#### 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: 0483-021-13

APPLICANT: Searles Valley Minerals

**COMMUNITY: Trona** 

> LOCATION: Eastside of Searles Drv Lake.

approximately 6 miles east of Trona

PROJECT NO: AP20090011

> Reuben Arceo, Contract Planner STAFF:

REP('S): Adam Bingham

PROPOSAL: Realignment of the site's mining

reclamation and mining boundaries

**USGS Quad:** Searles Lake

T. R. Section: T: 258 R:44E Sec: 20

Thomas Bros.: Page 2055, Grld: J-7

Planning Area: Trona

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: Searles Valley Minerals

> 13200 Main St., Trona, CA 93562 P.O. Box 367, Trona, CA 93592-0367

**Phone No:** (760) 372-2515

## **BACKGROUND:**

The East Borrow Pit of the Searles Valley Mine is operating under the authority of CA Mine ID No. 91-36-0028 and Mining and Reclamation Plan 78M-0013. The East Borrow Pit ("site") is located within a 160 acre portion of a 640 acre section of land owned by the Bureau of Land Management (BLM). The site has actively been mined since approximately 1994. Portions of the site have been highly disturbed by mining activities (although some portions that have been previously mined have been re-vegetated or reclaimed). Portions that are currently undisturbed will be disturbed by future excavations as the pit expands in an easterly direction upgradient toward the Slate Mountains.

Searles Valley Minerals processes brine solutions from Searles Lake to produce boric acid, sodium carbonate, sodium sulfate, several specialty forms of borax, and salt. Searles Valley Minerals utilizes a unique solution mining technology to extract the minerals from beneath the surface of Searles Lake and recovers these minerals in its three manufacturing plants--Argus, Trona and Westend. Partially depleted brine is returned to Searles Dry Lake where it dissolves additional minerals from the lakebed for future production. Searles Valley Minerals owns and/or leases more than 25,000 acres of land in Searles Valley for its operation.

To mine the Searles Lake resource, fill-dirt is needed to construct and to maintain access roads, well pump pads, and pads for other structures and equipment. Suitable fill dirt/material is only available from alluvial deposits situated away from the lake edge. Of the available material, the East Borrow Pit provides the best fill-dirt in sufficient quantities for Searles Valley Minerals operations. The property is currently vacant and is being utilized by Searles Valley Minerals under the authority of Contract from the United Stated Department of the Interior.

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Bureau of Land Management. The East Borrow Pit is located on the eastside of Searles Lake, approximately 6 miles east of Trona (See Exhibit 1).

An elevation and location survey was conducted on November 27th, 2012 to re-verify boundary locations and survey current depth of the East Borrow Pit. During this new survey, it was determined that a portion of previously mined and now reclaimed land from a previous permitted area lies just outside of the southwest boundary line. Under this proposal, the current mining boundary will be slightly adjusted to the east (approximately 600 feet) to include this previously disturbed area to avoid any future confusion about disturbed area and will be part of this latest Mining and Reclamation Plan requirements. Figure 2 shows the adjusted boundary line of the East Borrow Pit.

#### **PROJECT DESCRIPTION:**

The proposed Project consists of a Mining & Reclamation Plan and includes a realignment of the mining site's reclamation and mining boundaries as shown on Exhibit 2. The area to be mined (fill dirt material) and reclaimed consists of approximately 160 acres. The production of fill-dirt from the East Borrow Pit is expected to be 200,000 cubic yards per calendar year, and possibly as much as needed, if the Director of BLM determines that the volume limitation does not apply.

## **Mining**

## Pit Operations

Mining consists of stockpiling topsoil, excavation with a payloader and dozer, stockpiling fill dirt on the quarry floor and loading into open end-dump trucks. The dump trucks move the fill-dirt to the construction sites on Searles Lake. The exterior limit of the East Borrow Pit is staked on north and east side and flagged to assure that all activities are limited within the approved boundary.

The mining operation shall be conducted in a uniform manner, with exterior slopes and floors trimmed as the mining operation proceeds. The existing East Borrow Pit has been excavated to a depth of about 10 feet below the natural ground surface. The ground surface in the Project area slopes upward toward the east between 3% to 6%. The existing floor slopes downward toward the west at about 2% to 3%. Continued excavations will result in the pit being expanded in an easterly direction upgradient toward the Slate Mountains. Excavation shall be conducted so as to leave them in a reasonably neat and trim manner. In order to leave as small a mining footprint as possible and to maximize recovery of fill material, an excavation depth of 50 vertical feet in height with respect to existing slopes will be maintained at an inclination no steeper than 2:1 (horizontal to vertical). New slopes will be constructed at an inclination of 2:1 or flatter to facilitate re-vegetation. Topsoil will be stored onsite for use as a growth medium to encourage re-vegetation. All available data indicates that bedrock is located at depths greater than 50 feet and excavation will be terminated if bedrock is encountered.

Vehicle traffic will be conducted in such a manner as to minimize surface damage and vegetative disturbance. Vegetation will only be removed from those areas subject to immediate extraction; no unnecessary clearing will take place. No structures are proposed to be built on the site. Searles Valley Minerals will obtain clearance from BLM before improvement of or construction of any road or trail to or within the area. The public will be allowed to use the existing road along the Lakeshore at all times, as it will not be blocked.

Mining at the pit is anticipated to continue for an indefinite period of time but not less than 18 years or until December 31<sup>st</sup>, 2030. If mining activities are to continue after this date, Searles Valley Minerals will notify state and county agencies of such plans and will reassess all necessary reclamation plans and procedures. Therefore the reclamation plan shall be effective for the mine lifetime.

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#### Mine Waste

No mining waste is generated. Minor debris and oil leaks from the vehicles may accumulate as a normal part of any such operation. No refuse will be maintained at any time in pit excavation, channel ditches or work areas. All rubbish shall be disposed of at established waste disposal sites. Any large boulders found will be left in the excavation and when needed will be used for riprap on Searles Lake.

#### Ore Processina

No ore processing is required. The fill-dirt is used directly as located.

#### Water Use

No potable water is used except for drinking, which will be carried in the vehicles from elsewhere. Brackish water from the south brackish field to the south and east of Searles Lake is applied routinely to the dirt roads using a tank truck to minimize dust. The water evaporates rapidly and never penetrates the soil more than a few inches. No wastewater is generated.

#### Erosion and Sedimentation Control

Because no water is used, there will be no erosion or sedimentation from the mining operation. 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. However, natural erosion is minimal with only four inches of average annual precipitation in the area.

Stockpiles of topsoil and fill-dirt shall be managed to minimize water and wind erosion. The pit floor will be graded with a slight slope rising to the east and north to permit natural drainage at a slope less than that of the natural slope of the alluvial deposit from the Slate Range Mountains to the east.

All quarry slopes shall be designed such that they do not exceed a 50-feet vertical height. All finished quarry slopes shall have no less than a 2:1 slope ratio, horizontal to vertical. Existing slopes where re-vegetation is established will be left at 2:1 or gentler in conformance with SMARA stipulations. New slopes will be 2:1 or gentler to facilitate re-vegetation.

### Blasting

The sand and gravel in place is easily picked up by front-end loader and no blasting is necessary.

### Reclamation

No specific schedule has been established for termination of mining at the site. As previously stated, mining activities are slated to continue for at least 18 years up to December 31<sup>st</sup>, 2030 and may be continued depending on a few circumstances. One of three occurrences could determine when pit operations will be terminated:

- 1) The quality of sand and gravel recovered no longer meets the requirements for road and dike building.
- 2) The pit reaches the boundaries set under this Reclamation Plan, or
- 3) Searles Valley Minerals terminates mineral recovery operations in Searles Valley. Upon termination of mining activities, active reclamation of the site will begin and is anticipated to be complete with five years of the start of reclamation. For the above listed date, this would indicate December 31<sup>st</sup>, 2035 as the date reclamation is expected to be complete should mining operation at the site cease in 2030.

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During active mining, topsoil shall be conserved and stockpiled in undisturbed areas during excavation to be reused as cover on previously mined or disturbed areas to facilitate re-growth of vegetation. All bladed vegetation and excavated materials will be stockpiled in such a manner that they do not obstruct the natural flow of water down wash systems. Bracklish water will be used sparingly on growth medium plies and other materials to be left on site to avoid excessive salt buildups which may inhibit vegetation growth.

Whenever mining starts in a new area, Searles Valley Minerals will grade the disturbed area to blend with surrounding terrain and reestablish drainage. After grading the disturbed areas, Searles Valley Minerals will scarify these areas to encourage re-vegetation. Final reclamation will consist of contouring the banks of the pit to approximate the natural contours of the surroundings. Any sharp drops that might endanger passing individuals or vehicles will be contoured to a 2:1 slope or shallower.

At the time of termination of the operation for any reason, all equipment and refuse associated with operation shall be removed from the site, all hazards mitigated, and reclamation initiated within 90 days. All finished slopes shall be contour graded to blend with existing natural contours. The road to the material borrow site shall be reshaped and restored to near natural conditions. All material stockpiles will be spread throughout the pit at closure of the quarry. All disturbed areas along the road and other areas compacted by mining operations shall also be ripped and re-graded. Final reclamation shall include adequate provisions to intercept and conduct any off-site tributary drainage flow around or through the site in a manner which will not adversely affect adjacent or downstream properties.

## Revegetation

Searles Valley Minerals will stockpile topsoil (growth medium) and vegetation from any new areas to be mined or covered over and maintain the stockpiled material.

Suitable stockpile locations shall be clearly demarcated in the field and will have temporary erosion control measures in place as needed. These stockpile locations will also serve as test plots for re-vegetation as they have already been mined and will be left undisturbed while mining continues in the East Borrow Pit. Topsoil will be spread over the test plot areas and will continue undisturbed to allow for natural re-vegetation to occur. This will help provide a productive soil layer containing native seed stock. At the time of reclamation, areas outside of the test plots that need to be reclaimed shall also have stockpiled growth medium and vegetation spread over them to the extent practical.

It is anticipated that re-vegetation can occur simultaneously with mining activities and does occur naturally in all previously mined areas. Areas disturbed by grading and ore excavation are expected to rapidly develop natural new growth as the exposed nutrient-rich soil will receive native seeds distributed by the frequent desert winds

In July of 2010, Searles Valley Minerals conducted a baseline vegetation study of the area adjacent to the East Borrow Pit. It was determined that allowing the site to undergo natural re-vegetation undisturbed would be the most efficient and successful means of re-vegetation. This study will serve as a baseline comparison for re-vegetation as part of active reclamation when mining activities have ceased. The on-site test plots may also be monitored using this study as a baseline for concurrent re-vegetation while mining continues in the active areas of the East Borrow Pit.

One year after reclamation has begun, the reclaimed areas shall be examined to determine if the proposed reclamation and re-vegetation efforts are successful. Re-vegetation Monitoring protocols outlined by the County will be used during the qualitative and quantitative portions of the re-vegetation process. If deemed successful, this program will be continued for the entire life of the project. If not successful, SVM shall diligently explore for an acceptable alternative means of reclaiming the site if prior efforts are unsuccessful. A contingency plan containing approved alternative methods will be developed to be reviewed and approved by the County prior to their implementation and shall be monitored by Searles Valley Minerals and the County to ensure success.

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In the event that natural passive re-vegetation does not occur, Searles Valley Minerals will consider broadcast seeding at the site to supplement natural re-vegetation.

#### Clean-Up

At the time of termination of the operation, for any reason, all equipment and refuses associated with the operation shall be removed from the site. Any residual refuse, oil spills and other residual evidence of mining will be removed. All material stockpiles will be removed. All disturbed areas along the road and other areas compacted by mining operation shall be ripped and bladed. The road to the material borrow site shall be reshaped and restored to near natural conditions.

## Slopes and Slope Treatment

Whenever mining starts in a new area SVM will grade the disturbed area to blend with surrounding terrain and reestablish drainage. Final reclamation will consist of contouring the banks of the pit to approximate the natural contours of the surroundings. All final quarry slopes shall be designed such that they do not exceed a 50-feet vertical height. All finished quarry slopes shall have inclination no greater than a 2:1 slope ratio, horizontal to vertical.

Ponds, Reservoirs, Tailings, Waste

None will be present at this site.

Soils and Fine-Textures Waste

Topsoil conserved during excavation will be reused as cover on disturbed areas to facilitate re-growth of vegetation so there will be no fine-textured waste.

#### Drainage and Erosion Controls

Final reclamation shall include adequate provisions to intercept and conduct off-site tributary drainage flow around or through the site to minimize erosion and in a manner that will not adversely affect adjacent or downstream properties. However, with the low rainfall in the area, little run-off should occur.

### Post-Reclamation and Future Mining

The site will initially look like a depression in the gradually sloping alluvial fan from the mountains on the east moving to the dry lakebed in the west. Wind and rain will quickly smooth any signs of equipment and natural plants will further help return the area to the natural appearance.

If Searles Valley Mineral mining operations stop before the East Borrow Pit is mined out, the area will be readily available for any future fill-dirt mining operations by simply reopening the road. Any recreational activities in the area would be unaffected.

### Proposed Future Land Use

The reclamation plan measures for the East Borrow Pit have been designed to return the site to a condition consistent with open-space land use. Therefore the proposed end use for the East Borrow Pit is designated as open space (i.e. Resource Conservation).

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## Public Safety

The access road to the East Borrow Pit will be removed and blocked to restrict vehicular traffic. The former access will be posted, although there will be no hazard remaining that is not found in the general area.

## Monitoring and Maintenance

Once reclaimed, a company employee or a contractor will monitor the pit site for five years. Prior to abandoning the site, Searles Valley Minerals shall notify the Department of Environmental Health Services. Hazardous Materials Field Services Section of site closure and schedule a closure inspection.

#### Reclamation Assurance

Searles Valley Minerals will provide financial assurances (a surety bond) to ensure reclamation will be performed as described above. The amount of financial assurances shall be adjusted annually to account for new lands disturbed by surface mining operation.

## **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 January 2015.

The Project site is located within a 160 acre portion of a 640 acre section of land owned by the BLM. The site has actively been mined since approximately 1994 and is highly disturbed by mining activities. The existing East Borrow Pit has been excavated to a depth of about 10 feet below the natural ground surface. The ground surface in the Project area slopes upward toward the east between 3% to 6%. The existing floor slopes downward toward the west at about 2% to 3%. Continued excavations will result in the pit being expanded in an easterly direction upgradient toward the Slate Mountains.

The Project site is remotely located and relatively inaccessible to the public. Access to the site is by dirt road tied Into the overall Searies Lake road system. A vestigial desert trail circumnavigates the Lakeshore, but access from the south is blocked by the boundaries of the Naval Air Weapons Center Military Reservation (NWC). Access from the north over 9-10 miles of poor desert road is possible but infrequent. The boundary of the NWC reserve is approximately 2500-feet to the east and is posted, restricting access from that direction. Presently, access from the west across the lake is controlled by Searles Valley Minerals with gates.

The Project site is situated atop alluvium located on the easterly shore of Searles Lake. The alluvium has been washed from the adjacent Slate Range westerly toward the lakebed. Vegetation on the site is sparse, approximately 11.9 percent cover, consisting mainly of four salt-tolerant shrubs: Burrobush (Ambrosia dumosa), Cattle Spinach (Atriplex polycarpa), Shadscale (Atriplex confertifolia), and Torrey's Saltbush (Atriplex torreyi). At the extreme portion of the section there is an occasional Creosote Bush (Larrea tridentata).

The Project area includes a playa, which supports little vegetation. The vegetation surrounding the playa is typical for the region. Vegetation will only be removed from those areas subject to immediate extraction, i.e.; no unnecessary clearing will take place.

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Surrounding land uses and land use/overlay districts are shown in Table 1.

Table 1. Existing Land Use and Land Use/Overlay Districts

AREA	EXISTING LAND USE	LAND USE/OVERLAY DISTRICT
Site	Sand & Gravel Pit	RC (Resource Conservation)
North	Vacant	RC (Resource Conservation)
South	Vacant	RC (Resource Conservation)
East	Vacant	RC (Resource Conservation)
West	Vacant	RC (Resource Conservation)

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

<u>Federal</u>: The Project is under an existing contract with the Bureau of Land Management for extraction of fill/dirt material. No further Federal approvals are required.

State of California: None.

<u>County of San Bernardino</u>: Land Use Services Department- Code Enforcement, Building and Safety, Public Health-Environmental Health Services, Special Districts, and Public Works.

Regional: The Project is operating under existing permits issued by the Mojave Desert Air Quality Management District. No further permits are required.

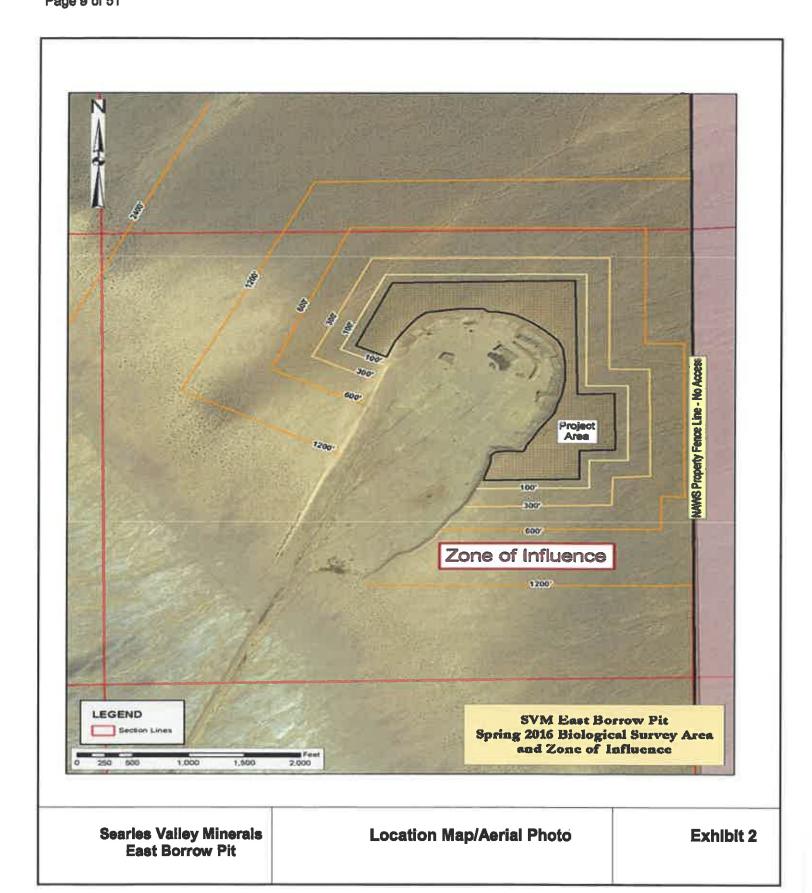
Local: None



Searles Valley Minerals
East Borrow Pit

Regional Location /Aerial Photo

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 Impact With Mitigation Incorporated	Less than Impact	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:**

	environmental factors checked below would be potentially affected by this project, involving at least one ct that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.
	Aesthetics
prep	nuse none of the environmental factors above are "checked", the Project does not require the aration of an Environmental impact Report.  ERMINATION: (To be completed by the Lead Agency)
On th	ne basis of this initial evaluation, the following finding is made:
	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION shall be prepared.
×	Although the proposed project could have a significant effect on the environment, there shall not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION shall be prepared.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
Z Re	When Ardeo, Contract Plenner   Date   Date
	ve Prusch, Planning Supervisor  Date

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# Appendices: (Under Separate Cover or on Compact Disk)

- A. Biological Resources of the Searles Valley Minerals East Borrow Pit, Paul Kielhold, June 15, 2016.
- B. Mohave Ground Squirrel Survey Report, Searles Valley Minerals Inc. Borrow Pit Project, Envira, July 17, 2017.

	Issues	Potentially Significant impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No impact
I.	AESTHETICS - Would the project				- 1
ε	) 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?	_	0	<b>-</b>	$\boxtimes$
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?	_	0		$\boxtimes$
SUBS	TANTIATION (Check □ if project is located within the General Plan):	he view-sh	ed of any	Scenic Rout	e listed in

I a) No Impact. County of San Bernardino General Plan Open Space Element, Policy OS 5.1. states that

Provides a vista of undisturbed natural areas:

a feature or vista can be considered scenic if it:

- 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 mountain ranges in the vicinity of the Project site meet the criteria of a scenic vista pursuant to County of San Bernardino General Plan Open Space Element Policy OS 5.1. The existing pit has been excavated to a depth of about 10 feet below the natural ground surface. In addition, no above ground structures are proposed. As such, public views of the mountain ranges will not be impacted and the Project will have no impact on a scenic vista.

- I b) **No Impact.** According to the County of San Bernardino General Plan the project site is not within a scenic route (Ref. General Plan Pg. IV-16). Therefore, no impact is anticipated
- I c) Less than Significant impact. The visual character of the site and surroundings is that of an existing mining operation surrounded by vacant desert land or other mining operations. The proposed use is an allowable use within the Resources Conservation Land Use Zoning District. The continued operation of mining activities will not significantly impact the existing visual character of the area. Therefore, a less than significant impact is anticipated.
- I d) No impact. No new light sources are proposed. 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. No impacts will occur.

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SUBSTANTIATION

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		issues	Potentially Significant Impact	Less then Significant Impact with Mitigation Incorp.	Less than Significant Impact	No Impact
H.		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?				$\boxtimes$
	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?				$\boxtimes$
<u>.</u>	е)	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?				×

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.

(Check ☐ if project is located in the Important Farmlands Overlay):

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.

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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 approximately 160 gross acres in size and is located in an area largely characterized as vacant desert land. Vacant desert land surrounds the site on all sides and no land is being used for agricultural purposes in the vicinity of the site. As such, the Project would not result in conversion of Farmland to non-agricultural use and no impacts would occur.

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	ISSUES	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorp.	Less than Significant impact	No Impact
II.	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?				
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)?		_	×	
d)	Expose sensitive receptors to substantial pollutant concentrations?				$\boxtimes$
е)	Create objectionable odors affecting a substantial number of people?	_			$\boxtimes$
UBST	ANTIATION (Discuss conformity with the Mojave applicable):	Desert A	ir Quality	Management	Plan,

The Project Site is located in the Mojave Desert Air Basin The Mojave Desert Air Quality Management District 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 Mojave Desert Air Quality Management District 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 Mojave Desert Air Quality Management District standards and evaluated against the most recent thresholds applicable.

III a) Less than Significant Impact. The Mojave Desert Air Quality Management District ("District") 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 District. The District has adopted a variety of attainment plans for a variety of non-attainment pollutants which together comprise the Air Quality Management Plan for the District.

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 District rules and regulations, complies with all proposed control measures that are not yet 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 a 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

Attainment Plan, (Resource Conservation/RC). In addition, based on Table 2 on the following page, Project-generated emissions generated will not exceed emission thresholds. Therefore, the Project's emissions are in compliance with the thresholds established by the District. 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 consists of stockpiling topsoil, excavation with a Payloader and dozer, stockpiling fill dirt on the quarry floor and loading into open end-dump trucks. The dump trucks move the fill-dirt to the construction sites on the Lake.

To control fugitive dust generated during removal of fill-dirt from the deposit, wind-blown dust from storage piles, dust from traffic on haul roads, dust during material dumping from front-end loaders, the roads and mine will be wetted regularly and more frequently as needed during windy conditions by a tank truck filled with brackish water from wells to the south of Searles Lake. Operation will be shut down on days of extreme wind conditions.

Operational emissions associated with the project are primarily a result of material mining and transport of materials to the Searles Valley Minerals facility. Operational emissions for the Project were estimated by using the California Emissions Estimator Model which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as California Environmental Quality Act (CEQA) documents and is authorized for use by the Mojave Desert Air Quality Management District ("District").

Operational emissions are based on the following equipment as shown in Table 1 below.

**Table 1. Estimated Typical Equipment List** 

Equipment Type <sup>1</sup>	Number of Units	Hours /Day	Horse Power
Rubber Tired Loader	1	6	199
Grader	1	2	174
Crawler Tractor (Dozer)	1	2	208
Water Truck	1	8	400
Dump Trucks (25-ton & 10-wheel)	5	8	400
Source: Project Operator  1 Equipment estimates based on project descriptions.			

A Project is considered to have significant impacts if it generates total emissions (direct and indirect) in excess of the thresholds established by the District. The Project is evaluated in comparison to the District's daily thresholds. As shown in Table 3, Project emissions would not exceed District thresholds with mandatory compliance with MDAQMD Rules 403 (Fugitive Dust) and 403.1 (Fugitive Dust Control for the Searles Valley Planning Area).

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Table 2.Operational Emissions
(Pounds per Day)

Source <sup>1</sup>	ROG	NOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Mining Operations (loader, grader, dozer) & Worker Trips	0.98	9.91	4.17	49.99	5.33
Hauling & Water Trucks	4.64	54.62	24.57	2.09	1.92
Totals (lbs/day)	5.62	64.53	28.74	52.08	7.25
MDAQMD Threshold (lbs/day)	137	137	548	82	82
Significant	No	No	No	No	No

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 Table 2, 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) No Impact. The Project is located in the Trona area of San Bernardino County. The nearest sensitive receptors are located at least 6 to 7 miles to the west of the Project in the communities of Trona and Argus. In addition, as shown in Table 2, the thresholds for the above referenced criteria pollutants would not be exceeded by the Project. Therefore, no impacts are anticipated.
- 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.

	ISSUES	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorp.	Less than Significant Impact	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 Game or US Fish and Wildlife Service?	_	_		$\boxtimes$
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?			_	$\boxtimes$
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?		_		$\boxtimes$
Θ)	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?	D	_		×

## 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 is based in part on the *Biological Resources of the Searles Valley Minerals East Borrow Pit*, Paul Kielhold, June 15, 2016 (Appendix A) and the *Mohave Ground Squirrel Survey Report, Searles Valley Minerals Inc. Borrow Pit Project*, Envira, July 17, 2017 (Appendix B).

# IV a) No Impact.

The undisturbed portion of the Project site is a 38-acre portion of the overall 160-acre mineral sales contract area.

### Plant Species

The site is located within a White bursage (Ambrosia dumosa) scrub plant community located adjacent to Searles Lake on a bajada originating In the Slate Range (Exhibit 2). The vegetation on site is a homogeneous and sparse (12% cover) community dominated by white bursage (burro bush). Thirteen species of plants were observed. No plant species listed as "threatened" or "endangered" or "special species" or "species of concern" were observed or are expected to occur on site.

#### Wildlife Species

The areas covered by eolian sand exhibited burrows which readily collapse. Many of the burrows observed had previously collapsed. The burrows on site and in surrounding areas exhibited sign of use by kangaroo rats. Sign of other fossorial species such as desert tortoise, burrowing owl and ground squirrels was not observed. Burrow entrances had concave floors rather than the flat floors and platforms attributable to desert tortoises. The burrows appear to be used by mammals and not reptiles or birds. No fossorial animals; desert tortoise, burrowing owl or kangaroo rats were observed above ground. No burrows large enough for badger were observed and a few burrows had been excavated, apparently by coyotes. Burros were commonly seen traversing the area after the mine crew and equipment had left for the day, in the early afternoon. Burro sign was common throughout the site and surrounding area.

Birds were rarely observed and the site lacks nesting habitat, water and trees or large shrubs. The aridity of the site is likely to limit food production and the low vegetative cover increases exposure to predators. The birds observed appeared to be foraging throughout the area. None were observed in nesting behaviors and no nests were seen. No raptors (eagles, hawks or owls) were seen on site. One golden eagle was observed west of the site in habitat where it is expected to forage.

The survey did not result in observation or detection by sign of any plant or animal species listed as "threatened", "endangered", "special species", or "species of concern" by the Federal government or State of California. However, this survey and a previous Mojave Ground Squirrel habitat evaluation are not deemed conclusive by the State Department of Fish and Wildlife with regard to the occurrence of the State listed "threatened" Mohave ground squirrel (Calvert, 2016. pers. com.). The Mojave ground Squirrel is discussed further below.

### Mojave Ground Squirrel (MGS)

A phase one site assessment was conducted on April 13 of 2017. The focused Mohave Ground Squirrel trapping surveys for the Searles Valley Minerals East Borrow Plt (CA Mine ID # 91-36-0028) were also conducted in 2017. Three five-day trapping sessions were conducted from April 14 to 18, May 27 to 31, and July 1 to 5 of 2017. Searles Valley Minerals and their predecessors have mined sand and gravel from the East Borrow Pit (pursuant to San Bernardino County Reclamation Plan 78M-0013) to provide material for construction of facilities on Searles Lake since 1978.

The majority of the Project Site consists of sparse density scrub. Other than a seemingly seldom used off road vehicle dirt road that bisects the site and the adjacent activities in the borrow pit, the property is not subject to human interference.

Historical MGS occurrence records show that the species was historically detected on the northwestern portion of Searles Valley across from the dry lake along highway 178 about ten miles from current project location. No MGS were observed or captured within the Project site. The Project site does not currently support MGS. Therefore, Project implementation will not result in the loss of individual MGS, nor will it adversely affect local or regional MGS populations.

- IV b-c) No Impact. There is no surface water on site or any riparian habitat or other sensitive natural community. As such, the Project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service or 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.
- 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 San Bernardino County Native Plant Protection Plan (1989) provides protection for all trees greater than 6 inches diameter at breast height (dbh), smoke trees, mesquite, creosote rings, and all plants in the agave family, including Joshua trees. Based on the General Biological Resources Assessment, the Project site does not have any trees or protected native plants. As such, the Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
  - IV f) No Impact. The Project area is located in the Northern and Eastern Mojave planning area of the California Desert Conservation Area Plan. Based on the responses to Issues IV a-e above, the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

	ISSUES	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorp.	Less then Significant Impact	No Imp <b>a</b> ct	
V.	CULTURAL RESOURCES - Would the project					
a	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				$\boxtimes$	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		□		$\boxtimes$	
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	0	$\boxtimes$			
d)	Disturb any human remains, including those interred outside of formal cemeteries?	0	0	$\boxtimes$	0	
SUBS'	SUBSTANTIATION (Check if the project is located in the Cultural □ or Paleontologic □ Resources overlays or cite results of cultural resource review):					

Va) No Impact. Historic resources generally consist of buildings, structures, improvements, and 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.

The site has actively been mined since approximately 1994 and is highly disturbed by mining activities. The existing East Borrow Pit has been excavated to a depth of about 10 feet below the natural ground surface. The ground surface in the Project area slopes upward toward the east between 3% to 6%. The existing floor slopes downward toward the west at about 2% to 3%. Continued excavations will result in the pit being expanded in an easterly direction upgradient toward the Slate Mountains. ECORP conducted a cultural resources records search on June 18, 2018, at the South Central Coastal Information Center of the California Historical Resources Information System (CHRIS), located at California State University, Fullerton. The purpose of the records search was to determine the extent of previous cultural resources Investigations and the presence of previously-recorded archaeological sites or historic period resources within a one-mile radius of the

Project area. Materials reviewed included reports of previous cultural resources investigations, archaeological site records, historical maps, and listings of resources on the National Register of Historical Resources.

The records search indicated that nine cultural resources investigations were conducted within a one-mile radius of the Project area between 1978 and 2006. Of these, two previous investigations, a 1978 cultural resources survey conducted by the Bureau of Land Management (SB-00630) and a 1979 cultural resources records search project conducted by the San Bernardino County Museum (SB-00853), included the Project area. The 1978 survey failed to identify any cultural resources within the Project area. Overall, the records search indicated that approximately 75 percent of the records search radius has previously been studied for cultural resources, which provides a good projection of the types of resources that may be found inside the Project area.

ECORP conducted a cultural resources records search on June 18, 2018, at the South Central Coastal Information Center of the California Historical Resources Information System (CHRIS), located at California State University, Fullerton and the records search indicated that nine cultural resources investigations were conducted within a one-mile radius of the Project area between 1978 and 2006. Of these, two previous investigations, a 1978 cultural resources survey conducted by the Bureau of Land Management (SB-00630) and a 1979 cultural resources records search project conducted by the San Bernardino County Museum (SB-00853), included the Project area. The 1978 survey failed to identify any cultural resources within the Project area.

As such, there will be no impact with respect to surface historical resources as a result of the Project and no mitigation measures are required.

Vb) No Impact: Archaeological sites are locations that contain resources associated with former human activities, and may contain such resources as human skeletal remains, waste from tool manufacture, tool concentrations, and/or discoloration or accumulation of soil or food remains.

The site has actively been mined since approximately 1994 and is highly disturbed by mining activities. The existing East Borrow Pit has been excavated to a depth of about 10 feet below the natural ground surface. The ground surface in the Project site slopes upward toward the east between 3% to 6%. The existing floor slopes downward toward the west at about 2% to 3%. Continued excavations will result in the pit being expanded in an easterly direction upgradient toward the Slate Mountains.

As noted under Issue Va) above, ECORP conducted a cultural resources records search on June 18, 2018, at the South Central Coastal Information Center of the California Historical Resources Information System (CHRIS), located at California State University, Fullerton and the records search indicated that nine cultural resources investigations were conducted within a one-mile radius of the Project area between 1978 and 2006. Of these, two previous investigations, a 1978 cultural resources survey conducted by the Bureau of Land Management (SB-00630) and a 1979 cultural resources records search project conducted by the San Bernardino County Museum (SB-00853), included the Project area. The 1978 survey failed to identify any cultural resources within the Project area

Vc) 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.

The Project area is located in the Northern and Eastern Mojave planning area of the California Desert Conservation Area Plan. According to Figure III.10-2- Plan Potential Fossil Yield Classification of Geology - Subarea Index Map of the Draft DRECP and EIR/EIS (August 2014), the Project area is identified as having a Moderate/Unknown potential to contain paleontological resources. To minimize the effects of this potential impact, Mitigation Measure CR-1 is recommended.

- CR-1: Treatment of Previously Unidentified Paleontological Resources. If previously unidentified paleontological resources are unearthed during construction activities, construction work in the immediate area of the find shall be halted and directed away from the discovery until a qualified Paleontologist assesses the significance of the resource. If the discovery is located on BLM land, the Ridgecrest field office shall be contacted to evaluate the resource and make necessary plans for treatment. If the resource is located on private land, the County of San Bernardino Land Use Services Department shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be historically significant according to CEQA (CEQA Guidelines Section 15064.5 (a)). The plan shall include, but not be limited to:
- 1. Preparation of recovered specimens to a point of identification and permanent preservation including washing of sediments to recover small invertebrates and vertebrates.
- 2. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage (e.g., SBCM). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impact to significant paleontological resources is not complete until such curation into an established museum repository has been fully completed and documented.
- 3. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontological resources.

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

Vd) 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 mandatory 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 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.

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I		ISSUES	Potentially Significant Impact	Less than Significant impact with Mitigation incorp.	Less than Significant impact	No Impact
VI.		GEOLOGY AND SOILS - Would the project:				
	a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
		<ol> <li>Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42</li> </ol>				$\boxtimes$
		ii. Strong seismic ground shaking?			$\boxtimes$	
		iii. Seismic-related ground failure, including liquefaction?				
		iv. Landslides?			$\boxtimes$	
	b)	Result in substantial soil erosion or the loss of topsoil?			$\boxtimes$	
	c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?			$\boxtimes$	
	d)	Be located on expansive soil, as defined in Table 181B of the California Building Code (2001) creating substantial risks to life or property?	p.		0	
	Θ)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			_	$\boxtimes$
SUE	3ST/	ANTIATION (Check □ if project is located in the	Geologic H	lazards Ov	erlay Distric	:t):

VI a) ai) **No Impact.** The Project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no known faults underlie the site. Because there are no faults located on the Project site, there is no potential for the Project to expose people or structures to adverse effects related to ground rupture.

aii) Less Than Significant Impact. Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. Two major earthquake faults dominate Searles Valley: the Wilson Canyon and Garlock Faults. The Garlock Fault is left-lateral strike-slip fault, which extends more than 160 miles east form the San Andreas Fault; horizontal displacement on the fault is estimated to about 40 miles. This fault forms the southern boundary of Searles Valley and the overflow point into Panamint Valley. The Wilson

Canyon Fault is a northwest-trending fault which extends across the Argus Range, and which may extend as far as Little Lake about 35 miles northwest of Searles Lake. The Wilson Canyon Fault may extend southeast from Wilson Canyon along the north and east borders of Searles Lake; openings along the fault may have functioned as conduits for rising fluids during formation of the Trona reef.

Several other minor northwest-trending faults occur north of the Wilson Canyon Fault in the Argus Range, and control locations of springs. The occurrence of fault scarps in the alluvial deposits along the west flank of the Slate Range suggest that extensive range front faults occur within the bedrock complex of the Slate Range; however, these faults are not believed to influence hydrologic systems in Searles Valley. In recent history, there has been no activity on any of the faults in Searles Valley. However, seismic shaking associated with the movement of other faults has been experienced in the Searles Valley.

Although the Project site is located in the vicinity of an earthquake faults the Project site is to be used for a mining operation and selsmic ground shaking is not generally considered to be hazardous to open-pit aggregate mines. Therefore, this impact is considered less than significant.

- aiii) **No Impact**. The Project would not build permanent structures or construct facilities with foundations that could fail as a result of liquefaction during an earthquake. Therefore, this impact is considered less than significant.
- aiv) Less Than Significant Impact. The proposed project would involve excavation to depths no greater than 50 feet below the existing ground elevation. In addition, the side slopes of the excavated area would not be steeper than 2:1 (H: V). Therefore, the Project site would not be expose people to landslide hazard. Therefore, this impact is considered less than significant.
- VI b) Less Than Significant Impact. Because no water is used, there will be no erosion or sedimentation from the mining operation. 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. However, natural erosion is minimal with only four inches of average annual precipitation in the area.

Stockpiles of topsoll and fill-dirt shall be managed to minimize water and wind erosion. The pit floor will be graded with a slight slope rising to the east and north to permit natural drainage at a slope less than that of the natural slope of the alluvial deposit from the Slate Range Mountains to the east. All quarry slopes shall be designed such that they do not exceed a 50-feet vertical height. All finished quarry slopes shall have no less than a 2:1 slope ratio, horizontal to vertical. Existing slopes where re-vegetation is established will be left at 2:1 or gentler in conformance with SMARA stipulations. New slopes will be 2:1 or gentler to facilitate re-vegetation.

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.

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

Based on the above, impacts are anticipated to be less than significant.

- VI c) Less Than Significant Impact. The Project is an open-pit mining operation. There are no structures on the site nor are any proposed. The Project would involve excavation to depths no greater than 50 feet below the existing ground elevation. All quarry slopes shall be designed such that they do not exceed a 50-feet vertical height. All finished quarry slopes shall have no less than a 2:1 slope ratio, horizontal to vertical. Existing slopes where re-vegetation is established will be left at 2:1 or gentler in conformance with SMARA stipulations. Therefore, impacts related to landslide, lateral spreading, subsidence, liquefaction or collapse are considered less than significant.
- VI d) No Impact. Soils within the Project site consist of sand, gravel and fill material. The Project is an open-pit mining operation. There are no structures on the site nor are any proposed. Therefore, impacts related to expansive soils are considered to have no impact.
- 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 then Significant Impact with Mitigation Incorp.	Less than Significant Impact	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?			$\boxtimes$	

#### 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.

Section 5.6 of the GHG Plan identifies the procedures for reviewing development projects for consistency with the GHG Plan. The GHG Plan includes a two-tiered development review procedure to determine if a project could result in a significant impact related greenhouse gas emissions or otherwise comply with the Plan pursuant to Section 15183.5 of the State CEQA Guidelines. The initial screening procedure is to determine if a project will emit 3,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E) per year or more. Projects that do not exceed this threshold require no further climate change analysis but are required to implement mandatory reducing measures in the project's conditions of approval.

Projects exceeding this threshold must meet a minimum 31 percent emissions reduction in order to garner a less than significant determination. This can be met by either (1) achieving 100 points from a menu of mitigation options provided in the GHG Plan or (2) quantifying proposed reduction measures. Projects failing to meet the 31 percent reduction threshold would have a potentially significant impact related to climate change and greenhouse gas emissions.

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."

A GHG emissions inventory was conducted for the Project utilizing the California Emissions Estimator Model (CalEEMod) based on the equipment mix and number of haul trips associated with mining activities. GHG emissions will be released by equipment used for loading, grading, and compacting activities. CalEEMod estimates that the estimated annual emissions from mining activities would be 850.30 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E) per as shown on Table 4.

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Table 3. Project Greenhouse Gas (GHG) Emissions

		yr		
Source	N20	CO2	CH4	CO2e
Operations	0.00	111.15	0.031	111.80
Hauling & Water Trucks	0.00	733.90	0.22	738.50
TOTAL				850.30
Screening Threshold				3,000
Exceed Threshold?				NO

As shown in Table 3, the Project's GHG emissions are less than the initial screening threshold of 3,000 MTCO<sub>2</sub>E per year Projects that do not exceed this threshold require no further climate change analysis.

However, 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 mining 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 mining equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.
- Less Than Significant Impact. The State and local regulatory programs for GHG emissions and climate change are described in the response to Issue 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.

	ISSUES	Potentially Significant Impact	Less then Significant Impact with Mitigation Incorp.	Less than Significant Impact	No Impact
VIII.	HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a)		_		$\boxtimes$	_
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?	_	_		$\boxtimes$
d)	Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard 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**

- VII a-b) Less Than Significant Impact. Typical hazardous wastes that may be present during mining activities on the Project site include:
  - Petroleum products from equipment operation and maintenance.

Any material deemed hazardous waste in California Code of Regulations (CCR) Title 22,
 Division 4.5; or listed in Code of Federal Regulations (CFR) 40, Parts 110, 117, 261, or 302.

The proposed mining activities include hazardous materials that would be used for fueling and serving mining equipment onsite. These types of hazardous materials used during mining activities are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by state and federal laws that the Project is required to strictly adhere to.

With mandatory compliance with applicable federal, state, and local laws and regulations regarding hazardous materials, including but not limited requirements imposed by the Environmental Protection Agency, California Department of Toxic Substances Control, South Coast Air Quality Management District, and the Regional Water Quality Control Board, impacts will less than significant.

Based on the above analysis, the routine transport, use or disposal of hazardous materials during mining activities of the Project would be less than significant.

- VIII c) No 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, a less than significant impact is anticipated.
- 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/f) No Impact. The Project site is not located within an airport land use plan or within 2 miles of a public use airport or private airstrip. The nearest airport is the Trona Airport located approximately 5 miles to the northwest of the Project site. As such, the Project would not result in safety hazard impacts to or from aircraft-related uses. No impact is anticipated.
- VIII 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 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. No impact is anticipated.
- VIII h) No Impact. According to the San Bernardino County Hazards Overlay Map (Trona), 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. No impact is anticipated.

	ISSUES	Potentially Significant Impact	Less than Significant impact with Mitigation incorp.	Less then Significant Impact	No impact
IX.	HYDROLOGY AND WATER QUALITY - Would the project:				ī ų
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 offsite?	_			
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?			$\boxtimes$	
е)	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)	Piace 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?		_		×
h)	Place within a 100-year flood hazard area structure that would impede or redirect flood flows?	<b>-</b>			$\boxtimes$
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?				$\boxtimes$

Less Than Significant Impact. Run-off resulting from direct precipitation and uncontrolled run-off from surrounding areas have the potential to cause minor erosion and deposition. 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.

Due to the low precipitation, flat gradient of the topography, and sandy nature of the soil, drainage control does not present a significant impact. The revegetation program is designed to reestablish a self-sustaining native plant community upon the conclusion of mining. As excavations are finished they will be revegetated with a combination of transplanted plants, growth media and native plant seeds collected from adjacent areas or purchased from commercial suppliers. All disturbed area drainage would be retained within the basins and low-lying areas; therefore, impacts are anticipated to be less than significant.

Less Than Significant Impact. No wells have been drilled at the site. The closest well typical of the lower reaches of the Slate range alluvial fan is well 7-1 located two miles to the northwest in Section T25S, R44E MDM. Water was encountered at a depth of 111-ft. (elevation approximately 1640 ft). The water encountered was highly brackish, containing 61,000 to 67,000 PPM TDS. Water of this quality is unsuitable for drinking water and only marginal for industrial uses.

This condition is typical of the Searles Valley, which does not contain groundwater of adequate quality for use as potable water. Potable water used in the Searles Valley must be imported.

IX c-f) Less Than Significant Impact. Rainfall in the area ranges from one to ten inches per year, averaging about four inches per year. Temperatures range for 10 to 120 degree F. Winds can blow at speeds up to 90 miles per hour, predominately from the southwest, occasionally from the north but rarely from the east. High winds occur predominantly in the spring, but may occur infrequently at other times.

The infrequent rainstorms typical of the area can produce run-off from the Slate Range Mountains to the east onto the Searles Lake Play. Such runoff follows well defined drainage channels, which only carry flows during periods of heavy precipitation. No such channels are apparent in the area of the East Borrow Pit and it should be anticipated that drainage on this site occurs as sheet flow.

Because Searles Lake is a playa, the small amount of runoff occurring in the area is ultimately confined to the lakebed where it either percolates or evaporates.

Because no water is used, there will be no erosion or sedimentation from the mining operation. 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. However, natural erosion is minimal with only four inches of average annual precipitation in the area.

Stockpiles of topsoil and fill-dirt shall be managed to minimize water and wind erosion.

The pit floor will be graded with a slight slope rising to the east and north to permit natural drainage at a slope less than that of the natural slope of the alluvial deposit from the Slate Range Mountains to the east.

All storm water discharge is regulated by the Lahontan Regional Water Quality Control Board pursuant to site specific Storm Water Pollution Prevention Plans. The County will approve the on-site drainage control system. Therefore, less than significant impact is anticipated.

- 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.
- IX i) 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 failure 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 Impact
	LAND USE AND PLANNING - Would the project:				
a)	Physically divide an established community?				$\boxtimes$
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?			<b>-</b>	$\boxtimes$
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	_			$\boxtimes$
					- O

- X a) No Impact. An example of a Project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. The Project site is surrounded by vacant desert land. No impact is anticipated.
- X b) **No Impact.** 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 of San Bernardino General Plan or Development Code. Additionally, the Project would not conflict with any applicable policy document, including, without limitation, the *California Desert Conservation Area Plan*, the Mojave Desert Air Quality Management District's *Air Quality Management Plan*, and the County of San Bernardino *Greenhouse Gas Emissions Reduction Plan*. The purpose of these plans is to avoid or mitigate an environmental effect.

In conclusion, the Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating adverse environmental effects and impacts would be less than significant.

X c) No Impact. The Project area is located in the Northern and Eastern Mojave planning area of the California Desert Conservation Area Plan. As discussed in Section IV, Biological Resources of this Initial Study Checklist/Mitigated Negative Declaration, the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

		ISSUES	Potentially Significant impact	Less than Significant Impact with Mitigation Incorp.	Less then Significent Impact	No impect
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?		_		$\boxtimes$

No Impact. Searles Valley Minerals processes brine solutions to produce boric acid, sodium carbonate, sodium sulfate, several specialty forms of borax, and salt from the deposits beneath the surface of the Searles Lake by means of a network of piping and wells drilled into the structure to various depths. The Lake surface is not generally usable by heavy equipment nor does it provide adequate foundation support for the stationary equipment. Access to the network is essential in operating and maintaining supply and quality of the brine fed to the three facilities of Searles Valley Minerals. To mine the Searles Lake resource, fill-dirt is needed to construct and to maintain access roads, well pump pads, and pads for other structures and equipment. The fill-dirt is to be used in connection with the development of public lands under sodium and potassium mineral leases (Lead Lease LA-087312) with royalties paid to the federal government. Suitable fill dirt/material is only available from alluvial deposits situated away from the lake edge. Of the available material, the East Borrow Pit, located on the east side of Searles Lake and administered by the BLM, provides the best fill-dirt in sufficient quantities for Searles Valley Minerals operations.

Based on the above analysis, the Project supports mineral extraction and 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. Therefore, no impacts are anticipated.

		ISSUES	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorp.	Less than Significant Impact	No impact
XII.		NOISE - Would the project:				
a	a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				×
b	)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				$\boxtimes$
c	<b>c)</b>	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	_		_	$\boxtimes$
d	ł)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	_	_		$\boxtimes$
e	<b>)</b>	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 expose people residing or working in the project area to excessive noise levels?	0			$\boxtimes$
f	f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	0		_	
SUBS	T/	ANTIATION (Check if the project is located in subject to severe noise levels according				

- XII a,c,d) No Impact. Approval of the Project would require operations to conform to all applicable noise control regulations. The Project is located in the Trona area of San Bernardino County. The nearest sensitive receptors are located at least 6 to 7 miles to the west of the Project in the communities of Trona and Argus. Therefore, no impacts are anticipated.
- XII b) **No Impact.** Approval of the Project would require operations to conform to all applicable vibration control regulations. The Project is located in the Trona area of San Bernardino County. The nearest sensitive receptors are located at least 6 to 7 miles to the west of the Project In the communities of Trona and Argus. Therefore, a less than significant impact is anticipated.
- XI e/f) No Impact. The Project site is not located within an airport land use plan or within 2 miles of a public use airport or private airstrip. The nearest airport is the Trona Airport located approximately 5 miles to the northwest of the Project site. As such, the Project would not expose people residing or working in the project area to excessive noise levels. No impact is anticipated.

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	ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less then Significant	No Impact
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)?		_		×
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?	ם			
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 an existing mining operation that will operate with a low number of employees. In addition, the duration of the operation is approximately 17 years after which time the site will be reclaimed and returned to open space use. 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 then Significant Impact with Mitigation Incorp.	Less than Significant Impact	No Impact
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 an existing mining operation with no permanent improvements proposed. In addition, mining activities have been taking place at the site since 1994. After mining operations cease, the site would consist of vacant land. Therefore, no impacts are anticipated.

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	ISSUES	Potentially Significant Impact	Less then Significant impact with Mitigation incorp.	Less than Significant Impact	No impact
XV.	RECREATION				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	0			$\boxtimes$
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?		<u> </u>		×

XVa/b) No Impact. The Project would 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 because it involves an existing mining operation that has been active since 1994. No impacts are anticipated.

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	ISSUES	Potentially Significant impact	Less than Significant impact with Mitigation incorp.	Less than Significant Impact	No Impact
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?		0	$\boxtimes$	
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)?	_	0		
e)	Result in inadequate emergency access?			0	$\boxtimes$
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	_			×

## SUBSTANTIATION

- XVI a-b) Less Than Significant Impact. Mining consists of stockpiling topsoil, excavation with a Payloader and dozer, stockpiling fill dirt on the quarry floor and loading into open end-dump trucks which transport the fill-dirt to the Searles Valley Mineral mining facility which is located approximately 2 miles to the west of the borrow pit. The trucks travel on an internal private road system and do not impact public roadways. As such, the Project will not exceed, either individually or cumulatively, a level of service standard. Impacts would be less than significant.
- XVI c) No Impact. Mining activities would not affect air traffic patterns at any airport or airstrip because no airport facilities exist in the vicinity of the site. The nearest airport is the Trona Airport located approximately 5 miles to the northwest of the Project site. No impacts are anticipated.
- XVI d) No Impact. The Project does not involve any road improvements or design features that could substantially increase hazards on public roads. Access to the mining pit is by dirt road tied into the overall Searles Valley Lake road system. Therefore, a less than significant impact is anticipated.

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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 emergency access routes. In addition, no road closures would be required. The Project would not involve any long-term increase in traffic that would conflict with adopted policies, plans, or programs supporting alternative transportation. No impacts would result.

		lasues	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
l.		TRIBAL CULTURAL RESOURCES - Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?			0	×
	b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				

No Impact. Historic resources generally consist of buildings, structures, improvements, and 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.

The site has actively been mined since approximately 1994 and is highly disturbed by mining activities. The existing East Borrow Pit has been excavated to a depth of about 10 feet below the natural ground surface. The ground surface in the Project area slopes upward toward the east between 3% to 6%. The existing floor slopes downward toward the west at about 2% to 3%. Continued excavations will result in the pit being expanded in an easterly direction upgradient toward the Slate Mountains.

In addition, ECORP conducted a cultural resources records search on June 18, 2018, at the South Central Coastal Information Center of the California Historical Resources Information System (CHRIS), located at California State University, Fullerton. The purpose of the records search was to determine the extent of previous cultural resources investigations and the presence of previously-recorded archaeological sites or historic period resources within a one-mile radius of the Project area. Materials reviewed included reports of previous cultural resources investigations, archaeological site records, historical maps, and listings of resources on the National Register of Historic Places or the California Register of Historical Resources.

The records search indicated that nine cultural resources investigations were conducted within a one-mile radius of the Project area between 1978 and 2006. Of these, two previous investigations, a 1978 cultural resources survey conducted by the Bureau of Land Management (SB-00630) and a 1979 cultural resources records search project conducted by the San Bernardino County Museum (SB-00853), included the Project area. The 1978 survey failed to identify any cultural resources within the Project area. Overall, the records search indicated that approximately 75 percent of the records search radius has previously been studied for cultural resources, which provides a good projection of the types of resources that may be found inside the Project area.

Based on the analysis above, there are no resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). As such, there is no impact and no mitigation measures are required. (Also refer to analysis under *Cultural Resources*, Issue 3.5(a).

- Ib) Less Than Significant 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.

The County Land Use Services Department notified the following California Native American Tribes per the requirements of AB52:

Morongo Band of Mission Indians

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

The Morongo Band of Mission Indians requested consultation which commenced on May 1, 2018. A copy of the above described cultural resources records search conducted by ECORP was provided to the tribe. On July 31, 2018, Alicia Benally, Cultural Resources Specialist, Morongo Band of Mission Indians stated via email that the tribe Is not requesting monitoring during mining activities but in the event that of an inadvertent discovery, they do ask that the Standard Development Conditions are included for the Project. As such, it is concluded that impacts are less than significant are no impacts and no mitigation measures are required.

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	ISSUES	Potentially Significant Impact	Less than Significant impact with Mitigation incorp	Less than Significant impact	No impact
VII.	UTILITIES AND SERVICE SYSTEMS - Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				×
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?		<u> </u>		×
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?			×	_
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e)	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?			$\boxtimes$	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?			$\boxtimes$	

XVII a/e) No Impact. The Project would not require sewer collection or treatment services and therefore no offsite discharge of treated wastewater would occur. No impacts related to wastewater treatment are

anticipated.

XVII b

No Impact. The only water consumption associated with both the past and present operation of this facility is for dust control. Brackish water is extracted from existing wells on Searles lake and sprayed from water trucks, which travel the dirt roads and quarry. No potable water, other than that brought to the site for drinking purposes is consumed onsite. The Project would not require sewer collection or treatment services. As such, the Project will not result in the construction of new water or wastewater treatment facilities.

XVII c) Less Than Significant Impact. The infrequent rainstorms typical of the area can produce run-off from the Slate Range Mountains to the east onto the Searles Lake Play. Such runoff follows well defined drainage channels, which only carry flows during periods of heavy precipitation. No such channels are apparent in the area of the East Borrow Pit and it should be anticipated that drainage on this site occurs as sheet flow.

Because Searles Lake is a playa, the small amount of runoff occurring in the area is ultimately confined to the lakebed where it either percolates or evaporates. The pit floor will be graded with a slight slope rising to the east and north to permit natural drainage at a slope less than that of the natural slope of the alluvial deposit from the Slate Range Mountains to the east.

The existing drainage system will not be altered so it will not cause significant environmental effects as shown in the analysis in this Initial Study Checklist/Mitigated Negative Declaration.

- XVII d)

  Less Than Significant Impact. The only water consumption associated with both the past and present operation of this facility is for dust control. Brackish water is extracted from existing wells on the lakebed sprayed from water trucks, which travel the dirt roads and quarry. No potable water, other than that brought to the site for drinking purposes is consumed onsite. The mining activity has been occurring since 1994. As such, the Project will not result in new or expanded entitlements for water.
- XVII f, g) Less Than Significant Impact. No mining waste is generated. The only solid waste generated is from worker activities and is minimal and is not forecast to impact nearby landfills.

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	ISSUES	Potentially Significant impact	Less than Significant impact with Mitigation incorp.	Less than Significant Impact	No impact
XVIII.	MANDATORY FINDINGS OF SIGNIFICANCE:				
a	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of Callfornia history or prehistory?		$\boxtimes$		
b	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		⊠		
C)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	0			_

- a) Less Than Significant Impact With Mitigation Incorporated. The Project does not have the potential to significantly degrade the overall quality of the region's environment, or substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population or drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. There are no rare or endangered species or other species of plants or animals or habitat identified by the Biological Resources Assessment (Appendix A and B) as being significantly and negatively impacted by this Project. There are no identified historic or prehistoric resources identified on this site. If any paleontological resources are identified during operation of the Project, the Project is required to comply with Mitigation Measures CR-1.
  - b) Less Than Significant Impact With Mitigation Incorporated... The analysis in this Initial Study Checklist demonstrated that the Project is in compliance with all applicable regional plans including but not limited to, water quality control plan, air quality maintenance plan, and plans or regulations for the reduction of greenhouse gas emissions. Compliance with these regional plans serves to reduce impacts on a regional basis so that the Project would not produce impacts, that considered with the effects of other past, present, and probable future projects, would not be cumulatively considerable.

c) Less Than Significant Impact. As discussed this Initial Study Checklist, the Project would not expose persons to adverse impacts related to Aesthetics, Agriculture and Forestry Resources, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation/Traffic, or Utilities and Service Systems. The Project will have no impact or a less than significant impact to these resources.

## 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: Treatment of Previously Unidentified Paleontological Resources. If previously unidentified paleontological resources are unearthed during construction activities, construction work in the immediate area of the find shall be halted and directed away from the discovery until a qualified Paleontologist assesses the significance of the resource. If the discovery is located on BLM land, the Ridgecrest field office shall be contacted to evaluate the resource and make necessary plans for treatment. If the resource is located on private land, the County of San Bernardino Land Use Services Department shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be historically significant according to CEQA (CEQA Guidelines Section 15064.5 (a)). The plan shall include, but not be limited to:

- 1. Preparation of recovered specimens to a point of identification and permanent preservation including washing of sediments to recover small invertebrates and vertebrates.
- 2. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage (e.g., SBCM). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impact to significant paleontological resources is not complete until such curation into an established museum repository has been fully completed and documented.
- 3. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontological resources.

## **GENERAL REFERENCES**

County of San Bernardino General Plan, 2007.

County of San Bernardino Development Code, 2007.

County of San Bernardino Biotic Resources Map.

County of San Bernardino Hazard Overlay Maps.

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

Federal Emergency Management Agency Flood Insurance Rate Map and Flood Boundary Maps.

State of California, Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program.

CEQA Guidelines, Appendix G.

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

## PROJECT SPECIFIC REFERENCES

Biological Resources of the Searles Valley Minerals East Borrow Pit, Paul Kielhold, June 15, 2016.

Mohave Ground Squirrel Survey Report, Searles Valley Minerals Inc. Borrow Pit Project, Envira, July 17, 2017