan or, has not been adopted, within two port or public use airport, would the le residing or working in the project pise levels?			×	
	f)	would the project ex	n the vicinity of a private airstrip, spose people residing or working in scessive noise levels?			\boxtimes	
SUB	STA	ANTIATION	(Check if the project is located in subject to severe noise levels acc □):				

- XII a,c,d)

 Less Than Significant Impact. Generally the sand and gravel aggregate material will be excavated directly from in bank via front-end loader and loaded into haul trucks for delivery to the processing plant or loaded into street legal haul trucks for export off-site. The site is bordered on the north and west by the Marine Corps Logistics Base Barstow; Interstate 40 to the south; and vacant land to east. The nearest noise sensitive receptor) is a residence located approximately 0.50 miles northeast of the site. Therefore, impacts are less than significant.
- XII b)

 Less Than Significant Impact. Generally the sand and gravel aggregate material will be excavated directly from in bank via front-end loader and loaded into haul trucks for delivery to the processing plant or loaded into street legal haul trucks for export off-site. No blasting is proposed. The site is bordered on the north and west by the Marine Corps Logistics Base Barstow; Interstate 40 to the south; and vacant land to east. The nearest noise sensitive

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receptor) is a residence located approximately 0.50 miles northeast of the site. Therefore, the Project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. Therefore, less than significant impact is anticipated.

Less Than Significant Impact. The Project site is not located within the boundaries of an airport land use plan or within the vicinity of a private airstrip. The Barstow-Dagget County Airport is located approximately 8.5 miles east of the Project site. The Project involves open-pit surface mining and does not include land uses that are considered to be sensitive to aircraft noise.

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	ISSUES	Significant impact	Significant with Mitigation Incorp.	Significant	Impac
XIII.	POPULATION AND HOUSING - Would the project:				
a)	Induce substantial 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)?				\boxtimes
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				
SUBST	ANTIATION				

- XIII a) No Impact. The Project would not induce substantial population growth in the area either directly or indirectly because the Project consists of a mining operation that will operates with an estimated 5 employees. No impacts are anticipated.
- XIII b) **No Impact.** The Project would not displace substantial numbers of existing housing units, or require the construction of replacement housing, as no housing units exist on the site.
- XIII c) No Impact. Implementation of the Project would not displace substantial numbers of people necessitating the construction of replacement housing elsewhere, as no housing exists on the Project Site.

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	ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impaci
XIV.	PUBLIC SERVICES				
a)	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:				
	Fire Protection?				\boxtimes
	Police Protection?				\boxtimes
	Schools?				\boxtimes
	Parks?				\boxtimes
	Other Public Facilities?				
SUBST	ANTIATION				

XIV a) **No Impact.** The Project would not result substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, or hinder acceptable service ratios, response times or other performance objectives for any of the public services, including fire and police protection, schools, parks or other public facilities because the Project consists of a mining operation with no permanent improvements proposed. After mining operations, the site would consist of vacant land. Therefore, no impacts are anticipated.

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XVa/b) No Impact. The Project is an aggregate mine with 5 employees. As such, it does not generate the need for new jobs or housing which would induce population growth in adjacent areas, and ultimately increase the use of park facilities or other recreational facilities in the region. No impacts are anticipated.

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SUBSTANTIATION

	ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impac
XVI.	TRANSPORTATION/TRAFFIC - Would the project:				
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit)?				
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			\boxtimes	
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				\boxtimes
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
e)	Result in inadequate emergency access?				\boxtimes
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				\boxtimes

XVI a-b) Less Than Significant impact. Volume of truck traffic will depend on type and duration of various construction market activities. Average annual excavation amounts of 200,000 – 400,000 tons will results in approximately 40-50 truck trips per day for exporting material from the mine site. During a maximum production year, up to 200 truck trips per day will occur. There may be periods of no onsite activity given that this mine will operate as dictated by market demands. Access to the site will be provided from National Trails Highway then south on an unnamed dirt road to the Project site.

Traffic studies in the County are required for certain projects and are based on the San Bernardino County Congestion Management Program (CMP) Guidelines for CMP Traffic Impact Analysis Reports (Appendix B, 2016 Update). The CMP Guidelines generally require traffic studies to be prepared by or at the direction of the local jurisdiction with land use authority when a change in land use, a development project, or at local discretion, a group of projects are forecast to generate 250 two-way peak hour trips based on trip generation rates published for the applicable use or uses in the Institute of Transportation Engineers' Trip

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Generation or other CMA-approved data source. CMP arterial highways shall be analyzed if they are projected to carry at least 50 two-way peak hour trips and freeway segments shall be analyzed if they carry at least 100 two-way peak hour trips. Based on the trip generation for the proposed Project (200 trips per day spread over up to 24 hours), a traffic study was not required.

- XVI c) No Impact. The Barstow-Dagget County Airport is located approximately 8.5 miles east of the Project site. The Project involves open-pit surface mining and does not include land uses that are considered to affect air traffic patterns at any airport or airstrip.
- XVI d) No Impact. Access to the site will be provided from National Trails Highway then south on an unnamed dirt road to the Project site. These are existing roadway facilities that will not be changed by the Project. Therefore, the Project does not involve any road improvements or design features that could substantially increase hazards on public or private roads.
- XVIe/g) No Impact. Activities associated with the Project would not impede existing emergency response plans for the Project Site and/or other land uses in the Project vicinity. All vehicles and stationary equipment would be staged off public roads and would not block public emergency access routes. The Project would not involve any long-term increase in traffic that would conflict with adopted policies, plans, or programs supporting alternative transportation because there are a limited amount of employees who come to work on the site. No impacts would result.

	ISSUES	Potentially Significant impact	Less then Significant with Mitigation Incorp.	Less than Significant	No Impad
XVII.	UTILITIES AND SERVICE SYSTEMS - Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				\boxtimes
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			\boxtimes	
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?		\boxtimes		
е)	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?				\boxtimes
f)	Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statutes and regulations related to solid waste?			\boxtimes	
UBSTAI	NTIATION				

- XVII a/e) No Impact. Portable toilets are proposed for the 5 employees. As such, the Project would not require sewer collection or treatment services and therefore no off-site discharge of treated wastewater would occur. No impacts related to wastewater treatment are anticipated.
 - XVII b) No Impact. The applicant has indicated the surface mining operation will obtain its principal source of water from groundwater beneath the site through an existing well. Portable toilets will be provided for employees. As such, the Project will not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities.
 - XVII c) Less Than Significant Impact. Drainage from the Project site will be self-contained within the Project area. The proposed quarry is designed to provide for complete retention of water flows. A small drainage channel courses south to north under the Interstate 40 and will direct

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infrequent flows into the site from the south. As the quarry expands in size, retention area(s) will be maintained to prevent water from discharging to offsite areas At the end of mining, any water retained within the Project boundary will remain until such time that evaporation and percolation have reduced the quantity of standing water onsite. Any accumulated sediments that may be deposited in the Project basin area will be removed and stockpiled for use during reclamation activities. Therefore, impacts are less than significant.

- XVII d) Less Than Significant Impact With Mitigation Incorporated. See analysis under Section IXb of this Initial Study Checklist.
- XVII f) Less Than Significant Impact. Mining activities at the Nebo Mine site may produce three types of waste: overburden (topsoil), waste oils/solvents, and domestic garbage.

Overburden on the project site primarily will be removed from the surface where it exists, and stockpiled for subsequent use during revegetation. Equipment and vehicle maintenance servicing may produce waste oils, lubricants and solvents. It is projected that maintenance of processing equipment will generally occur offsite, but occasionally it may take place onsite. When onsite maintenance does occur, all servicing of equipment will be performed consistent with San Bernardino County Department of Environmental Health Services regulations for draining/collecting waste oils and other hazardous materials. All collected waste oils, lubricants and solvents shall be placed in covered containers and stored within secondary containment structures while onsite. These collected materials will continue to be transferred to a County-approved hazardous waste handler for proper disposal or to an approved re-use facility.

Ordinary refuse will continue to be collected in bins and disposed of at permitted landfills. Solid waste is expected to be transported to the Barstow Sanitary Landfill which has an annual capacity of 200,000 to 499,000 tons per year (CalRecycle website accessed March 15, 2017). The amount of solid waste is expected to be generated by the Project is minimal given the nature of mining operations and is not expected to significantly impact landfill capacity. As such, impacts are less than significant.

XVII g) Less Than Significant Impact. The California Integrated Waste Management Act established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the Act established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. Per the requirements of the Integrated Waste Management Act, the San Bernardino County Board of Supervisors adopted the San Bernardino Countywide Integrated Waste Management Plan which outlines the goals, policies, and programs the County and its cities will implement to create an integrated and cost effective waste management system that complies with the provisions of California Integrated Waste Management Act and its diversion mandates.

The Project's waste hauler would be required to coordinate with the waste hauler to develop collection of recyclable materials for the Project on a common schedule as set forth in applicable local, regional, and State programs. Recyclable materials that would be recycled by the Project may include paper products, glass, aluminum, and plastic.

Additionally, the Project's waste hauler would be required to comply with all applicable local,

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State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to the landfills that serve the Project are reduced in accordance with existing regulations.

Based on the above analysis, impacts would be less than significant and no mitigation measures are required.

r FINDINGS OF SIGNIFICANCE: ect have the potential to degrade the quality ment, substantially reduce the habitat of a species, cause a fish or wildlife population to elf-sustaining levels, threaten to eliminate a all community, reduce the number or restrict a rare or endangered plant or animal or cortant examples of the major periods of ory or prehistory?		\boxtimes		
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ect have impacts that are individually limited, latively considerable? ("Cumulatively means that the incremental effects of a posiderable when viewed in connection with past projects, the effects of other current the effects of probable future projects)?		\boxtimes		
ject have environmental effects, which will ntial adverse effects on human beings, either rectly?		\boxtimes		
	past projects, the effects of other current he effects of probable future projects)? The effects of probable future projects in the projects in the projects in the projects of probable future projects in the projects of p	past projects, the effects of other current he effects of probable future projects)?	past projects, the effects of other current he effects of probable future projects)?	past projects, the effects of other current he effects of probable future projects)? Continue

a) Less Than Significant Impact With Mitigation Incorporated. All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animals, and historical and pre-historical resources were evaluated as part of this Initial Study Checklist.

The results of the Initial Study show that there are potentially significant impacts Cultural Resources These impacts will be reduced to less than significant after incorporation of Mitigation Measures CR-1 and CR-2.

Therefore the Project will not degrade the quality of the environment and no habitat, wildlife populations, or plant and animal communities would be impacted.

b) Less Than Significant Impact With Mitigation Incorporated. As discussed throughout this Initial Study Checklist, implementation of the proposed Project has the potential to result in effects to the environment that are individually limited, but cumulatively considerable.

In instances where potentially significant impacts have been identified, Mitigation Measures CR-1, CR-2 and HYD-1 are required to reduce impacts to less than significant levels. Therefore, the Project would not contribute to environmental effects that are individually limited, but cumulatively considerable.

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c) Less Than Significant Impact With Mitigation Incorporated. The Project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this Initial Study Checklist document.

In instances where potentially significant impacts have been identified, Mitigation Measure HYD-1 is required. Therefore, the Project would not result in environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

XVIII MITGATION MEASURES. Include mitigation measures here.

(Any mitigation measures which are not 'self-monitoring' shall have a Mitigation Monitoring and Reporting Program prepared and adopted at the time of project approval)

CR-1: The developer/property owner shall submit a letter to the County Land Use Services Department- Planning Division (County) agreeing to adhere to the following requirements:

• In the event archaeological resources are uncovered during earthmoving activities, all work in that area shall cease immediately and the County shall be notified. A qualified archeologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded, excavated, and/or recovered as necessary. Earthmoving shall be allowed to proceed on the site when the archaeologist, in consultation with the appropriate Native American Tribe(s), the County, and the qualified archaeologist determines the resources are recovered to their satisfaction.

CR-2: The developer/property owner shall submit a letter to County Land Use Services Department- Planning Division (County) agreeing to adhere to the following requirements:

e) In the event paleontological resources are uncovered during earthmoving activities, all work in that area shall cease immediately and the County shall be notified. A qualified paleontologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded, excavated, and/or recovered as necessary. In consultation with the Project proponent, the County, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.

HYD-1. The following requirements shall be met:

- e) Prior to the commencement of mining activities evidence shall be submitted to the DEHS/Water Section for approval, that the well is constructed to public water supply standards, will provide the quantity of water projected as required for the Project, meets quality standards for domestic and industrial use, and the well is properly permitted with the County. For information, call DEHS/Water Section at (909) 387-4666.
- f) During mining operations, the operator of the on-site well shall abide by the terms of the Stipulated Judgment for the Mojave River Basin Adjudication and shall coordinate with Mojave Water Agency to ensure compliance.

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- g) After mining operations have concluded, any well, exploratory hole or test hole which is abandoned, out of service, or otherwise left unattended shall have a temporary cover over the well or opening which prevents the introduction of undesirable material into the well or hole, and ensures public and wildlife safety pursuant to Section 115700 of the California Health & Safety Code.
- h) Upon final reclamation, evidence shall be provided to the DEHS/Water Section that all wells, exploration holes or test holes, as defined by DWR Bulletin 74-81 as revised in 1988 or the latest revision are destroyed in accordance with DEHS regulations and in such a manner that will no longer be a hazard to the health and safety of people and wildlife.

GENERAL REFERENCES

CEQA Guidelines, Appendix G.

County of San Bernardino General Plan, 2007

County of san Bernardino Development Code, 2007

County of San Bernardino Greenhouse Gas Emissions Reduction Plan, September 2011

Mojave Desert Air Quality Management District <u>California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. August 2016</u>.

Mojave Water Agency, Final Urban Water Management Plan, June 2016.

PROJECT SPECIFIC REFERENCES

General Biological Resources Report by RCA Associates, Inc. dated October 27, 2017.