



LAND USE SERVICES DEPARTMENT  
PLANNING DIVISION  
**PLANNING COMMISSION STAFF REPORT**



**HEARING DATE:** December 20, 2012

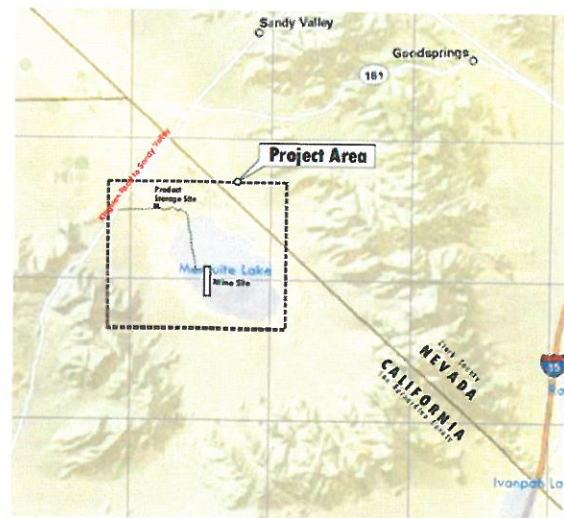
**AGENDA ITEM # 4**

PROJECT DESCRIPTION

VICINITY MAP



**APN:** 0572-231-02 & 0572-271-33  
**APPLICANT:** DALTON TRUCKING, INC.  
**COMMUNITY:** MESQUITE LAKE  
FIRST SUPERVISORIAL DISTRICT  
**LOCATION:** 5 MILES SOUTH OF SANDY VALLEY, NV;  
CLARK MOUNTAINS (NORTHEAST OF);  
KINGSTON ROAD (EAST OF)  
  
**PROJECT NO:** AP20120002(SMARA)  
**CONTRACT**  
**STAFF:** GUS ROMO  
**REP(S):** LILBURN CORP.  
C/O MARTY DERUS & FRANK AMENDOLA  
**PROPOSAL:** NEW MINING RECLAMATION PLAN FOR 160-  
ACRE LAKE BED AND 10 ACRES OF OFF-SITE  
MILL SITES ON UNPATENTED BLM LANDS  
APPROVED BY THE BLM TO CONDUCT  
GYPSUM SCRAPING



**25 Hearing Notices Sent On:** December 4, 2012 **Report Prepared By:** Gus Romo, RPG, Inc.

**SITE INFORMATION:**

**Parcel Size:** 170 total acres (160-acre mining/reclamation plus 10 acres off-site mill sites)  
**Terrain:** Dry lakebed  
**Vegetation:** Salt cedar trees (*Tamarix ramisissima*)

**SURROUNDING LAND DESCRIPTION:**

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
SITE	Dry lakebed/open space	RC (Resource Conservation)
North	Dry lakebed/open space	RC (Resource Conservation)
South	Dry lakebed/open space	RC (Resource Conservation)
East	Dry lakebed/open space	RC (Resource Conservation)
West	Dry lakebed/open space	RC (Resource Conservation)

**AGENCY**

City Sphere of Influence:  
Water Service:  
Sewer Service

**COMMENT**

N/A  
None  
Portable Toilets

N/A  
N/A<sup>1</sup>  
N/A

**STAFF RECOMMENDATION:** That the Planning Commission **APPROVE** Reclamation Plan 2012-04 subject to the attached Conditions of Approval and incorporated Mitigation Measures, **ADOPT** the Findings, **ADOPT** a Mitigated Negative Declaration, and **FILE** the Notice of Determination.<sup>2</sup>

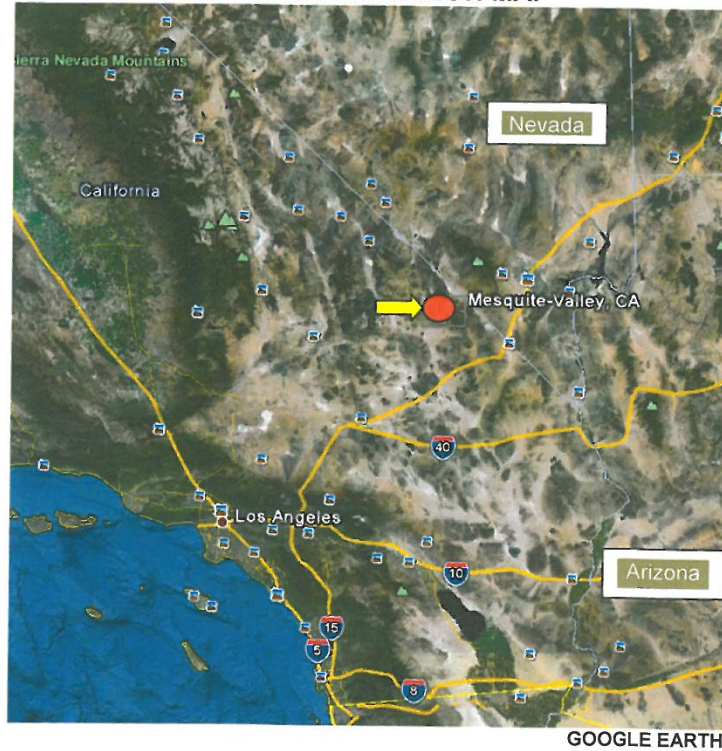
<sup>1</sup> Water to be provided by private party (Two Hawks Ranch) under separate agreement.

<sup>2</sup> In accordance with Section 86.08.010 of the Development Code, the action taken by the Planning Commission may be appealed to the Board of Supervisors within ten (10) calendar days after the Planning Commission hearing.

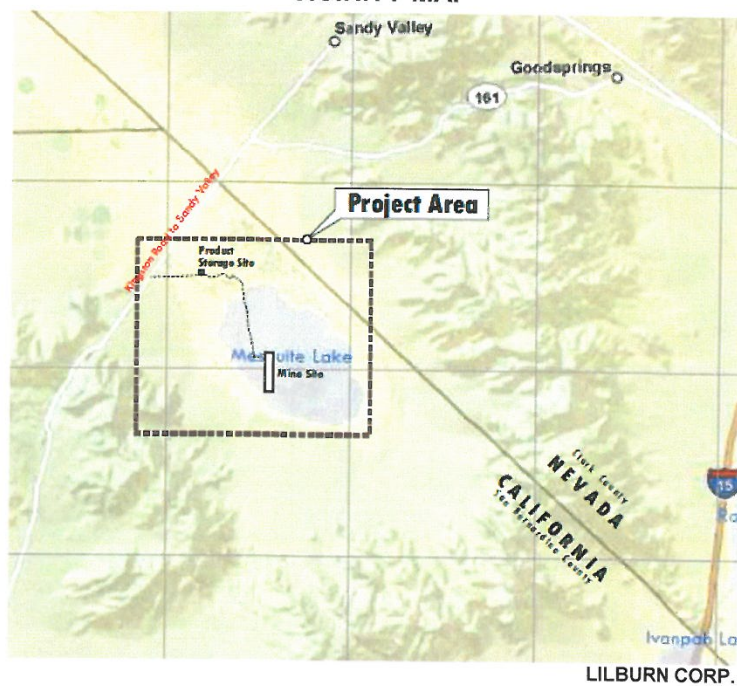
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### REGIONAL LOCATION MAP

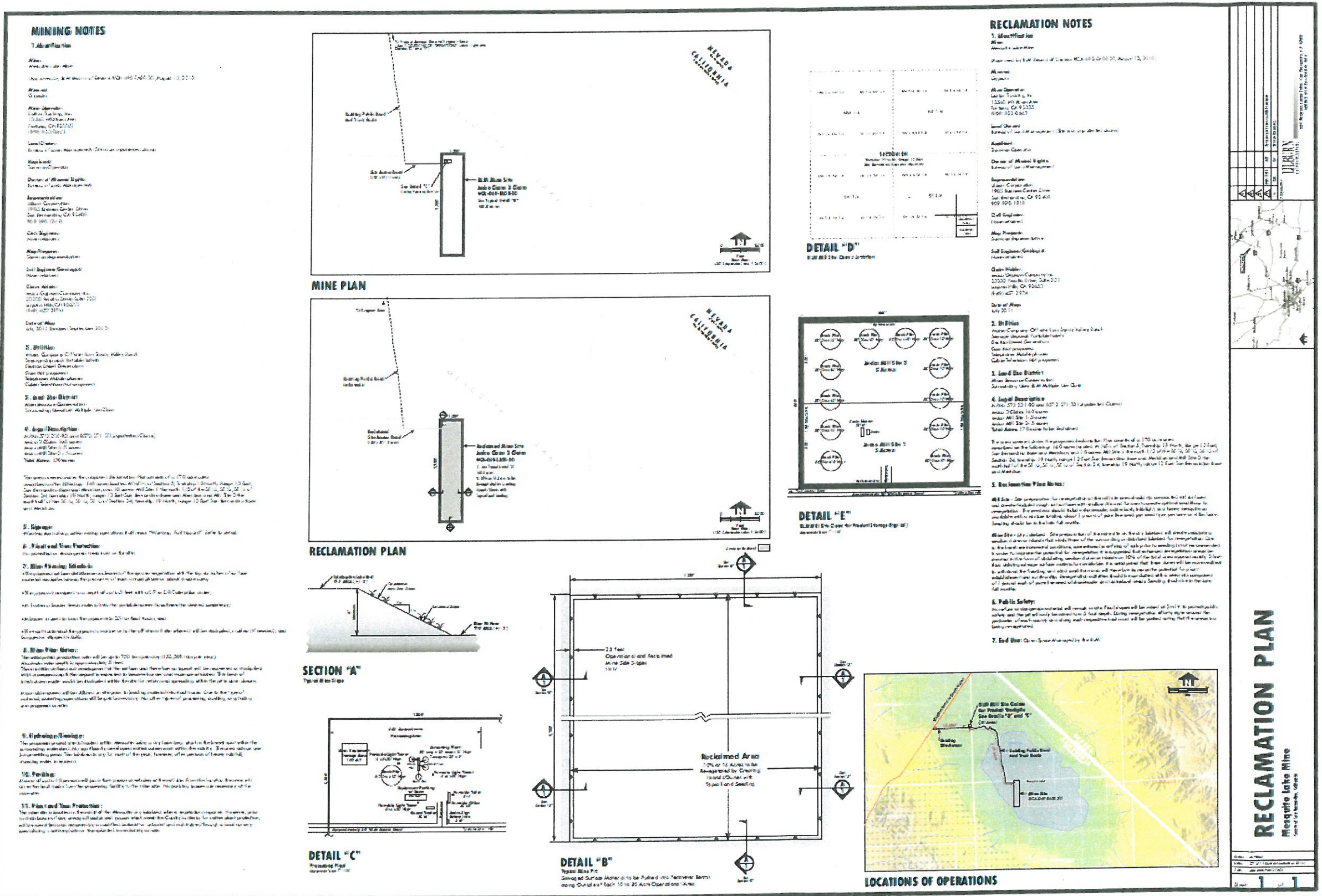
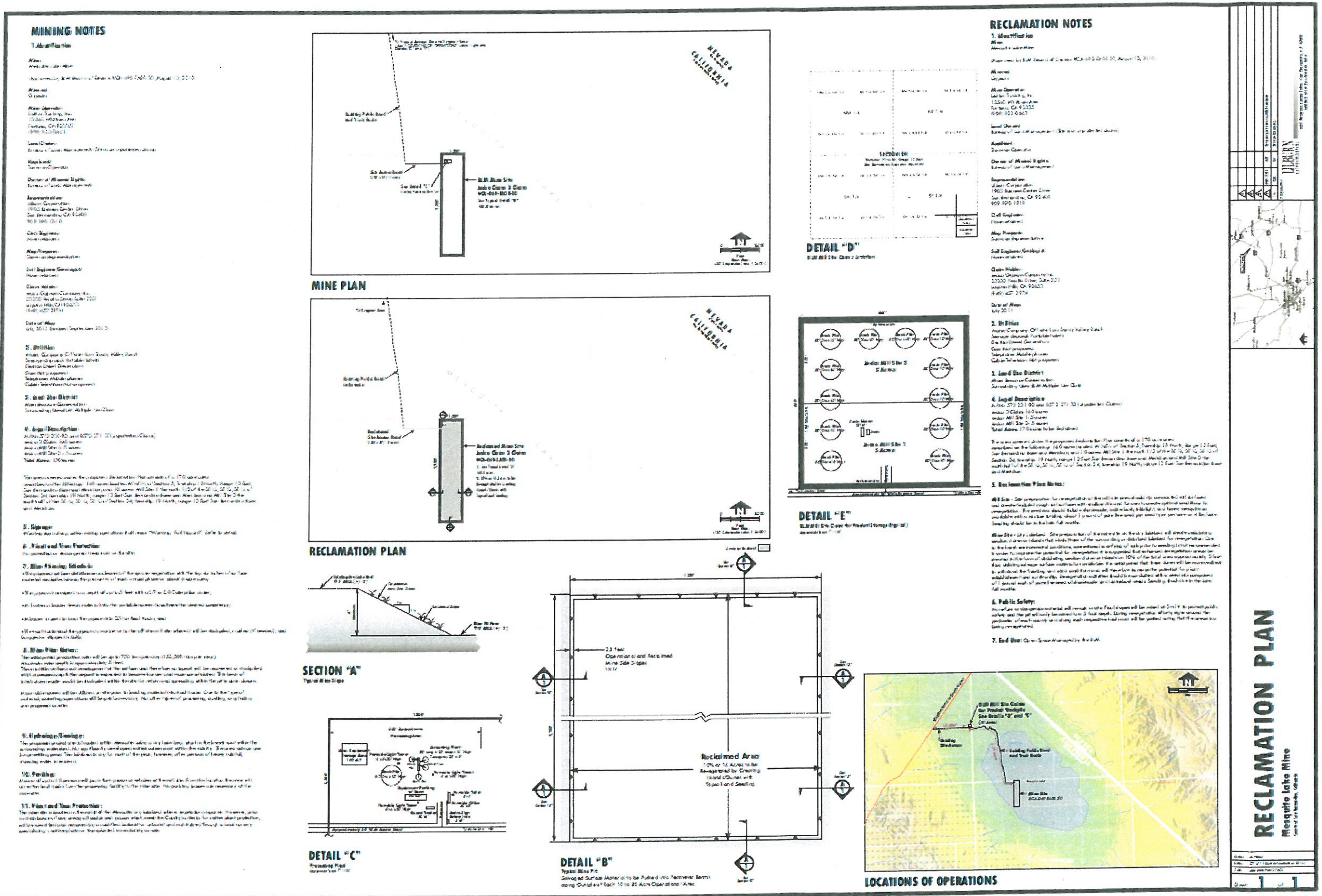


### VICINITY MAP



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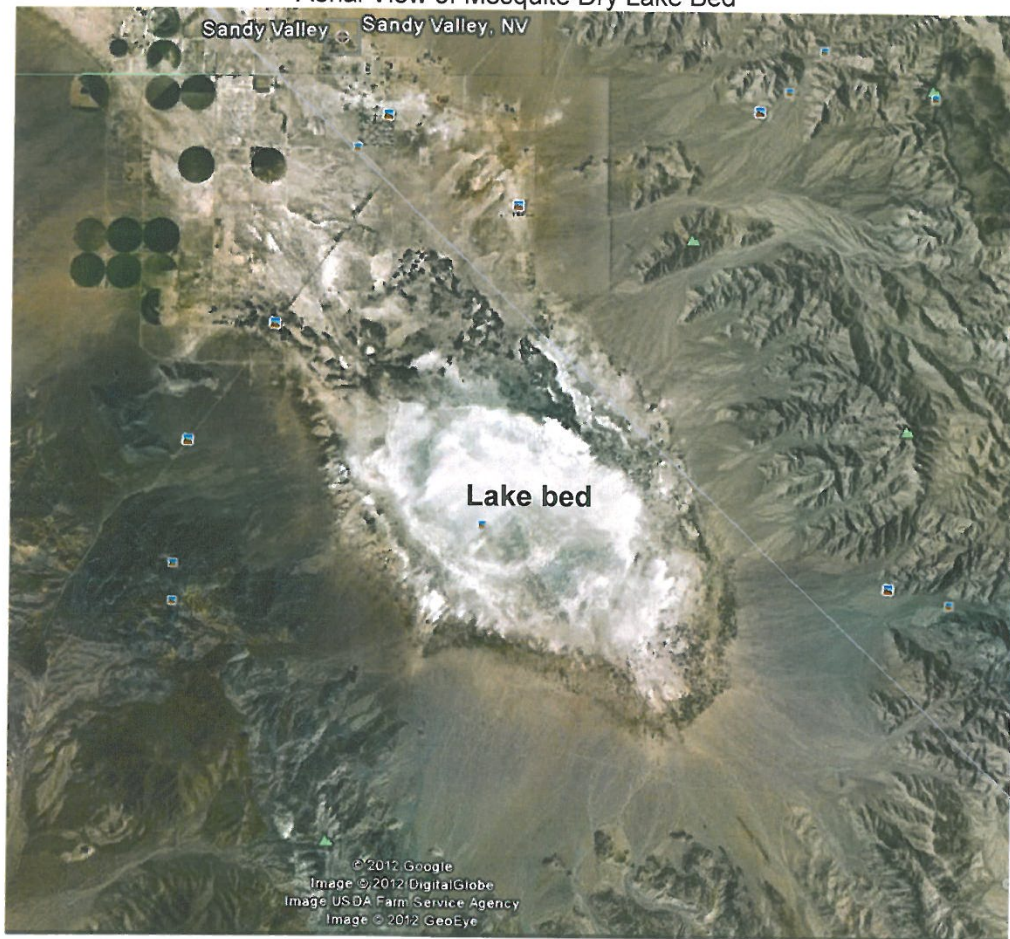
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### **SUMMARY/BACKGROUND:**

On August 13, 2010, Dalton Trucking, Inc. received approval from the Bureau of Land Management (BLM) to conduct a surface mining operation on a 160-acre site comprised of a dry lakebed at Mesquite Valley, California, in order to recover gypsum (gypsite) from the surface of the lakebed. A subsequent revision was approved by the BLM on January 30, 2012, to include the use of two off-site parcels totaling 10 acres for the mill site operation to allow material to be stockpiled off-site from the gypsum mining operation [Refer to Exhibit D, BLM Decision Records and Environmental Assessment for approved Plan of Operations (POO)]. The applicant then proceeded to submit the required Reclamation Plan for the 170 acres to the County in February 2012, which is the subject of this report.

The Reclamation Plan has been reviewed by staff as well as the Office of Mining Reclamation and found to be in compliance with Public Resources Code Section 2770 of the Surface Mining and Reclamation Act of 1975 (SMARA). The Reclamation Plan details the methods and procedures to be employed to reclaim disturbed areas and establishes a monitoring program and financial assurances as required by SMARA to ensure that reclamation is completed in accordance with the approved Plan of Operation.

Aerial View of Mesquite Dry Lake Bed



View of Lake Bed Looking East



Interior View of Lake Bed





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### **PROJECT PROPOSAL/OPERATION:**

The applicant is proposing a Reclamation Plan (Project) to reclaim the lakebed to its natural state upon completion of the gypsum scraping and processing mining operation approved by the BLM for the subject 170 acres. The site is located in Mesquite Valley, California, approximately five (5) miles south of Sandy Valley, Nevada. Gypsum naturally occurs at the surface of the lakebed as windblown gypsum sand and as a bedded evaporate deposit at depth. The gypsum sand contains some silt and clay impurities but is pure enough to be used as an agricultural soil additive without the need for any chemical beneficiation (treating the ore in order to make it more suitable for refining). Information obtained from exploratory drilling revealed that the gypsum deposit is minable to an initial depth of approximately five (5) feet from the surface; however, additional data could reveal the potential for an increased depth. If this is the case, approval for increased mining depth will require submission and approval of a modified plan to BLM and a future revision to this Reclamation Plan as well. Because there is little defined soil development at the surface, it is considered useable for mining purposes and will not result in stockpiling at the mining area.

The operator proposes to confine the surface disturbance area to the 170 acres, which includes the mill sites. In addition, site access will be confined to existing roads and approximately 2500 feet of a new road extending from the existing County road to the Project site.

The operator intends to scrape the gypsum from the site's surface using a medium-sized bulldozer or front-end loader. If the depth is increased, the deposit is expected to become harder and more consolidated, thus requiring a caterpillar mounted ripper to loosen the bedded gypsum. No use of explosives or blasting is proposed, and a condition of approval has been included to this effect.

Picture of Equipment Types Used in the Project



The gypsum will be moved to a crusher and screening assembly where it will be crushed and screened into three different sizes. The sized material will then be stockpiled and a conveyor belt loader will be used to top-load semi-trailer trucks in order to transport the bulk material to market via the proposed access routes.

Conveyor Equipment



Operations are planned to begin following County approval of this Reclamation Plan and would consist of one 8-10 hour shift per day, 6 days per week, with a crew of three to four individuals. The anticipated production rate would be approximately 325 tons per day (80,000 to 100,000 tons per year). Assuming a weight of 1.9 tons per cubic yard, this would equate to approximately 50,000 cubic yards per year. Mining would be conducted year-round. If mined to an average depth of three (3) feet (maximum 5-foot depth), the 170-acre site would provide product for a period of approximately 15 years under this plan of operations. Operations exceeding five (5) years would require periodic review of this plan by BLM.

#### Reclamation

Upon completion of the mining operation, the site would be scarified and the surface material graded into place. The Reclamation Plan requires the implementation of re-vegetation activities as mining phases are completed at the lakebed and at the operation's mill sites. Because of the unique site conditions at the mine site that include lack of top soil, frequent winds, and annual flooding, it is recommended that conditions for re-vegetation be created on portions of the site. Revegetation of the lakebed would be limited by the availability of salvage material for the creation of the Aeolian sand dunes that mimic the surrounding undisturbed lakebed. The purpose of the dunes is to increase the potential for plant establishment and survivorship. Annual assessments of the reclamation area will be conducted by a qualified botanist to determine the success of the revegetation effort until the criteria is achieved.

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## **ANALYSIS:**

Land Use Compatibility. The site is located within the “Resource Conservation (RC)” land use zoning designation, which allows a limited number of uses, including mining operations, subject to County approval of a conditional use permit or BLM approval of a POO when located on federal lands. The area surrounding the site is undisturbed and remains in a natural state. Activities occurring in the immediate area include recreational off-road vehicle travel and commercial livestock grazing. The area is within a grazing allotment and burro Herd Management Area. The Mesquite Lake Area of Critical Environmental Concern begins in the foothills surrounding the lakebed approximately 3,500 feet southwesterly at its closest point to the site. The BLM property within the area is identified within the California Desert Conservation Area Plan as being a Multiple Use Class L (Limited Use) Area. Class L areas are designed to protect sensitive, natural, scenic, ecological, and cultural resources. Public lands designated as Class L are managed to provide for generally lower-intensity, controlled, multiple-use resources, while ensuring that sensitive values are not significantly diminished.

The proposed Project would not physically divide an established community, and is consistent with all applicable land use policies and regulations of the County of San Bernardino General Plan.

Initial Study. In compliance with the California Environmental Quality Act, an Initial Study was completed and routed to the State Clearinghouse for circulation (SCH# 2012091040). The 30-day comment period ended on October 22, 2012. Comments were received from Native American Heritage Commission (NAHC); California Department of Fish and Game (CDFG); Archeological Information Center (San Bernardino County Museum); and the Mojave Desert Air Quality Management District. Staff has reviewed the comments and has prepared adequate responses that describe that concerns have been addressed in the Initial Study. Please refer to Exhibit E for copies of the Comment Letters and the responses to same.

The comments did not trigger the need for substantial revisions or re-circulation of the document due to the reasons discussed in the following paragraphs following the summary of mitigated environmental factors.

Mitigated Environmental Factors. Of the environmental factors potentially affected, mitigation measures are being recommended for Biological Resources and Cultural Resources.

1. Biological Resources (Desert Tortoise): The proposed Project is entirely on federal lands managed by the BLM. The BLM reviewed and approved the Project per their Record of Decision (ROD) on January 30, 2012 (DOI-BLM-CA-D090-2011-0029-EA)(EA). The EA included review of biological resources and determined that the Project site was found not to be Desert Tortoise habitat. In response to comments from the CDFG, the County requested the applicant to update Desert Tortoise studies to reaffirm the previous conclusions and findings made through the BLM ROD and EA. The updated Desert Tortoise study found no Desert Tortoise sign and there is no Desert Tortoise habitat found in or adjacent to the Project areas as the soils and vegetation are not favorable Desert Tortoise habitat. Thus the conclusions reached in the BLM EA and as described in the Initial Study remain the same.
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2. Biological Resources (Rare Plants): As noted above, the BLM reviewed and approved the Project per the ROD and EA. The EA included review of biological resources and determined no impact would occur to sensitive plant species. The Project site was not identified as habitat for any sensitive plant species per the EA findings. In response to the above comments, the County requested the applicant to update Desert Tortoise and sensitive plant studies to reaffirm the previous conclusions and findings made through the BLM ROD and EA. Attached herein are updated studies on the presence/absence of Desert Tortoise in the Project areas and the potential occurrence of sensitive plant species.

In response to comments from CDFG, the County requested the applicant to update rare plant studies to reaffirm the previous conclusions and findings made through the BLM decision record and EA. Plant surveys conducted for the preparation of the revegetation plan per OMR and County comments and focused sensitive plant survey conducted on late October 2012, did not find any of the sensitive plant species listed. The dry gypsum lake bed site consisted only of very isolated islands of two plants, including shadescale (*Atriplex confertifolia*) and iodinebush (*Allenrolfea occidentalis*). The mill site was dominated by inkblight or Mojave seablight (*Sueda moquinii*) and also included the two species noted above and honey mesquite (*Prosopis glandulosa*).

The updated rare plant survey identified one acre of mesquite bosque, which is considered a natural community plant is located on the southwestern portion of the Project site. In order to mitigate impacts to this natural community, the following mitigation measure will be added to the Project:

**BIO-16:** The approximately one acre of mesquite bosque (a habitat type characterized by mesquite) located on the southwestern corner of the lakebed mine site be avoided by prominently marking this area in the field. In addition, the mill site boundaries should be prominently marked in the field to avoid any impacts to mesquite bosque habitat outside of the mill site.

3. Cultural Resources (NAHC): Per the request of the NAHC, the County requested that a Sacred Lands File Search be conducted.

This search was conducted on October 19, 2012 and it was determined that "Native American cultural resources were not identified within one-half mile of the project site." A copy of the October 19, 2012 Sacred Lands File Search is attached.

Although the potential for unearthing Native American cultural resources is considered low, implementation of the following mitigation measure contained in the Mitigated Negative Declaration for the Project would ensure potential impacts are reduced to a less than significant level, as identified in Mitigation Measure CR-1 referenced in the following section.

4. Cultural Resources (County Museum Archeo/Paleo): Additional surveys were conducted in January 2004, June 2004, April 2005 and September 2008 by the Needles Field Office Archaeologist. The archaeological survey revealed no prehistoric or historic resource values associated with the proposed mining location or the access routes.
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An additional archaeological records and literature search occurred in September 2011 for the proposed expansion/construction of the mill construction. In addition, that area for the proposed mill expansion was subjected to a pedestrian survey by the Needles Field Office archaeologist in September 2011. This included a survey of the entire 10 acre area and a small buffer. No historic or prehistoric resources were revealed during the survey or literature and records search. A review of the Needles Field Office sacred lands inventory revealed no areas of traditional or sacred Native American values within the Project area."

The surveys conducted between January 2004 and September 2011 confirmed the findings made in the January 1984 Cultural Resources Assessment. Although the potential for unearthing cultural resources is considered low, implementation of the following mitigation measure contained in the Mitigated Negative Declaration for the Project would ensure potential impacts are reduced to a less than significant level:

**CR-1:** The proponent shall notify the BLM Needles Field Office prior to any road improvements (widening, grating, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. In the event that cultural resources, including paleontological resources, are encountered; mining activities in the immediate area of the find will be halted and the County Museum and BLM notified. Inspection of uncovered resources will be made and if necessary a recovery and curation plan implemented. An initial Cultural Resources Assessment for the Project area was conducted on the subject property in January 1984. The Report determined that there were "no adverse impacts to cultural resources are anticipated..."

In conclusion, the Initial Study confirms that the proposed use with mitigation measures will not have a significant effect on the environment, and a Mitigated Negative Declaration is recommended. This proposed determination represents the independent judgment of the County. All mitigation measures are included in the Conditions of Approval and are implemented through the post approval review.

**RECOMMENDATION:** That the Planning Commission:

- 1) **ADOPT** the Mitigated Negative Declaration based on a finding that the Initial Study was completed in compliance with the California Environmental Quality Act, that it has been reviewed and considered prior to approval of the Project, and that the Initial Study/Mitigated Negative Declaration reflects the independent judgment of the County of San Bernardino;
- 2) **ADOPT** the Findings as attached with this Staff Report (Exhibit A);
- 3) **APPROVE** Reclamation Plan No. 2012M-04 for the proposed Bureau of Land Management-approved mining operation; and
- 4) **FILE** a Notice of Determination.

**ATTACHMENTS:**

Exhibit A: Findings  
Exhibit B: Conditions of Approval

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Exhibit C: Initial Study/Mitigated Negative Declaration  
Exhibit D: BLM Decisions of Record & Conditions for Plan Of Operation (POO)  
Exhibit E: Response to Comments  
Exhibit F: Reclamation Plan (Text & Site Plan)



## **EXHIBIT A**

### **FINDINGS**

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**FINDINGS:** Pursuant to Development Code Section 88.03.060(k)(2) the following findings must be made in the affirmative in order to approve a Mining Reclamation Plan. The Reclamation Plan is proposed for a mining Plan of Operation (POO), which was approved on August 13, 2010 by the U.S. Department of Interior Bureau of Land Management (BLM) for the removal of gypsum on a dry lakebed of approximately 160 acres and revised on January 30, 2012 to include an additional 10 acres of off-site mill sites:

1. The Reclamation Plan as conditioned is in compliance with Surface Mining and Reclamation Act (Public Resources Code Section 2772-2773 and any other applicable provisions). The project has been routed to the State's Office of Mining Reclamation (OMR). A written response to OMR has been prepared describing the disposition of issues raised by that Department. The project has also been routed to all applicable County departments for review and has been cleared with conditions of approval.
2. The Reclamation Plan as conditioned is in compliance with the applicable requirements of State regulations (California Code of Regulations Section 3500-3505 and 3700-3713). The project has been routed to OMR. A written response to OMR has been prepared describing the disposition of issues raised by that Department. The project has also been routed to all applicable County departments for review and has been cleared with conditions of approval.
3. The Reclamation Plan and potential end use of land reclaimed as conditioned is in compliance with the Plan and are consistent with the Development Code and the General Plan and any applicable resource plan or element. The BLM has approved the mining and reclamation standards and appropriately conditioned the project. The reclamation plan specifically implements the following General Plan Conservation Element goal:  
  
General Plan Goal CO 7.6: Provide for the monitoring of mining operations for compliance with the established operating guidelines, conditions of approval and the reclamation plan.
4. The Reclamation Plan has been reviewed in compliance with the California Environmental Quality Act (CEQA) and the County's environmental review guidelines, and all significant adverse impacts from reclamation of the surface mining operations are mitigated below a level of significance or to the maximum extent feasible. An Initial Study and resulting Mitigated Negative Declaration have been prepared in compliance with CEQA and represent the independent judgment of the County acting as lead agency for the project. Therefore, if the Project is approved, a Notice of Determination will be filed.
5. The land and/or resources, such as water, will be reclaimed to a condition that is compatible with, and blends in with, the surrounding natural environment, topography, and other resources, or suitable off-site development will compensate for related disturbance to resource values. In addition to conditions of approval imposed by this reclamation plan, the operation has been approved and conditioned by the BLM to ensure appropriate reclamation measures are taken following the end of the operation.



6. The Reclamation Plan as conditioned will reclaim the mined lands to a usable condition which is readily adaptable for alternative land uses consistent with the General Plan and applicable resource plan. The reclamation plan specifically implements the following General Plan Economic Development and Conservation Element goals:

General Plan Goal ED 7: The County will conserve mineral resources for extractive industries.

General Plan Goal CO 7.6: Provide for the monitoring of mining operations for compliance with the established operating guidelines, conditions of approval and the reclamation plan.

7. A written response to the State Department of Conservation has been prepared, describing the disposition of major issues raised by that Department. Where the County's position is at variance with the recommendations and objections raised by the State Department of Conservation, the responses address, in detail, why specific comments and suggestions were not accepted. A letter to this effect was sent to the Office of Mining Reclamation 30 days prior to the public hearing.

## **EXHIBIT B**

### **CONDITIONS OF APPROVAL**

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## CONDITIONS OF APPROVAL

### GENERAL REQUIREMENTS: PROCEDURAL CONDITIONS OF APPROVAL

#### LAND USE SERVICES DEPARTMENT - (909) 387-4105

1. This conditional approval is for Mining Reclamation Plan No. 2012M-04 for the **Mesquite Lake Gypsum Mine**, a Mining Reclamation Plan to take reclamation responsibility of 160 acres of lake bed and 10 acres of off-site mill sites on unpatented BLM lands approved by the BLM to conduct gypsum scraping and processing. The site is located in the community of Kingston/Mesquite Valley 5 miles south of Sandy Valley, Nevada, within the dry lakebed of Mesquite Lake between Yucca and Ocotillo Roads on the east side of Stage Horn Road.

A copy of Mining Reclamation Plan No. 2012M-04 shall be kept on site during operations at all times. Any alteration or expansion of these facilities or increase in the developed area of the site from that shown on the final approved plot plans may require submission of an additional application for review and approval.

2. Mining Reclamation Plan No. 2012M-04 shall be effective for a period of thirty **(30)** years, with surface mining operations to terminate on effective date of County approval (**i.e., January 2, 2033**) as long as the permit is valid and the operation is in compliance with the Conditions of Approval. The Reclamation Plan shall be effective for a period of **five (5)** additional years to allow for monitoring of revegetation efforts and other required reclamation activities, with anticipated reclamation to be completed by **January 2, 2038**. At the conclusion of the mining operation, all accessory uses shall be vacated and the area reclaimed or the property owner or operator shall process the appropriate application(s) for approval as a stand-alone use.
3. The San Bernardino County Land Use Services Department shall be notified in writing, within 30 days, about any:
  - A) Change in operating procedures, or inactive periods of operation for one (1) year or more.
  - B) Changes of Company ownership, address, or telephone during the life of the Conditional Use Permit or Reclamation Plan.
  - C) Any changes to provisions in lease agreements or real property that will affect the approved Mining Reclamation Plan.

**ENVIRONMENTAL MITIGATION MEASURE: Shown in Italic Type**

4. The approved Reclamation Plan shall be bound in a 3-ring notebook and shall incorporate the revegetation plan, test plot plan, National Pollutant Discharge Elimination System (NPDES) Permit (or evidence from the CRBRWQCB that the NPDES permit is not needed), and Conditions of Approval. The Reclamation Plan shall be kept at the site at all times during operations and be presented to the inspector upon request.
5. The applicant/operator shall ascertain and comply with requirements of all Federal, State, County, and Local agencies as are applicable to the project areas. They include, but are not limited to: the San Bernardino County Departments of Planning, Environmental Health Services, Transportation/Flood Control, Fire Warden, Building and Safety, Bureau of Land Management, Mojave Desert Air Quality Management District, State Fire Marshall, Lahontan Regional Water Quality Control Board, CalTrans District 8, California Department of Fish and Game (specifically with Fish & Game Code Section 1600 requiring notification for a Lake and Streambed Alteration Agreement), State Mining and Geology Board, U.S. Fish and Wildlife Service, Mine Safety and Health Administration (MSHA), the California Occupational Safety and Health Administration (Cal-OSHA), and California Highway Patrol.
6. In compliance with the County Development Code, Section 81.01.070, the applicant shall agree, to defend, indemnify, and hold harmless the County or its "indemnitees" (herein collectively the County's elected officials, appointed officials (including Planning Commissioners), Zoning Administrator, agents, officers, employees, volunteers, advisory agencies or committees, appeal boards or legislative body) from any claim, action, or proceeding against the County or its indemnitees to attack, set aside, void, or annul an approval of the County by an indemnitee concerning a map or permit or any other action relating to or arising out of County approval, including the acts, errors or omissions of any person and for any costs or expenses incurred by the indemnitees on account of any claim, except where such indemnification is prohibited by law. In the alternative, the applicant may agree to relinquish such approval.

Any condition of approval imposed in compliance with the County Development Code or County General Plan shall include a requirement that the County acts reasonably to promptly notify the applicant of any claim, action, or proceeding and that the County cooperates fully in the defense. The applicant shall reimburse the County and its indemnitees for all expenses resulting from such actions, including any court costs and attorney fees, which the County or its indemnitees may be required by a court to pay as a result of such action.

**ENVIRONMENTAL MITIGATION MEASURE: Shown in Italic Type**

The County may, at its sole discretion, participate at its own expense in the defense of any such action, but such participation shall not relieve the applicant of their obligations under this condition to reimburse the County or its indemnitees for all such expenses.

This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The applicant's indemnification obligation applies to the indemnitees' "passive" negligence but does not apply to the indemnitees' "sole" or "active" negligence or "willful misconduct" within the meaning of Civil Code Section 2782.

7. The applicant/operator shall maintain an acceptable form of financial assurance for the reclamation plan and conditions of approval. The financial assurance shall identify the County of San Bernardino, the State Department of Conservation Office of Mine Reclamation (OMR), and the U.S. Department of Interior Bureau of Land Management (BLM) as beneficiaries. Any withdrawals made by the County, State, or Federal Government for reclamation shall be re-deposited by the applicant/operator within 30 days of notification.

The financial assurance shall be calculated based on a cost estimate submitted by the applicant/operator and approved by the County and OMR for the approved reclamation procedures. Each year, following the annual mine site inspection, the assurance amount shall be reviewed and, if necessary, adjusted to account for new lands disturbed plus one additional year of proposed land disturbance by surface mining operations, inflation and reclamation of lands accomplished in accordance with the approved Reclamation Plan.

The financial assurance is not established to replace the applicant's/operator's responsibility for reclamation, but to assure adequate funding to complete reclamation per the Reclamation Plan and Conditions of Approval. Should the applicant/operator fail to perform or operate within all of the requirements of the approved Reclamation Plan, the County or Department of Conservation will follow the procedures outlined in Sections 2773.1 and 2774.1 of the Surface Mining and Reclamation Act (SMARA) regarding the encashment of the assurance and applicable administrative penalties, to bring the applicant/operator into compliance. The requirements for the assurance will terminate when reclamation of the site has been completed in compliance with the approved Reclamation Plan and accepted by the County and the Department of



Conservation, Office of Mine Reclamation pursuant to California Code of Regulations, Section 3805.5.

8. This Reclamation Plan shall become null and void if the conditions applicable to BLM approved Plan of Operation (POO) and Reclamation Plan have not been complied with following due process and/or operation has not commenced within three (3) years of the date of approval. One extension of time, not to exceed three (3) years may be granted upon written request and submittal of the appropriate fee, not less than 30 days prior to the date of expiration. PLEASE NOTE: This will be the only notice given for the above specified expiration date. The applicant is responsible for the initiation of an extension request.
9. The applicant/operator shall submit an annual report (Mining Operation Annual Report Form MRRC-1) summarizing the past year's mining and reclamation activity to the Department of Conservation, Office of Mine Reclamation and the Land Use Services Department each year. Mine site inspections will occur in conjunction with the annual report or at other times as appropriate.
10. As determined necessary on a case by case basis, the applicant shall deposit funds with the County necessary to compensate staff time and expenses for review of financial assurance cost estimates, compliance monitoring reports, site inspections, enforcement activities, and annual inspections.
11. If the mining operation or Mining Reclamation Plan procedures change from those outlined in Reclamation Plan No. 2012M-04, the applicant/operator shall file an amendment and secure County, OMR, and BLM approval 90 days before such changes can be made effective.
12. The mine operations and hauling (i.e., material and equipment/supplies transport) shall operate within the hours approved by the BLM Plan of Operation (POO).
13. Pursuant to the approved BLM POO, blasting is NOT a part of this approval. As such, no explosives shall be stored on-site.
14. All conditions of this Reclamation Plan are continuing conditions. Failure of the applicant/operator to comply with any or all of said conditions at any time could result in the revocation of the permit granted to use the property.

**ENVIRONMENTAL MITIGATION MEASURE: Shown in Italic Type**

15. Proof of Department of Fish and Game fee payment, pursuant to California State Assembly Bill 3158, will be required prior to recordation and issuance of the Reclamation Plan. The applicant/operator should be aware that Section 21089(b) of the Public Resources Code provides that any project approved under CEQA is not operative, vested or final until the required fee is paid.
16. Prior to issuance of the approved Permits, all fees due under actual cost job no. AP20120002 shall be paid in full.
17. Implementation of the mitigation measures required for this project shall be verified according to the methods identified in the Mitigation Monitoring and Compliance Program. Planning verification of compliance shall be requested through submittal of a Mitigation Monitoring and Compliance Application along with the required fee deposit. A qualified third party consultant with experience in mine operations shall do mitigation monitoring compliance verification to be funded by the applicant/operator. Annual reports shall be prepared by the operator that summarizes compliance with regulatory agency monitoring requirements and submitted to Land Use Services by Oct 1<sup>st</sup> of each year.

**PRIOR TO LAND DISTURBANCE, THE FOLLOWING CONDITIONS SHALL BE MET:**

LAND USE SERVICES DEPARTMENT, PLANNING - (909) 387- 8311

18. The applicant/operator shall process a Condition Compliance Review through the County in accordance with the direction stated in the Conditional Approval letter, for verification of conditions for each phase of the project as approved in the Reclamation Plan. A minimum balance of \$1,200.00 must be in the project account at the time the Condition Compliance Review is initiated. NOTE: Sufficient funds must remain in the account to cover the charges during the Compliance Review for each phase.
19. Prior to disturbance, the Reclamation Plan text and maps shall be revised to reflect the project as approved by the Planning Commission. The revision will undergo technical review by County staff and OMR, and shall also be amended to incorporate comments per OMR letter dated June 4, 2012 to the extent stated in the County's response letter to OMR dated October 18, 2012.
20. Prior to disturbance, the applicant/operator shall post a County-approved financial assurance mechanism for the initial amount of **\$158,588** to assure that adequate funding is available to complete reclamation per the Reclamation Plan and Conditions of Approval. The financial assurance mechanism shall identify the County, the Department of Conservation, and BLM as beneficiaries on State Mine and Geology Board approved forms. (Note: Operator currently has Surety Bond No. K0826790A for stated amount on file with the County).
21. Prior to disturbance, the applicant/operator shall obtain a California Mine Identification number from OMR pursuant to Public Resources Code, Section 2207 and pay all associated fees to the Department of Conservation.
22. Authorization for mine access and ground disturbance activities shall be provided from the U.S. Department of the Interior, Bureau of Land Management, Needles Field Office (BLM) prior to initiating new land disturbance activities affecting APN's 0571-191-06 and 0571-181-03.

**ENVIRONMENTAL MITIGATION MEASURE: Shown in Italic Type**



**PRIOR TO OPERATION, THE FOLLOWING CONDITIONS SHALL BE MET:**

LAND USE SERVICES DEPARTMENT, PLANNING - (909) 387- 8311

23. *BIO-1. All trash and food items should be promptly enclosed in raven-proof containers (i.e. metal or solid trash cans) and disposed of in a licensed disposal facility on a regular basis.*
24. *BIO-2. All project related vehicular traffic should be confined to existing roads and only those new roads authorized by this action.*
25. *BIO-3. Any desert tortoises observed during any phase of the project should be left to move out of the way on its own. Handling of desert tortoises is not authorized.*
26. *BIO-4. To assure observation and avoidance of desert tortoises in roadways, the proponent should travel no more than 20 miles per hour on all roads not maintained by the County during the tortoise active season (mid-March to mid-November).*
27. *BIO-5: Workers should inspect for desert tortoises under vehicles and equipment prior to moving them. If a desert tortoise is present, the worker should carefully move the vehicle or equipment only when necessary or should wait for the desert tortoise to move out from under the vehicle or equipment*
28. *BIO-6: The proponent should notify the BLM Needles Field Office upon locating a dead or injured tortoise at the project site or along any access road. Any desert tortoise injured by project related activities should be transported to a veterinarian for treatment at the expense of the proponent.*
29. *BIO-7: BLM biologists should have the authority to halt any action that could cause harm to a desert tortoise. Should BLM personnel identify potential harm to a desert tortoise during any phase of the project, all project work identified as a source of potential harm to the tortoise would be required to cease until a suitable course of action has been identified, including, as needed, consultation pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 as amended.*
30. *BIO-8: The proponent should notify the BLM Needles Office prior to any road improvements (widening, grading, etc.), construction (turn-arounds, pull-outs, etc.) and/or maintenance of the access roads. The proponent should specify exactly where the improvements, construction, and/or maintenance would take place so that*

**ENVIRONMENTAL MITIGATION MEASURE: Shown in Italic Type**

*biological and cultural surveys may be undertaken prior to the proponent making any changes in the access roads.*

31. *BIO-9: All salt cedar individuals in the project vicinity should be removed prior to commencement of mining activities. GPS locations and approximate heights of these individuals have been provided in an appendix by the Needles Field Office Invasive Species Coordinator. Removal of these trees will be done during the winter of 2012-2013 between October and February when the salt cedar is not in seed. Removal will be done by mechanical means. This will involve a backhoe or similar device used to pull the entire trees.*
32. *BIO-10: Before entering the site, all vehicles should be inspected for any invasive plant materials and seeds. Any vehicles containing mud or vegetative materials will be cleaned. This should be done offsite using a wash station, compressed air station or a commercial car wash that should wash the under carriage of the vehicle. Possible locations for washing of the vehicles include Primm, Jean or Las Vegas, NV. The method used to remove invasive materials from the vehicle should be reviewed by the BLM invasive weed coordinator prior to approval.*
33. *BIO-11: Before entering the site all clothing and footwear should be checked and any plant material, especially stickers, and burs that may contain invasive non-native plant seeds should be removed and disposed of in a trash receptacle.*
34. *BIO-12: There should be a briefing on the importance of preventing the spread of noxious weeds in areas that are not currently infested, and controlling the proliferation of weeds already present. Impacts of noxious weeds on native vegetation, wildlife, and fire activity should be discussed including an explanation of how invasive grasses provide a fine fuel understory which can spread fire from shrub to shrub and how this has historically been absent in the native desert ecosystem.*
35. *BIO-13: Reclamation should include the following:*
  - a. *All cacti and yucca, if any, should be saved for transplanting purposes. These plants should to be protected, stored in 5-gallon containers, watered and placed in a shaded environment during the period of storage. The aforementioned plants should be replanted according to the guidelines supplied by the BLM botanist.*
  - b. *The mill area and new cross country access roads that are not designated to remain after reclamation and closure should be ripped to create textured rough soil surfaces with shallow rills and furrows and native seed should be spread over the sites per the approved Revegetation Plan. The mining areas within the*

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*lakebed will be reclaimed with designated "islands" to revegetate disturbed areas. Islands shall constitute approximately 10% of the total area to be reclaimed and covered with approximately 2 feet of salvaged surface material and seeded with native seed per the approved Revegetation Plan and in accordance with guidelines to be supplied by the BLM botanist upon notification by the operator to BLM when reclamation is to be initiated.*

- c. The operator should notify the County and BLM Authorized Officer when reclamation is completed to allow for inspection of reclamation activities.*
- 36. *BIO-14: All pits/trenches and drill holes should be constructed in such a way as to avoid trapping or injury to livestock or burros.*
- 37. *BIO-15: Vehicle operators should be made aware by the proponent of the presence of livestock and burros and take steps to avoid vehicle collision.*
- 38. *BIO-16: The approximately one acre of mesquite bosque (a habitat type characterized by mesquite) located on the southwestern corner of the lakebed mine site be avoided by prominently marking this area in the field. In addition, the mill site boundaries should be prominently marked in the field to avoid any impacts to mesquite bosque habitat outside of the mill site.*
- 39. *CR-1: The proponent shall notify the BLM Needles Field Office prior to any road improvements (widening, grading, etc.), construction (turn-arounds, pull-outs, etc.) and/or the maintenance of access roads. In the event that cultural resources, including paleontological resources, are encountered; mining activities in the immediate area of the find will be halted and the County Museum and BLM notified. Inspection of uncovered resources will be made and if necessary a recovery and curation plan implemented.*

*In the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code Section 7050.5 dictates that no further disturbances shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and Public Resources Code Section 7050.5 which stipulates the process to be followed when human remains are encountered, no mitigation measures are necessary.*

- 40. *HAZ-1: The proponent and associated project personnel should comply with all Federal, State and County regulations and codes, including but not limited to Occupational Safety and Health Administration and Environmental Protection Agency Regulations. Requirements include provisions of the Resources*

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*Conservation and Resources Conservation and Recovery Act, Comprehensive Response, Compensation and Liability Act, and Clean Water Act.*

41. *HAZ-2: A Health and Safety Plan (HASP) for the project should be developed and implemented prior to beginning site operations in accordance with 29 Code of Federal Regulations (CFR) 1910.20 and 1926.65. The plan should also be maintained on the project site and made available to, and reviewed by, all employees at all times that work is in progress and reviewed by, all employees at all times that work is in progress and reviewed with those working on site.*
42. *HAZ-3: The HASP should include a separate site-specific Emergency Response Plan (ERP) section of the HASP for the project in accordance with 29 CFR 910.120(b)(4)(ii)(H) and 1926.65(b)(4)(ii)(H). The ERP should be developed and implemented prior to beginning operations.*
43. *HAZ-4: A copy of the HASP (including the ERP) should be submitted to the BLM Needles Field Offices and County prior to beginning site operations.*
44. *HAZ-5: A written plan describing how the OSHA hazard Communication Standard will be met should be prepared and implemented in accordance with 29 CFR 1910.1200. The plan should include a list of hazardous chemicals on site, hazardous chemical labeling and other forms of warning, material safety and data sheets (MSDS) administration, and employee information and training.*
45. *HAZ-6: Prior to mobilization on the site, the equipment should be inspected to be sure it is operating correctly and is free of leaks. Equipment should be inspected daily to ensure that there are no discharges. Equipment maintenance activities should not be conducted on the site. All fuels and other appropriate materials used should be contained within the equipment or stored in appropriate containers. All materials should be removed from the site upon completion of construction activities.*
46. *HAZ-7: The operators should develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities. A copy of this plan should be provided to the Authorized Officer prior to initiating the proposed activity.*

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47. *HAZ-8: A copy of the list of project related OSHA hazardous chemicals should be provided to the BLM Needles Field Office and County.*
48. *HAZ-9: Material Safety Data Sheets for fuel, oil, antifreeze, and all other chemical characterized as hazardous by OSHA should be properly/legally stored. Sealed containments should be installed under all generators, and tanks, and state and county permits required for tanks and other storage should be secured prior to use on site.*
49. *HAZ-10: Fuels, oils, and all hazardous materials should be transported and stored on site in U.S. Department of Transportation and OSHA approved containers, within a containment area with an impermeable lining. A spill response/removal kit for fuels/oils, consisting at a minimum of equipment and supplies to address the quantities of materials on site, should be on site for containment of spills and legal removal of contaminated soils.*
50. *HAZ-11: No regulated hazardous, radioactive, "special" or "universal" wastes should be brought onto the site without the prior approval of the County and BLM Authorized Officer.*
51. *HAZ-12: If any serious injury or death occurs in connection with this project, the proponent should notify the BLM immediately and follow the initial report within 24 hours after the incident/accident with written report detailing the incident and resulting actions. The BLM should supply the necessary forms for reporting the incident and copies of ambulance and emergency room reports must also be submitted to the BLM.*
52. *HAZ-13: Contamination of soils with hydraulic fluids, oils or other lubricants would not be permitted. A tarpaulin, plastic, or other protective device should be required to prevent fluid/soil contact. Contaminated soils should be handled and disposed of in accordance with Environmental Protection Agency regulations for hazardous wastes. All costs associated with this clean-up should be borne by the proponent.*
53. The operator shall stockpile and relocate to designated areas shown on the Reclamation Plan all available growth media and vegetation from areas to be disturbed and maintain the stockpiled growth media material with temporary erosion control methods. At the time of reclamation, designated "island" areas constituting 10% of the areas to be reclaimed shall have the stockpiled growth medium and vegetation spread over them. Re-vegetation areas shall be ripped to a depth of

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one-foot and shall be supplemented by broadcast seeding with native and locally adapted seed per the approved reclamation plan and BLM POO conditions of approval. Stockpiled growth media shall be stored separately from silt and overburden material stockpiles and shall be stabilized through establishment of temporary vegetative cover or other acceptable means of surface treatment for prolonged storage periods.

54. Any buildings, structures (including any concrete foundations), and other mining related waste and debris shall be removed and taken to approved off-site disposal locations.
55. Prior to any disturbance that could disrupt, impede, or alter any drainage course, which may substantially adversely affect an existing fish or wildlife resource, the applicant/operator shall enter into a California Department of Fish and Game 1602 Streambed Alteration Agreement.
56. The applicant/operator shall obtain a National Pollutant Discharge Elimination System (NPDES) Permit for storm water discharges associated with operation activities. The NPDES permit shall be submitted to the Lahontan Regional Water Quality Control Board (CRBRWQCB) and a copy shall be submitted to Planning, or provide evidence from the CRBRWQCB that the NPDES permit is not needed. For more information, contact CRBRWQCB at (760) 340-4521.
57. The Operator shall submit an Erosion and Sediment Control Plan within 90 days of County Reclamation Plan Permit issuance and prior to any land disturbance or operations at the mill sites. The Plan shall illustrate how the mill site slopes will be protected and utilize Best Management Practices (i.e. slope armor/rip-rap or other slope stabilizing methods) to address the erosion during a 20 year/1 hour event.
58. Prior to initiation of operation, applicant shall obtain verification from RWQCB indicating if a storm water permit and SWPPP are required. If no permit and SWPPP are required by the RWQCB, then the erosion and sediment control plan required in condition 57 will suffice for the mill site only. The lakebed does not require erosion control as it is a broad flat basin that receives run-off from the surrounding area and tends to sheet flow. If a permit and SWPPP are required, then they will be made part of the Reclamation Plan Permit for the entire site and submitted to the Lahontan Regional Water Quality Control Board. A copy shall also be submitted to County Planning or evidence from CRBRWQCB shall be provided indicating that the SWPPP is not needed. For more information, contact CRBRWQCB at (760) 340-4521.

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59. The area of illumination from any lighting shall be confined to be within the site boundaries and to minimize impacts to night sky views from surrounding properties. The glare from any luminous source, including on-site lighting shall not exceed one-half (0.5) foot-candle at property line. On-site lighting shall be fully shielded, diffused, or directed in a manner to avoid glare directed at adjacent properties, roadways or any light spill into any wildland areas surrounding the site that might affect nocturnal animals. No light shall project onto adjacent roadways in a manner that interferes with on-coming traffic. All lighting shall be limited to that necessary for maintenance activities, security and safety purposes. All signs proposed by this project shall only be lit by steady, stationary, shielded light directed at the sign.
60. The applicant/operator shall maintain and annually renew existing permits to operate the processing plant, onsite generators, and any other applicable equipment from the Mojave Desert Air Quality Management District (MDAQMD) and be in compliance with said permits.
61. Operation of all off-road and on-road diesel vehicles/equipment shall comply with the County Diesel Exhaust Control Measures (Development Code, Section 83.01.040 (c)) including but not limited to:
  - A. Equipment/vehicles shall not be left idling for period in excess of five minutes;
  - B. Engines shall be maintained in good working order to reduce emissions;
  - C. Onsite electrical power connections shall be made available where feasible;
  - D. Ultra low-sulfur diesel fuel shall be utilized;
  - E. Electric and gasoline powered equipment shall substituted for diesel powered equipment where feasible;
  - F. Signs shall be posted requiring all vehicle drivers and equipment operators to turn off engines when not in use;
  - G. In addition, all on-road diesel trucks shall not idle more than five minutes per truck trip or per day on the project site.
62. The mine operator shall submit for review and obtain approval from County Planning a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce Green House Gas (GHG) emissions and submit documentation of compliance. The developer/construction contractors shall do the following:

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- a) Select construction equipment based on low GHG emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or Compressed Natural Gas (CNG) equipment.
  - b) All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.
  - c) All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes.
63. The operator shall submit for review and obtain approval from County Planning of evidence that all air quality mitigation measures have been installed properly and that specified performance objectives are being met to the satisfaction of MDAQMD.
64. Prior to ground disturbance, a Licensed Land Surveyor shall be employed to determine and permanently monument the property corners with visible intermediate boundary markers between corners and limits of each road right-of-way and project boundaries. For each corner, GPS coordinates (or other similar technology) shall also be provided in a format acceptable to the County. A final report shall be provided to the Mining Section of the County Land Use Services Department and the BLM.

PUBLIC WORKS DEPARTMENT, Land Development Division – Drainage Section  
(909) 387-8145

65. The mill sites may be subject to infrequent flood hazards by reasons of overflow, erosion and debris deposition in the event of a major storm. The project is located within Flood Zone D according to FEMA Panel Number 0375H dated 08/28/2008. Flood hazards are undetermined in this area, but possible. Adequate provisions should be made to intercept and conduct the tributary off site - on site drainage flows around and through the site in a manner, which will not adversely affect adjacent or downstream properties at the time the site is developed and shall be maintained five (5) years following the termination date of operation.

COUNTY FIRE DEPARTMENT, Hazardous Materials Division (909) 386-8401

66. Prior to commencement of land disturbing activities, the operator shall submit a Business Emergency/ Contingency Plan for emergency release or threatened release of hazardous materials and wastes to their Business Emergency/

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Contingency Plan or a letter of exemption. Updates shall indicate the revisions/changes to the facility. Revisions must at minimum include a letter of explanation, the Cover Sheet, the Activities Page, the Business Owner/Operator Identification Page, and any other information that has changed (i.e. facility maps, inventory, etc.).

67. Prior to commencement of land disturbing activities, the applicant shall apply for one or more of the following as applicable: a Hazardous Materials Handler Permit, a Hazardous Waste Generator Permit, an Aboveground Storage Tank Permit, and/or an Underground Storage Tank Permit.

DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES (909) 387-4666

68. The water purveyor shall be DEHS-approved. Contact DEHS to submit information for Two Hawks Ranch proposed as the purveyor.
69. If sewer connection and services are unavailable, an EHS approved sanitary waste disposal system will then be allowed. EHS must approve any proposed system prior to project commencement. Submit a liquid waste disposal plan to DEHS for review and approval. This plan should address all aspects of the sanitary waste portion of the project: waste collection tanks, service contracts, frequency of service, potential employee usage, etc. Include persuasive arguments to support the use of non-traditional methods of disposal.
70. A copy of any written clearances required by the Lahontan Regional Water Quality Control Board (LRWQCB) shall be forwarded to the County Department of Environmental Health Services (DEHS).

**GENERAL REQUIREMENTS: ON-GOING OPERATIONAL CONDITIONS**

DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES (909) 387-4666

71. The Noise level shall be maintained at or below County Standards, Development Code Section 87.0905(b).
72. If a septic system is installed, it shall be maintained so as not to create a public nuisance and shall be serviced by a DEHS permitted pumper.
73. No land filling of wastes or construction and mining related debris and materials shall occur on-site without an approved Solid Waste Facilities Permit.
74. All refuse and waste generated at the premises shall at all times be stored in approved containers and shall be placed in a manner so that visual or other impacts, and environmental public health nuisances are minimized and complies with the Development Code, Section 33.0830 et seq. For information, please call DEHS/Local Enforcement Agency (LEA) at: 909-387-4655.
75. All refuse containing garbage shall be removed from the premises at least one time per week to an approved solid waste facility in conformance with San Bernardino County Code Chapter 8, Section 33.0830 et seq. For information, please call DEHS/LEA at: 800-442-2283.
76. All refuse not containing garbage shall be removed from the premises at least one time every two weeks to an approved solid waste facility in conformance with San Bernardino County Code Chapter 8, Section 33.0830 et seq. For information, please call DEHS/LEA at: 800-442-2283.

COUNTY FIRE DEPARTMENT, Fire Warden (760) 843-4375

77. The primary access route shall comply with the minimum requirements for fire protection and/or emergency response with applicable local ordinances, codes, and/or fire protection standards.

LAND USE SERVICES DEPARTMENT, PLANNING - (909) 387-4105

78. The applicant shall implement measures to stabilize and secure the non-mill site portion of the Reclamation Plan during periods of inactivity as per the approved Reclamation Plan. An Interim Management Plan (IMP) as required by SMARA,

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Section 2770(h) shall be submitted to Planning for review and approval within 90 days of the mining operation becoming idle.

79. The mining operation shall be conducted in a uniform manner, with exterior slopes and floors trimmed as the mining operation proceeds to facilitate implementing site reclamation. Excavations shall be conducted so as to leave them in a reasonably neat and trim manner. The site should resemble natural landforms where possible. The final site shall be graded and revegetated as per the approved BLM POO and Reclamation Site Plan. Any changes to the approved plans shall require a Revision Application.
80. The applicant/operator shall maintain the premises in a neat and orderly manner at all times. No refuse or construction-related debris shall be retained at any time in the work areas. All refuse shall be disposed of at an approved licensed disposal facility. Refuse storage shall be maintained in closed containers.
81. Adequate provisions shall be made to intercept and conduct on-site sheet flow around or through the mill sites and mine area in a manner that will not adversely affect adjacent or downstream properties.
82. Drainage diversion structures shall be constructed in accordance with good engineering practice. Development shall consider reasonable measures that would preclude a potential for pit-capture and off-site erosion.
83. Material shall not be stockpiled adjacent to an active drainage unless adequate protective measures are implemented. Adequate measures shall consider the most adverse conditions the stockpile location will likely experience.
84. Reclamation shall be initiated at the earliest possible time on those portions of the mined lands that will not be subject to further disturbance by the surface mining operation or as shown on the Reclamation Plan (i.e., revegetation islands).
85. Clearly legible signs denoting limits shall be placed every 300 feet around the perimeter of the project plan area where undisturbed ground adjoins the permit area. Lettering shall be a minimum four (4) inches in height. All signs shall be in place prior to the commencement of extraction activities.
86. The applicant/operator should regularly review the adequacy of the signs. Care should be taken to ensure that signs do not become blocked by vegetation or become illegible from dirt or deterioration. As new phases are mined, additional

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signs may be needed. In evaluating the adequacy of signs, they should be considered from the viewpoint of a first-time visitor on the property, such as a vendor or a contractor. Pay special attention to any areas where public roads intersect project roads. Other drivers may not be familiar with the operation of mining equipment, the mine's traffic patterns, and equipment blind spots. Ensure that the traffic and warning signs that are provided in these areas are adequate.

87. Any advertising or identifying sign shall be constructed in compliance with the designated Official Land Use District for this site.
88. The applicant shall install Company identification signs on all company owned and operated haulage trucks used on public roads. The signs shall be located on both sides and the rear of each truck. The information contained on the sign shall include:

On the rear of the truck:

- A. How am I driving?
- B. Truck number.
- C. Company phone number.

On the side of the truck:

- A. Company name.
- B. Truck number.
- C. Company phone number.

The signing shall be printed in a minimum of 3" high lettering. The applicant shall have a person or an answering machine available during operating hours to answer the phone that corresponds to the phone number on the truck. The persons answering the phone number shall be instructed as to how to take the calls, how to affect a solution, and be responsible for returning a call to the complainant with results of investigation. The applicant shall keep a log of all calls received and shall include documentation of response and/or resolution of complaints. The log shall be made available to the County upon request.

89. In the event of any soil contamination on-site, the applicant/operator shall remove to a County approved disposal site, any soils that become chemically contaminated so as to preclude any chemical leaching into the local ground water supply over time.
90. In the event of any spill(s) on site, the applicant/operator shall remove any soils and or liquid in accordance with the approved Business Plan.
91. Processing and/or stockpiling of recycled materials of any type is not permitted within the Reclamation Plan boundaries.

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92. Any well, exploratory hole or test hole which is abandoned, out of service, or otherwise left unattended shall have a temporary cover over the well or opening which prevents the introduction of undesirable material into the well or hole, and ensures public and wildlife safety pursuant to California Health & Safety Code, Section 115700.
93. Non-portable plant equipment and structures are restricted to a maximum of 35 feet in height above natural grade level.
94. Revegetation test plots shall be identified on the Mine Reclamation Plan and required to determine the suitability of growth media for revegetation purposes. Test plots shall be conducted simultaneously with mining to determine the most appropriate planting procedures to be followed to ensure successful implementation of the Re-vegetation Plan. In lieu of test plots within the reclamation boundary, the revegetation efforts on adjacent mining operations may be used to verify the success of establishing vegetation at the site.
95. Re-vegetation Monitoring, to include BLM procedures, will continue annually for at least five (5) years after reclamation has been completed. Following the first two years of qualitative monitoring, quantitative monitoring will be conducted. Monitoring will utilize methods appropriate to the areas under study. Beginning with the adoption of the final revision of the Reclamation Plan that encompasses all the needed changes to be consistent with the final conditions of project approval, and continuing until reclamation is completed, the applicant/operator will submit to Planning annual monitoring reports. The reports will:
  - A. Describe re-vegetation actions undertaken in the reporting period;
  - B. Identify areas that have been disturbed;
  - C. Identify areas and acreage for which re-vegetation has been started;
  - D. Present results of investigations on species diversity and other measures of re-vegetation success in test and control or reference plots;
  - E. Describe successes and problems in the re-vegetation efforts for that year;
  - F. Describe steps taken to resolve problems or achieve re-vegetation success;
  - G. Describe disturbance and re-vegetation efforts planned for the next two years.
96. If re-vegetation is not successful, the applicant/operator shall undertake the following actions:

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- A. If, during the first two years of qualitative monitoring, revegetation is clearly not successful, the applicant/operator will re-evaluate the revegetation methods and will discuss changes to these methods with the County and BLM representatives. The applicant/operator will revise the Re-vegetation Plan, secure concurrence from County Planning for the changes, and begin implementing the new measures.
  - B. If the test plots do not meet the specified success criteria of the control plots after three years, the applicant/operator will make an assessment of the re-vegetation methods to identify any deficiencies contributing to planting failures. Corrective action shall be incorporated in follow-up testing.
  - C. If after five years, the re-vegetated areas (as measured by the results of the test plots) have not achieved these success criteria, the applicant/operator will immediately begin to implement the measures identified in a contingency plan.
97. Re-vegetation in arid areas is tenuous at best and, therefore, the applicant shall provide in the Financial Assurance Cost Estimate the annual costs to monitor and report on revegetation, incidental disturbance and erosion control for a time period of five (5) years following the termination date of the surface mining operation.
98. Pursuant to SMARA, Section 2772.7, as revised December 2006, Planning will prepare a "Notice of Reclamation Plan Approval" on a form to be approved by the County Records Office. The operator shall pay any and all review and recording fees.

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**PRIOR TO FINAL CLOSURE, THE FOLLOWING CONDITIONS SHALL BE MET:**

99. Provisions shall be implemented to intercept and conduct off site tributary drainage flows around or through the site to minimize erosion in a manner which will not adversely affect adjacent or downstream properties shall be verified pursuant to conditions 57 and 58 and shall be maintained five (5) years following the termination date of operation.
100. At the time of termination of the operation for any reason, all equipment, structures and refuse associated with the operation shall be removed from the site, all hazards mitigated, and reclamation initiated within 90 days, as per the approved Reclamation Plan.
101. Upon final reclamation, evidence shall be provided that all wells, exploration holes or test holes, as defined by DWR Bulletin 74-81 as revised in 1988 or the latest revision are destroyed in accordance with DEHS regulations and in such a manner that will no longer be a hazard to the health and safety of people and wildlife.
102. Each area reclaimed shall be identified on a map and labeled for identification. The final map shall be provided to County Planning and OMR for review and approval.

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## **EXHIBIT C**

### **INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION**

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# LAND USE SERVICES DEPARTMENT



COUNTY OF SAN BERNARDINO

## PLANNING DIVISION

385 N. Arrowhead Avenue, San Bernardino, CA 92415-0182

(909) 387-8311 Fax (909) 387-3223

<http://www.sbcounty.gov/landuseservices>

CHRISTINE KELLY  
Director

### COUNTY OF SAN BERNARDINO NOTICE OF AVAILABILITY AND NOTICE OF INTENT (NOI) TO ADOPT AN INITIAL STUDY / MITIGATED NEGATIVE DECLARATION FOR THE ESSEX PIT MINE AND RECLAMATION PLAN

In accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, County Staff prepared a Draft Initial Study / Mitigated Negative Declaration (IS/MND) that identify and evaluate the environmental impacts of the below-named project.

**Project Title:** Mesquite Lake Mine Reclamation Plan

**Project No.:** AP20120002

**Project Location:** 5 miles south of Sandy Valley, Nevada, northeast of the Clark Mountains within the dry lakebed of Mesquite Lake. Assessor's Parcel Number: Portion of 0572-231-02 and 0572-271-33.

**Project Description:** Reclamation Plan for surface mining of gypsum (gypsite) on 160 acres and a 10 acre mill site.

**Environmental Review and Public Comment:** The circulation of the Draft Mitigated Negative Declaration and Initial Study is to encourage written public comments. Interested persons can review the Draft IS/MND at [www.sbcounty.gov](http://www.sbcounty.gov) and at the following physical locations:

San Bernardino County Government Center  
Land Use Services Department, First Floor  
385 N. Arrowhead Avenue  
San Bernardino, CA 92415

High Desert Government Center  
15900 Smoke Tree St. Suite 131  
Hesperia, CA 92345

If unavailable on the web site, the document may be obtained in electronic format by telephoning the Land Use Services Department at (909) 387-4131 or, or by emailing the project Planner at [ernestperea@ymail.com](mailto:ernestperea@ymail.com) to request a PDF version of the document.

The public comment period will end on October 22, 2012 at 5:00 PM. Please submit comments to

[ernestperea@ymail.com](mailto:ernestperea@ymail.com) or to:

Ernie Perea, Contract Project Planner  
County of San Bernardino  
Land Use Services Department, Planning Division  
385 N. Arrowhead Avenue  
San Bernardino, CA 92415-0184

**Public Hearing:** A public hearing will be scheduled to consider adoption of the Final IS/MND at a future date. In advance of the hearing date, Staff will distribute a separate notice regarding that hearing.

GREGORY C. DEVEREAUX  
County Executive Officer

Board of Supervisors  
BRAD MITZELFELT.....First District      NEIL DERRY .....Third District  
JANICE RUTHERFORD.....Second District      GARY C. OVITT.....Fourth District  
JOSIE GONZALES.....Fifth District

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**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:**

<b>APN:</b>	Portions of 0572-231-02 and 0572-271-33
<b>Applicant:</b>	Dalton Trucking, Inc.
<b>Community:</b>	Mesquite Lake
<b>Location:</b>	5 miles south of Sandy Valley, Nevada, northeast of the Clark Mountains within the dry lakebed of Mesquite Lake
<b>Project No:</b>	AP20120002
<b>Staff:</b>	Ernie Perea, Contract Planner
<b>Rep:</b>	Lilburn Corporation
<b>Proposal:</b>	Reclamation Plan for surface mining of gypsum (gypsite) on a 160 acres and a mill site on 10 acres.

**USGS Quad:** Mesquite Lake  
**T, R, Section:** T18N R13E Sec. 5 W  $\frac{1}{2}$  E  $\frac{1}{2}$   
**Thomas Bros:** Pg. 330 Grid: L-4  
**Planning Area:** Mesquite Lake  
**OLUD:** Resource Conservation (RC)  
**Overlays:** None

**PROJECT CONTACT INFORMATION:**

**Lead agency:** County of San Bernardino  
Land Use Services Department - Advance Planning Division  
385 N. Arrowhead Avenue  
San Bernardino, CA 92415-0184

**Contact person:** Ernie Perea, Contract Planner  
**Phone No:** (951) 214-2739      **Fax No:** (909) 387-3223  
**E-mail:** ernestperea@ymail.com

**Project Sponsor:** Dalton Trucking, Inc.  
13560 Whittram Ave.  
Fontana, CA 92335

**PROJECT BACKGROUND:**

Dalton Trucking, Inc was approved by the Bureau of Land Management (BLM) to conduct a small surface mining operation to recover gypsum (gypsite) from the surface of Mesquite Dry Lake on a 160 acre site. The BLM in their Decision Record and Environmental Assessment approved a Plan of Operations (POO) for the site on August 13, 2010. A subsequent revision was submitted (August 2011) to include the use of a 2-parcel 10 acre Mill Site. The Mill Site will allow material to be stockpiled from the Mesquite Lake Gypsum Mine. The POO per the revised operation to include the Mill Site was adopted on January 30, 2012.

Dalton submitted a Reclamation Plan for the 170 acres to the County in February 2012 which is the subject of this Initial Study Checklist and as described in the Project Description which follows.

**PROJECT DESCRIPTION:**

The proposed mine site, which consists of 170 total acres, is located in Mesquite Valley, California, approximately five miles south of the town of Sandy Valley, Nevada. The gypsum occurs at the



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surface as windblown gypsum sand and as a bedded evaporate deposit at depth. The gypsum sand contains some silt and clay impurities but is pure enough to be used as an agricultural soil additive without the need for any chemical beneficiation.

The operator would confine the surface disturbance area to a maximum of 170 acres in W½ E ½ of Section 5, T. 18 N., R. 13 E., as shown on the Exhibit 1 - Regional Map. The operator would access the site by existing roads and approximately 2500 feet of new road, with a maximum width of twelve feet, from the existing county road to the site. The lake bed surface is flat and little if any preparation would be required for the "construction" of the new road segment. Other road work would consist of routine occasional maintenance during the life of the operation and would be confined to within the existing disturbed roadway. Removal of wind blown gypsum sand drifts are the primary source of the need for occasional maintenance.

Some areas of road widening not to exceed 20 feet in overall width would be necessary in selected areas on the roads that are located on Mesquite Dry Lake playa, to allow safe passage of vehicles from two directions. These selected areas would be confined to pull-off areas at strategic places and would not exceed 50 feet in length. The access route and pull-off areas would be identical to the approved Kummerfeld sites as shown on Exhibit 2. Gypsite or interburden waste rock would be applied to some portions of the existing roads to suppress dust and repair or prevent rutting.

Information obtained from previous drilling has shown that the deposit, at shallow depths, is minable to a depth of approximately five (5) feet from the surface.

The operator would scrape the gypsum from the surface using a medium-sized dozer (e.g., Caterpillar D7 or D8) or front end loader. A front end loader would be used to move the gypsite to a crusher and screening assembly. The gypsite would be crushed as necessary and screen into three sizes. The sized material would be stockpiled adjacent to the loading site as depicted on Exhibit 2. A diesel engine powered conveyor belt loader measuring approximately fifty feet in length and fifteen feet in height would be used to top load semi trailer bulk haulage trucks. These haulage trucks would transport the bulk product to market via the proposed access routes.

Operations would begin as soon as possible. Initial operations would consist of one, eight to ten hour shift per day, six days per week, with a crew of three or four persons. The anticipated production rate would be approximately 325 tons per day (80,000 to 100,000 tons per year), assuming a weight of 1.9 tons per cubic yards, this would equate to approximately 50,000 cubic yards per year. Mining would be conducted year round January through December.

Maximum mine depth would be five feet, however, additional data could increase this depth and if so would be accomplished with submission and approval of a plan modification to BLM. There is little defined soil development at the surface and the surface is considered useable product so no topsoil stockpiling would be conducted. With depth the deposit is expected to become harder and more consolidated. When the more consolidated parts of the deposit are encountered at depth, a caterpillar mounted ripper would be used to loosen the bedded gypsum. Blasting or other uses of explosives are not planned.

Equipment on site would consist of a medium-sized dozer, front end loader, scales, screener, conveyor belts, haul trucks, semi trailer bulk trucks, pickup fuel truck, diesel fuel tank, company or

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personal support vehicles, self contained portable toilet(s), water tank, small office and break room mobile trailer, and occasional pickup mounted auger drill rig. No onsite residency would be permitted and refuse and human wastes would be regularly disposed of in appropriate offsite, permitted facilities (landfill, wastewater hauler).

The 170 acre site, if mined to an average depth of three feet, would provide product for a period of approximately fifteen years of operation at anticipated levels of production (50,000 cubic yards per year) under this plan of operations. Operations exceeding five years in duration would require periodic review of this plan by BLM.

Pit walls would not exceed a 2:1 (vertical to horizontal) slope while the operation is active and would be reduced to a 1:2 (vertical to horizontal) slope during periods of temporary non-operation and final closure. The amount of interburden within the deposit has not been determined. Thin beds of interburden waste would be stockpiled within the 160 acre site for return and spreading within the pit area upon closure. Thick beds of interburden waste rock would define mine depth since its removal would be uneconomic. During periods of temporary inactivity or final closure, all equipment and refuse would be removed from the site.

As mining progresses, the pit slopes may be up to 5 feet in height with slopes ranging less steep than 5H:1V. The project boundary's perimeter slopes are planned to be reclaimed concurrently to an overall slope gradient of 5H:1V during operations to meet reclamation performance standards as stated in Article 9, Reclamation Standards §3704(d) in 14 CCR. Phased reclamation will take place on an annual basis. Prior to mining, the top 6 inches of material will be scraped from the area to be mined into small perimeter berms. The area mined would average approximately 6 acres per year if maximum production is realized. Upon completion of mining in this area, the site would be scarified and the surface material graded into place. The surface material used to create the elevated stockpile area will be re-graded into place. Revegetation would be conducted and the area flagged off to avoid further disturbance.

Final reclamation will be undertaken upon completion of mining operations. Any remaining slopes will be reduced to 5H:1V and compacted areas scarified to a depth of one foot during final contouring and prior to revegetation of mine areas (refer to Sheet 1). Any waste material followed by salvaged surface material will be spread evenly within the pit area and revegetation conducted. The reclaimed end use will be open space and wildlife habitat.

Reclamation Plan requires the implementation of revegetation activities as mining phases are completed at Mesquite Dry Lake and at the operation mill site. Baseline data was collected at both sites and success criteria was calculated. Based on the results of the baseline surveys, successful revegetation of the mill site would be achieved at 6.5% cover, density of 12 shrubs per 100m<sup>2</sup> plot, and 1 shrub species per 100m<sup>2</sup> plot. Successful revegetation of the lakebed would be achieved at 2.0% cover, a density of 1 shrub per 100m<sup>2</sup> plot, and 1 shrub species per 100m<sup>2</sup> plot. Due to the unique site conditions at the mine site that include lack of top soil, frequent winds, and annual flooding, it is recommended that optimal conditions for revegetation be created on portions of the site. Revegetation of the lakebed would be limited by the availability of salvage material for the creation of aeolian sand dunes that mimic the surrounding undisturbed lakebed. The purpose of the dunes is to increase the potential for plant establishment and survivorship. Annual assessments of the

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reclamation area will be conducted by a qualified botanist to determine the success of the revegetation effort until said criteria are achieved.

As part of this revegetation program, the following two methods will be used for revegetation:

1. Broadcast Seeding - Commercially available seeds of local native species will provide the broadcast seed mix. Revegetation recommendations as follows:

*Mill Site*

Site preparation for revegetation at the mill site area should rip compacted soil surfaces and create textured rough soil surfaces with shallow rills and furrows to create optimal conditions for revegetation. The soil mix should include shadescale, iodine bush, inkblight, and honey mesquite.

*Dry Lakebed*

Site preparation of the dry lakebed will require the creation of undulating aeolian dunes that mimic those of the surrounding undisturbed lakebed for revegetation. Due to the harsh environmental conditions, conventional scarifying of soils prior to seeding is not recommended. In order to improve the potential for revegetation it is suggested that enhanced revegetation areas be created in the form of undulating aeolian dunes utilizing salvage material as available. It is anticipated that these dunes will be more resilient to withstand the flooding and wind conditions and will therefore increase the potential for plant establishment and survivorship. Revegetation activities should be conducted with a seed mix comprised of shadescale and iodinebush seeds.

2. Transplanting – The approved POO requires the salvaging of all cacti and yuccas from the project area. The project site does not have any cacti or yucca. Prior to disturbance of any areas, any cactus and yuccas which meet the County's criteria for native plant protection, will be identified and removed by a qualified botanist or arborist and transplanted immediately adjacent onsite.

Revegetation shall be done in accordance with the Revegetation Plan and guidelines supplied by the BLM botanist upon notification by the operator that reclamation is to be initiated. Revegetation will commence upon completion of mining in phased mining areas. Note that during operations, areas where mining has been completed to the 5-foot depth will be flagged off for avoidance, scarified, covered with stockpiled surface material, and revegetated. Only locally occurring native seeds and salvaged cacti and yucca tolerant to existing soil and rainfall conditions will be used.

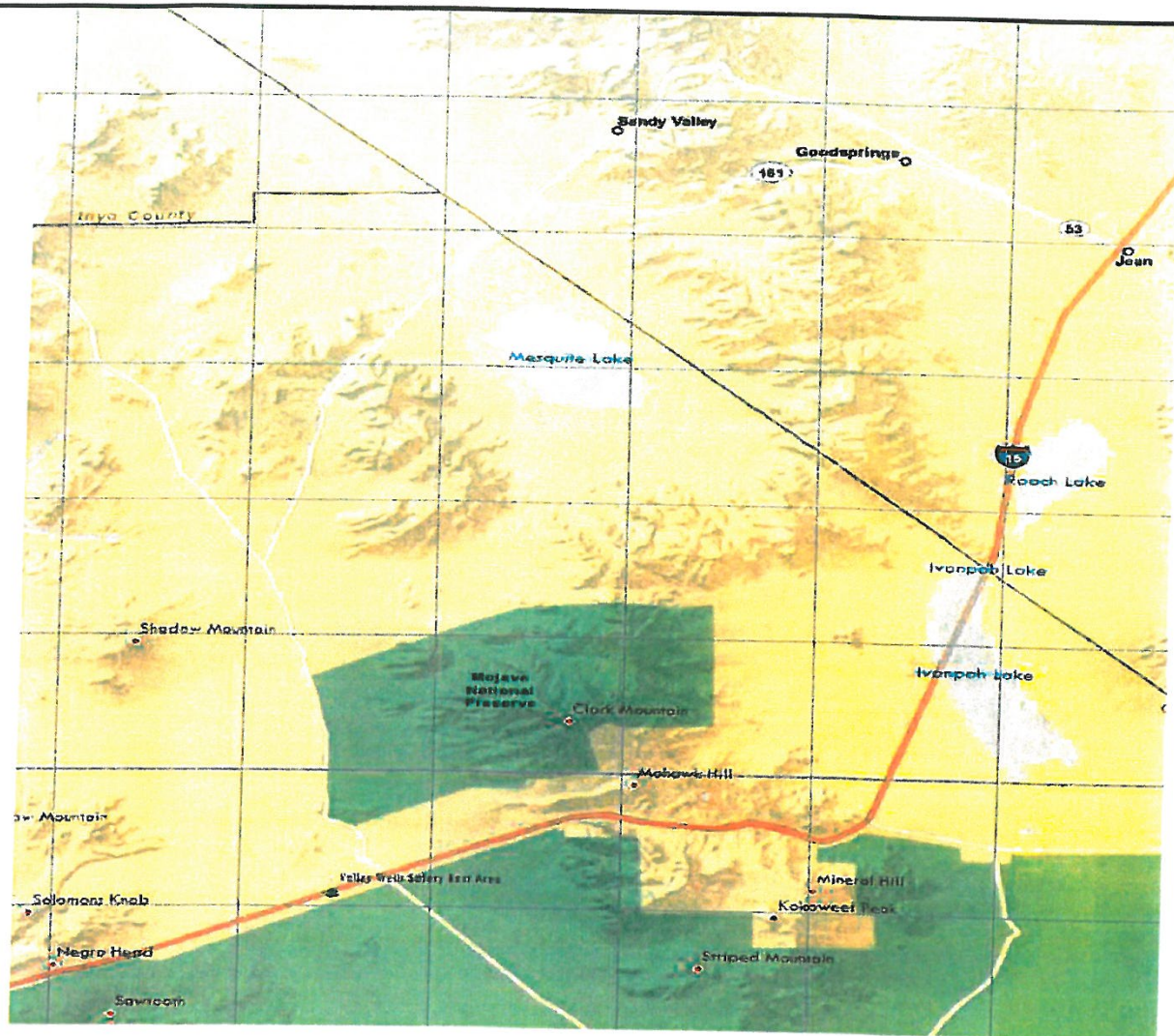
Revegetation efforts will be annually monitored after seeding and planting of the revegetated areas and will be summarized annually as part of the overall monitoring program. Monitoring will continue as required by the BLM or for a minimum of five years after completion of mining. Due to the extreme climate, soil conditions, and existing sparse vegetation, standard success criteria based on plant densities may not be representative. Baseline plant transects will be conducted and the revegetated areas will be compared to the baseline data.

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Equipment and any portable structures will be removed from the project site. No permanent structures are planned for the site. Any remaining refuse will be disposed of at an appropriate disposal site.

Upon reclamation, the site will appear as a shallow 5-foot deep vegetated depression with 5H:1V side slopes. With time, it is likely that the depression will refill due to water and wind erosion. Any stockpiles of marketable material will be removed and overburden will be spread within the pit.



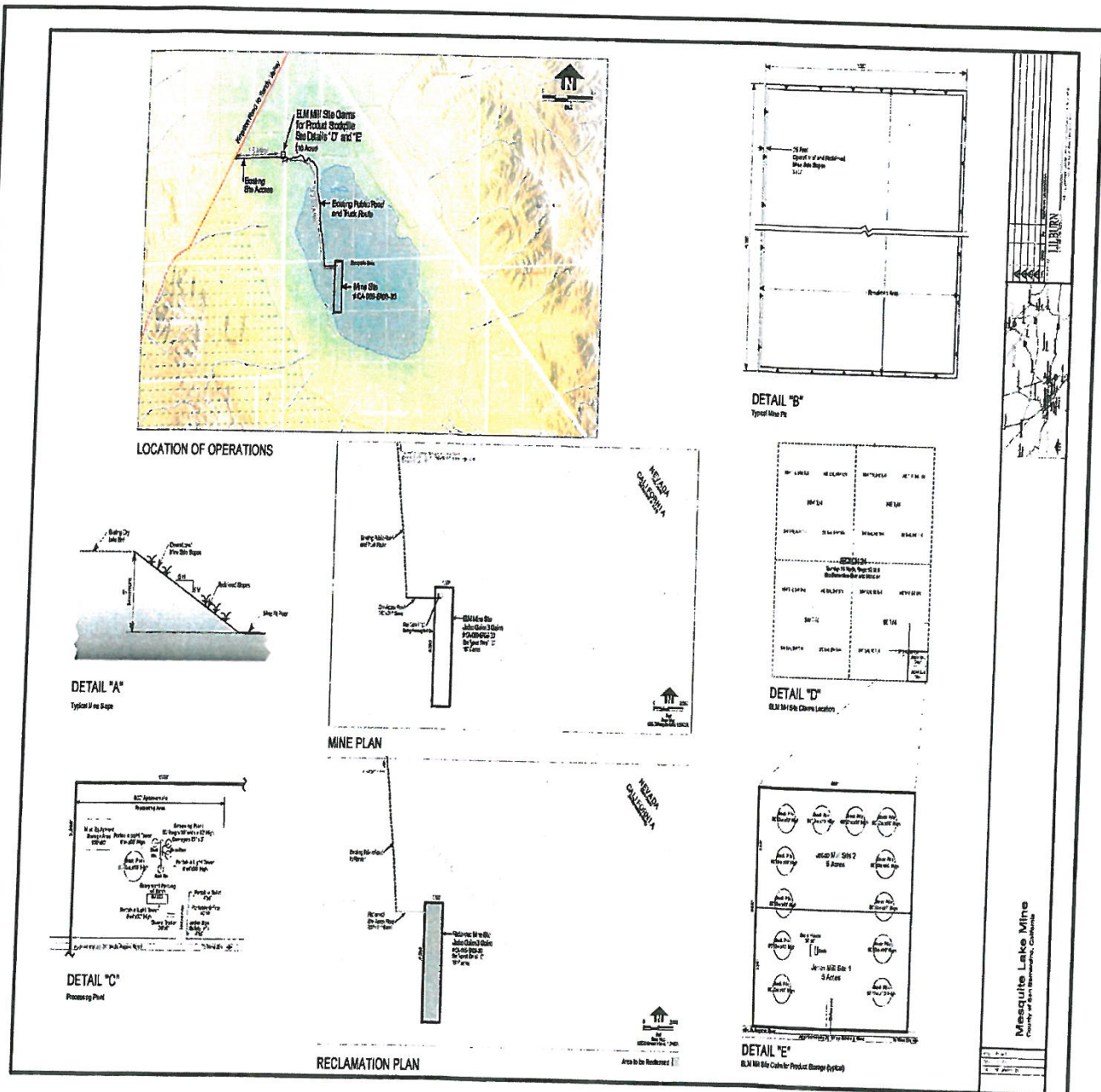


**Mesquite Lake  
Gypsum Mine**

**Regional Location Map**

**Exhibit 1**





Mesquite Lake  
Gypsum Mine

Location of Operations

Exhibit 2

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**ENVIRONMENTAL/EXISTING SITE CONDITIONS:**

AREA	EXISTING LAND USE	OFFICIAL LAND USE DISTRICT
Site	Open Space	RC
North	Open Space	RC
South	Open Space	RC
East	Open Space	RC
West	Open Space	RC

**Surrounding Land Use**

The area surrounding the site is undisturbed and remains in a natural state. Activities occurring within the immediate area include recreational off-road vehicle travel and commercial livestock grazing. The site as well as the surrounding area are within the Resource Conservation (RC) Official Land Use District and are primarily used for grazing activities. The area is within a grazing allotment and burro Herd Management Area. The Mesquite Lake Area of Critical Environmental Concern begins in the foothills surrounding the lakebed approximately 3,500 feet southwesterly at its closest point to the site. The BLM property within the area is identified within the California Desert Conservation Area Plan as being a Multiple Use Class L (Limited Use) Area. Class L areas are designed to protect sensitive, natural, scenic, ecological, and cultural resources. Public lands designated as Class L are managed to provide for generally lower-intensity, controlled multiple-use of resources, while ensuring that sensitive values are not significantly diminished.

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

- Mojave Desert Air Quality Management District (MDAQMD): Permit to Construct and Operate a Crushing/Screening Plant.
- Bureau of Land Management (BLM): Approved POO, Refer to Appendix A and B of the Reclamation Plan

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## **EVALUATION FORMAT**

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

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

1. **No Impact:** Therefore, no impacts are identified or anticipated and no mitigation measures are required.
2. **Less than Significant Impact:** Therefore, 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 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 (Listing the impacts requiring analysis within the EIR).

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### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology / Soils                    |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials      | <input type="checkbox"/> Hydrology / Water Quality          |
| <input type="checkbox"/> Land Use / Planning      | <input type="checkbox"/> Mineral Resources                  | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population / Housing     | <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation / Traffic | <input type="checkbox"/> Utilities / Service Systems        | <input type="checkbox"/> Mandatory Findings of Significance |

### DETERMINATION: (To be completed by the Lead Agency)

On the 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 will be prepared.

- ☒ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

- ☐ 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.

  
Signature (prepared by) Ernie Perera, Contract Planner

  
Signature: Terri Rahhal, Planning Manager

9-13-12  
Date

9-13-12  
Date

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**APPENDICES:**

- A. Decision of Record and Environmental Assessment – Mesquite Lake Gypsum Mine, Bureau of Land Management, CA-690-EA08-30, August 13, 2010, Revised August 2011.
- B. Decision of Record and Environmental Assessment – Mesquite Lake Gypsum Mine, Bureau of Land Management, CA-D090-2001-0029, January 1, 2012.



I. **AESTHETICS** - Would the project

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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**SUBSTANTIATION:** (Check ☐ if project is located within the view-shed of any Scenic Route listed in the General Plan):

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- a) **No Impact.** According to The San Bernardino County General Plan the project site is not within a scenic vista. The Project Site is located approximately ten miles northwest of Interstate 15 (I-15). Interstate 15 is part of the California Freeway and Expressway System and it is eligible for designation as a state highway within the State Scenic Highway System; however Caltrans has not done so. Therefore, no impact is anticipated
- b) **No Impact.** According to The San Bernardino County General Plan the project site is not within a scenic vista. Additionally, I-15 is not a designated scenic route. Therefore, no impact is anticipated
- c) **Less Than Significant Impact.** The project site is not located within a scenic vista or along a scenic highway. The proposed use is an allowable use within the Resources Conservation Land Use Zoning District. Therefore, less than significant impact is anticipated.
- d) **No Impact.** The Proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. No new light sources are proposed and therefore no impacts are anticipated.

**II. AGRICULTURE AND FORESTRY RESOURCES** - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

- 
- a) **No Impact.** The California Resources Agency defines Prime Farmland, Unique Farmland, or Farmland of Statewide Importance for San Bernardino County as farmlands which include dryland grains of wheat, barley, oats, and dryland pasture. The Project Site does not meet these characteristics.

The Mesquite Lake Gypsum Mine operations are located in northern San Bernardino County approximately five miles south of Sandy Valley, Nevada, northeast of the Clark Mountains within the dry lakebed of Mesquite Lake, within an area that contains soils that are unsuitable for agriculture. The Proposed Project would not Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Therefore, no impact is anticipated.

- b) **No Impact.** The Project Site is not designated as agricultural land use or Williamson Act land. The Proposed Project would not conflict with current zoning. No impact is anticipated.
- c) **No Impact.** The Proposed Project does not conflict with, nor could it result in the rezoning of forest or timber land. The proposed use is consistent with the zoning district. Therefore, no impact is anticipated.
- d) **No Impact.** No portion of the project site occurs within forest land, and approval of the proposed project would not result in the loss of forest land or convert forest land to a non-forest use. No impact is anticipated.
- e) **No Impact.** The Proposed Project would not 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. Therefore, no impacts are anticipated.

**III. AIR QUALITY** - Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Would the project:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Expose sensitive receptors to substantial pollutant concentrations?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**SUBSTANTIATION:** *(Discuss conformity with the South Coast Air Quality Management Plan, if applicable):*

The Project Site is located in the Mojave Desert Air Basin (MDAB). The Mojave Desert Air Quality Management District (MDAQMD) has jurisdiction over air quality issues and regulations within the MDAB. To assist local agencies to determine if a project's emissions could pose a significant threat to air quality, the MDAQMD has published its Air Quality Rule Book. The air and dust emissions from the reclamation was evaluated and compared to the MDAQMD standards and evaluated against the most recent thresholds applicable.

- a) **No Impact.** Reclamation of the site would involve the disturbance of approximately 170 acres over 15 years. The Proposed Project is an allowable use within the RC Land Use District. The project site is within the MDAB and under the jurisdiction of the MDAQMD. The MDAQMD is responsible for updating the Air Quality Management Plan (AQMP). The AQMP was developed for the primary purpose of controlling emissions to maintain all federal and state ambient air standards for the district. The project would not significantly increase local air emissions and therefore would not conflict with or obstruct implementation of the plan. Therefore, no impact is anticipated.

b) **Less Than Significant Impact:**

Reclamation will be undertaken upon completion of mining operations. Any remaining slopes will be reduced to 5H:1V and compacted areas scarified to a depth of one foot during final contouring and prior to revegetation of mine areas. Any waste material followed by salvaged surface material will be spread evenly within the pit area and revegetation conducted.

Revegetation efforts will occur in the disturbed areas including the graded pit floor, shallow 5-foot side slopes, and the site's 1,400-foot access road. The goal of the revegetation program is to reduce potential erosion and visual impacts, and to reestablish native habitat compatible with that currently found surrounding the site. Native species, which currently occur on or adjacent to the site, will be utilized to maintain the genetic balance of the area and to avoid the introduction of foreign species. Approximately 10-percent of the disturbed area will be reseeded as to represent surrounding adjacent vegetation with the gypsum dry lake bed.

The disturbed area to be revegetated as mining is completed. These include the 5H:1V side slope, mine floors, mill site, and 1,400-foot access road. Compacted areas will be scarified to a depth of one foot, covered with stockpiled surface material, and revegetated.

The Proposed Project was screened for emission generation using MDAQMD "Rule Book" guidelines, and Off-Road Mobile Source Emissions Factors (2012). The criteria pollutants screened for included: reactive organic gases (ROG), nitrous oxides (NO<sub>x</sub>), carbon monoxide (CO), and particulates (PM<sub>10</sub> and PM<sub>2.5</sub>). Two of these, ROG and NO<sub>x</sub>, are ozone precursors.

Typically daily operations were screened for the following: a water truck, loaders, scraper/grader, a miscellaneous material handling equipment, and a rubber tired dozer. Refer to Table 2 for quarry equipment emissions and plant emissions.

**Table 1**  
**Reclamation Plan Emissions**  
**(Pounds per Day)**

<b>Source<sup>1</sup></b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Water Truck	0.64	5.6	2.0	0.24	0.23
Loader	1.0	8.0	3.9	0.48	0.47
Scraper/Grader	2.4	20.8	8.8	0.9	0.8
Other Material Handling Equipment	1.3	11.3	4.1	0.48	0.4
Rubber Tired Dozer	2.5	21.6	9.6	0.88	0.8
<b>Totals (lbs/day)</b>	<b>7.8</b>	<b>67.3</b>	<b>28.4</b>	<b>3.0</b>	<b>2.7</b>
MDAQMD Threshold (lbs/day)	137	137	548	82	82
<b>Significant</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

<sup>1</sup> Off-Road Mobile Source Emissions Factors (2012)



---

As shown in Table 1 , Project emissions would not exceed MDAQMD thresholds.

*Compliance with MDAQMD Regulation II and Rules 402 and 403*

Although the Proposed Project does not exceed MDAQMD thresholds, the Applicant is required to comply with all applicable MDAQMD rules and regulations as the MDAB is in non-attainment status for ozone and suspended particulates (PM<sub>10</sub> and PM<sub>2.5</sub> (state)). The Project shall comply with Regulation II which requires the Applicant to obtain and implement condition for a Permit to Construct and a Permit to Operate the proposed crush/screening plant and power generator. To limit dust production, the Applicant must comply with Rules 402 nuisance and 403 fugitive dust, which require the implementation of Best Available Control Measures (BACM) for each fugitive dust source. This would include, but not be limited to the following BACMs:

1. The Project proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.
  - I. The Project proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading and mining activity on the site. Portions of the site that are actively being mined shall be watered to ensure that a crust is formed on the ground surface, and shall be watered at the end of each workday.
  - II. The Project proponent shall ensure that all disturbed areas are treated to prevent erosion.
  - III. The Project proponent shall ensure that all mining and processing activities are suspended when winds exceed 25 miles per hour.

Exhaust emissions from vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase NO<sub>x</sub> and PM<sub>10</sub> levels in the area. Although the Proposed Project would not exceed MDAQMD thresholds during operations, the Applicant would be required to implement the following conditions as required by MDAQMD:

2. All equipment used for mining and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.
3. The operator shall maintain and effectively utilize and schedule on-site equipment and on-site and off-site haul trucks in order to minimize exhaust emissions from truck idling.
4. The operator shall comply with all existing and future CARB and MDAQMD regulations related to diesel-fueled trucks, which may include among others:

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(1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

5. The aggregate crusher must obtain permits to construct and annually renew permits to operate from the MDAQMD and be in compliance with such permits.

MDAQMD rules for diesel emissions from equipment and trucks are embedded in the compliance for all diesel fueled engines, trucks, and equipment with the statewide CARB Diesel Reduction Plan. These measures will be implemented by CARB in phases with new rules imposed on existing and new diesel-fueled engines.

- c) **Less Than Significant Impact.** The Proposed Project would not individually exceed any MDAQMD thresholds for criteria pollutants. The County of San Bernardino General Plan EIR concluded that continued development would contribute to pollutant levels in the County, many areas of which already exceed State and Federal air quality criteria. Findings on potentially significant impacts of the General Plan indicated that policies contained in the General Plan and mitigation measures in the EIR are expected to reduce emissions associated with future development. However, even after application of these policies and mitigation measures, the General Plan when viewed as a whole project, is expected to generate emission levels that would exceed the MDAQMD thresholds for criteria pollutants, resulting in a significant unavoidable adverse air quality impact. A Statement of Overriding Considerations for the General Plan EIR was adopted by the County Council. Less than significant impact is anticipated.
- d) **No Impact.** The Proposed Project is located in a remote area of northern San Bernardino County. No sensitive receptors are located within the project vicinity. Therefore, no impacts are anticipated.
- e) **No Impact.** The Proposed Project is the reclamation of a gypsum mine. 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.

#### 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 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?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

**SUBSTANTIATION:** (Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database ☒):  
Category «CAT»

The following analysis is based in part on the *Decision of Record and Environmental Assessment – Mesquite Lake Gypsum Mine*, Bureau of Land Management, CA-690-EA08-30, August 13, 2010, Revised August 2011 and the *Decision of Record and Environmental*

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Assessment – Mesquite Lake Gypsum Mine, Bureau of Land Management, CA-D090-2001-0029, January 1, 2012. (See Appendix A and B).

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a) **Less than Significant with Mitigation Incorporated:**

According to the County General Plan, Biotic Resources Overlay Map, the site is within Desert Tortoise Habitat Overlay. The desert tortoise, (*Gopherus agassizii*), is listed as threatened by both the U.S. Fish and Wildlife Service and the State of California. The desert tortoise occurs in the area surrounding the proposed project site. Per the BLM's Decision Records (Appendix A and B) and as the Project Site occurs within the Desert Tortoise Habitat Overlay, the following mitigation measures are recommended to minimize potential impacts:

- BIO-1. All trash and food items should be promptly enclosed in raven proof containers (i.e. metal or solid plastic trash cans) and disposed of in a licensed disposal facility on a regular basis.
- BIO-2. All project related vehicular traffic should be confined to existing roads and only those new roads authorized by this action.
- BIO-3. Any desert tortoises observed during any phase of the project should be left to move out of the way on its own. Handling of desert tortoises is not authorized.
- BIO-4. To assure observation and avoidance of desert tortoises in roadways, the proponent should travel no more than 20 mph on all roads not maintained by the county during tortoise active season (mid-March to mid-November).
- BIO-5. Workers should inspect for desert tortoises under vehicles and equipment prior to moving them. If a desert tortoise is present, the worker should carefully move the vehicle or equipment only when necessary or should wait for the desert tortoise to move out from under the vehicle or equipment.
- BIO-6. The proponent should notify the BLM Needles Field Office upon locating a dead or injured desert tortoise at the project site or along any access road. Any desert tortoise injured by project related activities should be transported to a veterinarian for treatment at the expense of the proponent.
- BIO-7. BLM biologists should have the authority to halt any action that could cause harm to a desert tortoise. Should BLM personnel identify potential harm to a desert tortoise during any phase of the project, all

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project work identified as a source of potential harm to the tortoise would be required to cease until a suitable course of action has been identified, including, as needed, consultation pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended.

- BIO-8.** The proponent should notify the BLM Needles Field Office prior to any road improvements (widening, grating, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. The proponent should specify exactly where the improvements, construction, and/or maintenance would take place so that biological and cultural surveys may be undertaken prior to the proponent making any changes in the access roads.

No other species, or their habitat, listed by the state or federal government as candidate, threatened or endangered would be affected by the proposed project.

**Less than Significant with Mitigation Incorporated:** Per the BLM's Decision Records (Appendix A and B) eighteen salt cedar (*Tamarix ramisissima*) trees are in and around the project site. GPS coordinates and height of salt cedar trees within seventy-five meters of the project site were recorded. Trees averaged between 10-15 feet tall. Since their introduction from Eurasia and Africa, tamarisk (also known as salt cedar) and other non-native invasive plant species have become a serious threat to critical water resources. Tamarisk species were introduced as ornamentals but are weedy trees with deep roots and one of the highest transpiration rates of any known phreatophyte (plants dependent upon ground water) (Hughes, 1993). As a result these species require a tremendous amount of water to survive. They are very prolific, with one large plant capable of producing over 500,000 tiny wind-dispersible seeds. Tamarisk will successfully out-compete native vegetation by monopolizing water resources, and by changing soil chemistry by the excretion of salt through the leaves.

Heavy equipment including dump trucks and excavators have the potential to transport invasive seed and plant material to the mesquite lake area. There is a need for all heavy equipment to be free of all invasive seed and plant material prior to entering the Mesquite Lake area.

To prevent the transport of invasive, non-native plant species to and from site the following mitigation measure is required:

- BIO-9:** All eighteen salt cedar individuals in the project vicinity should be removed prior to commencement of mining activities. GPS locations and approximate heights of these individuals have been provided in an appendix by the Needles field office invasive species coordinator. Removal of these trees will be done during the winter of 2008-2009 between October and February when the salt cedar is not in seed. Removal will be done by mechanical means. This will involve a



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backhoe or similar device used to pull the entire tree including the root system from the ground. Trees will be stacked in a location away from any areas with standing water.

- BIO-10:** Before entering the site, all vehicles should be inspected for any invasive plant materials and seeds. Any vehicles containing mud or vegetative materials will be cleaned. This should be done offsite using a wash station, compressed air station or a commercial car wash that should wash the under carriage of the vehicle. Possible locations for washing of the vehicles include Primm, Jean or Las Vegas, NV. The method used to remove invasive materials from the vehicle should be reviewed by the BLM invasive weed coordinator prior to approval.
- BIO-11:** Before entering the site all clothing and footwear should be checked and any plant material, especially stickers, and burs that may contain invasive non-native plant seeds should be removed and disposed of in a trash receptacle.
- BIO-12:** There should be a briefing on the importance of preventing the spread of noxious weeds in areas that are not currently infested, and controlling the proliferation of weeds already present. Impacts of noxious weeds on native vegetation, wildlife, and fire activity should be discussed including an explanation of how invasive grasses provide a fine fuel understory which can spread fire from shrub to shrub and how this has historically been absent in the native desert ecosystem.
- BIO-13:** Reclamation should include the following:
- a. All cacti and yucca should be saved for transplanting purposes. These plants should to be protected, stored in 5-gallon containers, watered and placed in a shaded environment during the period of storage. The aforementioned plants should be replanted according to the guidelines supplied by the BLM botanist.
  - b. The pit and new cross country access roads should be ripped and native seed should be spread over all disturbed areas. Planting of native seed should be done in accordance with guidelines to be supplied by the BLM botanist upon notification by the operator to BLM when reclamation is to be initiated.
  - c. The operator should notify the Authorized Officer when reclamation is completed to allow for inspection of reclamation activities.

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**No Impact:** The proposed project is not located within a federally protected wetland as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.). Therefore, no impacts are anticipated.

**Less than Significant with Mitigation Incorporated:** Wildlife typical of the proposed site could include small mammals, such as pocket mice (*Perognathus* spp.), kangaroo rats (*Dipodomys* spp.), and jackrabbits (*Leupus californicus*) as well as larger animals, such as coyotes (*Canis latrans*) and common ravens (*Corvus corax*). The proposed action could result in the crushing and disturbance of some wildlife burrows and habitat; however, the project site itself is not essential habitat for any particular wildlife species.

In addition, the area is within a grazing allotment and burro Herd Management Area (HMA). Vehicles could collide with livestock or burros. The access route aligns with an allotment boundary fence, where a cattle guard exists to prevent cattle and burros from exiting the allotment/HMA.

To ensure potential impacts are reduced to a less than significant level, the following mitigation measures shall be implemented:

**BIO-14: All pits/trenches and drill holes should be constructed in such a way as to avoid trapping or injury to livestock or burros.**

**BIO-15: Vehicle operators should be made aware by the proponent of the presence of livestock and burros and take steps to avoid vehicle collision.**

- e) **Less Than Significant Impact:** The San Bernardino County Native Plant Protection policy (1989) provides protection for all trees greater than six inches in diameter at breast height (dbh). Such species include: smoke trees, mesquite, creosote rings, and all plants in the agave family, including Joshua trees. Joshua trees (*Yucca brevifolia*) and Mojave yuccas (*Y. schidigera*) occur on the site. With implementation of the recommended mitigation measures (BIO-12 and BIO-13), the project is not anticipated to conflict with any local policies or ordinances protecting native plants or other biological resources. Therefore, impacts are anticipated to be less than significant.
- f) **Less Than Significant Impact.** The Proposed Project is subject to and in conformance with the *California Desert Conservation Area Plan* (CDCA) 1980 *et seq.* The plan's Geology, Energy and Mineral Resources Element provides for continued recognition of access to and the availability of as much public land as possible for mineral exploration and development. Locatable mineral actions located within Multiple-Use Class L (limited) are to be subject to Title 43 CFR 3809 Regulations and applicable State and local law. Implementation of Mitigation Measures BIO-1 through BIO-15 would ensure potential impacts of the Proposed Project would be reduced to a less than significant level. Therefore, proposed reclamation activities would be in compliance with the

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*California Desert Conservation Area Plan.*

**V. CULTURAL RESOURCES** - Would the project

- |   |                          |                                     |                                     |                          |
|---|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?    | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?       | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries?                          | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**SUBSTANTIATION:** (Check if the project is located in the Cultural ☐ or Paleontologic ☐ Resources overlays or cite results of cultural resource review):

- a-d) **Less Than Significant with Mitigation Incorporated.** An archaeological records and literature search and a pedestrian survey of the project area was conducted on the subject property in January 2004, June 2004, April 2005 and September 2008 by the Needles Field Office Archaeologist. The archaeological survey revealed no prehistoric or historic resource values associated with the proposed mining location or the access routes. A review of the Needles Field Office sacred lands inventory revealed no areas of traditional or sacred Native American values within the project area.

Although the potential for unearthing buried historic and/or paleontological resources is considered low, implementation of the following mitigation measure would ensure potential impacts are reduced to a less than significant level:

**CR-1:** The proponent shall notify the BLM Needles Field Office prior to any road improvements (widening, grading, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. In the event that cultural resources, including paleontological resources, are encountered; mining activities in the immediate area of the find will be halted and the County Museum and BLM notified. Inspection of uncovered resources will be made and if necessary a recovery and curation plan implemented.

In the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code Section 7050.5 dictates that no further disturbances shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and Public Resources Code Section 5097.98. With adherence to mandatory State Health and Safety Code Section 7050.5 which stipulates the

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process to be followed when human remains are encountered, no mitigation measures are necessary.



**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:
- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ☐ ☐ ☒ ☐
  - ii. Strong seismic ground shaking? ☐ ☐ ☒ ☐
  - iii. Seismic-related ground failure, including liquefaction? ☐ ☐ ☒ ☐
  - iv. Landslides? ☐ ☐ ☒ ☐
- b) Result in substantial soil erosion or the loss of topsoil? ☐ ☐ ☒ ☐
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse? ☐ ☐ ☒ ☐
- d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001) creating substantial risks to life or property? ☐ ☐ ☐ ☒
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ☐ ☐ ☐ ☒

**SUBSTANTIATION:** (Check ☐ if project is located in the Geologic Hazards Overlay District):

- a) **Less Than Significant Impact.** The Project Site lies within the eastern part of San Bernardino County in a part of California considered not to be seismically active. Although there are numerous relatively small faults in the area, most do not exhibit recent activity. According to Blake (2004), the nearest major fault is the Garlock Fault, which is located approximately 50 miles to the west of the Project Site. The Garlock fault is a major fault

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that has exhibited earthquake activity during recent Holocene time (Jennings, 1994). The State Line Fault, located a few miles east of the site on the California-Nevada border has been classified as an older fault that has exhibited early Quaternary activity (movement within the last 1.6 million years) (Jennings, 1994). The Ivanpah Fault is located about ten miles southeast the site. This fault trends in a northwest-southeast orientation and is approximately 33 miles long. Most of the Ivanpah Fault is buried beneath Quaternary alluvium and no surface expression of this fault is present in the vicinity of the project site. The Ivanpah Fault is considered an inactive fault not having earthquake activity within the last 1.6 million years (Jennings, 1994). The site is not located within an area designated by the Alquist-Priolo Special Studies Zone Act of 1972.

The BLM approved the Mesquite Lake Gypsum Mine POO to allow mining of the site. The mining operation is a simple scraping of the shallow gypsum deposited at the surface of the dry lakebed. The mine design includes a shallow 5-foot depth with a maximum operational slope of 5H: 1V. Since no substantial slopes or human occupied structures are proposed on-site, no significant impacts are expected to result.

- b) **Less Than Significant Impact.** The project site is located within Mesquite Lake, a dry lakebed. The area is the lowest spot within the surrounding watershed, therefore no downstream impacts will occur as a result of the mining activity. No significantly developed watercourses exist within the vicinity. The area acts as one large settling basin. The lakebed is dry for most of the year, however, after periods of heavy rainfall, standing water is evident. 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, lakebed hydrology (flat gradient of the lakebed), and sandy nature of the soil, drainage control does not present a significant impact. Run-off resulting from direct precipitation and uncontrolled run-off from surrounding lakebed areas have the potential to cause minor erosion and deposition, in both the disturbed and downgradient areas. Upon reclamation, all disturbed area drainage would be retained within the basins and low-lying areas; therefore, impacts are anticipated to be less than significant.

- c) **Less Than Significant Impact:** The project boundary's perimeter slopes are planned to be reclaimed concurrently to an overall slope gradient of 5H:1V during operations to meet reclamation performance standards as stated in Article 9, Reclamation Standards §3704(d) in 14 CCR. Phased reclamation will take place on an annual basis. Upon completion of

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mining in an area, the site would be scarified and the surface material graded into place. The surface material used to create the elevated stockpile area will be re-graded into place. Revegetation would be conducted and the area flagged off to avoid further disturbance.

Final reclamation will be undertaken upon completion of mining operations. Any remaining slopes will be reduced to 5H:1V and compacted areas scarified to a depth of one foot during final contouring and prior to revegetation of mine areas. Any waste material followed by salvaged surface material will be spread evenly within the pit area and revegetation conducted. The reclaimed end use will be open space and wildlife habitat. Proposed reclamation would not result in any unstable conditions at the Project Site; a less than significant impact would result.

- d) **No Impact.** The Project Site is not located in an area which has been identified by the County Building and Safety Geologist as having the potential for expansive soils. No impact is anticipated.
- e) **No Impact.** Septic tanks and/or alternative water supply systems are not proposed as part of the proposed project. Therefore, no impacts are anticipated.

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**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 an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ☐ ☐ ☒ ☐

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**SUBSTANTIATION:**

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**Greenhouse Gas Emissions Measures**

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."

The San Bernardino County GHG Reduction Plan ("GHG Plan") presents a comprehensive set of actions to reduce the County's internal and external GHG emissions to 15% below current levels by 2020, consistent with the AB 32 Scoping Plan.

a) **Less Than Significant Impact.**

Greenhouse gas emissions from the project were evaluated to determine if emissions could be reduced below the 3,000 MTCO<sub>2</sub>E threshold established by the County of San Bernardino Greenhouse Gas Emissions Reduction Plan without the need for incorporation of mitigation measures.

As shown in Table 3, The Reclamation GHG emissions are not anticipated to exceed the County's GHG emissions threshold; therefore a less than significant impact is anticipated.

**Table 3  
Greenhouse Gases**

Task	CO <sub>2</sub> <sup>1</sup>	CH <sub>4</sub> <sup>1</sup>	N <sub>2</sub> O <sup>2</sup>
Reclamation Equipment	6,572	0.70	0.05
<b>Total Per Year (lbs)<sup>3</sup></b>	<b>138,012</b>	<b>14.3</b>	<b>0.11</b>
MTCO <sub>2</sub> e	62.6	0.006	0.00005
<b>Total MTCO<sub>2</sub>e</b>	<b>62.6</b>		
Threshold	3,000 MTCO <sub>2</sub> e		
<b>Significant</b>	<b>NO</b>		

<sup>1</sup> Off-Road Mobile Source Emissions Factors (2010);

Emission Factors for On-Road Heavy-Duty Diesel Trucks (Emfac 2010)

<sup>2</sup> California Climate Action Registry General Reporting Protocol, 2009I;

Table A9-8-C SCAQMD Handbook; Climate Leaders EPA, Section 3, Table 2.

<sup>3</sup> 21-day Reclamation Process

The GHG reducing performance standards were developed by the County to improve the energy efficiency, water conservation, vehicle trip reduction potential, and other GHG reducing impacts from all new development approved within the unincorporated portions of San Bernardino County. As such, the following Performance Standards establish the minimum level of compliance that development must meet to assist in meeting the 2020 GHG reduction target identified in the County GHG Emissions Reduction Plan. These Performance Standards apply to all Projects, including those that emit less than 3,000 MTCO<sub>2</sub>e per year, and will be included as Conditions of Approval for development projects.

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

*1. The "developer" shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance. The developer/construction contractors shall do the following:*

*a) Select construction equipment based on low GHG emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or CNG equipment.*

*b) All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.*

*c) All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes.*



b) **Less Than Significant Impact.**

The state and local regulatory programs for GHG emissions and climate change are described in the response to Question VIIa above. The performance standards described above will ensure that there would be no conflict with any applicable plan, policy, or regulation; therefore, impacts would be less than significant, and no mitigation would be required.

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**VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:**

- |  |                          |                                     |                                     |                                     |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 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?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?                                   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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**SUBSTANTIATION:**

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- a, b) **Less Than Significant Impact with Mitigation Incorporated.** Reclamation would include, but not be limited to: 1) Saving of topsoil for final application after reshaping of disturbed areas have been completed; 2) Measures to control erosion, landslides, and water runoff; 3) Measures to isolate, remove, or control toxic materials; 4) Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and 5) Rehabilitation of fisheries and wildlife habitat.

The vehicles and generators used during reclamation would contain fuel, oil, antifreeze, and other fluids, which fall under hazardous and special materials. To ensure potential impacts are reduced to a less than significant level the following mitigation measures shall be implemented:

- HAZ-1:** The proponent and associated project personnel should comply with all Federal, State and County regulations and codes, including but not limited to Occupational Safety and Health Administration and Environmental Protection Agency regulations. Requirements include provisions of the Resources Conservation and Recovery Act, Comprehensive Response, Compensation, and Liability Act, and Clean Water Act.
- HAZ-2:** A Health and Safety Plan (HASP) for the project should be developed and implemented prior to beginning site operations in accordance with 29 Code of Federal Regulations (CFR) 1910.120 and 1926.65. The plan should also be maintained on the project site and made available to, and reviewed by, all employees at all times that work is in progress and reviewed with those working on site.
- HAZ-3:** The HASP should include a separate site-specific ERP section of the HASP for the project in accordance with 29 CFR 910.120(b)(4)(ii)(H) and 1926.65(b)(4)(ii)(H). The ERP should be developed and implemented prior to beginning site operations.
- HAZ-4:** A copy of the HASP (including the ERP) should be submitted to the BLM Needles Field Office prior to beginning site operations.
- HAZ-5:** A written plan describing how the OSHA Hazard Communication Standard will be met should be prepared and implemented in accordance with 29 CFR 1910.1200. The plan should include a list of hazardous chemicals on site, hazardous chemical labeling and other forms of warning, material safety data sheets (MSDS) administration, and employee information and training.
- HAZ-6:** Prior to mobilization on the site, all equipment should be inspected to be

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sure it is operating correctly and free of leaks. Equipment should be inspected daily to ensure that there are no discharges. Equipment maintenance activities should not be conducted on the site. Appropriate spill containment material should be kept on site. All fuels and other materials used should be contained within the equipment or stored in appropriate containers. All materials should be removed from the site upon completion of construction activities.

- HAZ-7:** The operators should develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities. A copy of this plan should be provided to the Authorized Officer prior to initiating the proposed activity.
- HAZ-8:** A copy of the list of project related OSHA hazardous chemicals should be provided to the Needles Field Office.
- HAZ-9:** Material Safety Data Sheets for fuel, oil, antifreeze, and all other chemicals characterized as hazardous by the OSHA should be made available at the location of use and should be properly/legally stored. Sealed containments should be installed under all generators, and tanks, and state and county permits required for tanks and other storage should be secured prior to use on site.
- HAZ-10:** Fuels, oils, and all hazardous materials should be transported and stored on site in U.S. Department of Transportation and OSHA approved containers, within a containment area with an impermeable lining. A spill response/removal kit for fuels/oils, consisting at a minimum of equipment and supplies to address the quantities of materials on site, should be on site for containment of spills and legal removal of contaminated soils.
- HAZ-11:** No regulated hazardous, radioactive, "special" or "universal" wastes should be brought onto the site without the prior approval of the Authorized Officer.
- HAZ-12:** If any serious injury or death occurs in connection with this project, the proponent should notify the BLM immediately and follow the initial report within 24 hours after the incident/accident with written report detailing the incident and resulting actions. The BLM should supply the necessary forms for reporting the incident and copies of ambulance and

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emergency room reports must also be submitted to the BLM.

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**HAZ-13:** Contamination of soils with hydraulic fluids, oils or other lubricants would not be permitted. A tarpaulin, plastic, or other protective device should be required to prevent fluid/soil contact. Contaminated soils should be handled and disposed of in accordance with Environmental Protection Agency regulations for hazardous wastes. All costs associated with this cleanup should be borne by the proponent.

- c) **No Impact.** The Proposed 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 reclamation of the site. Potential impacts from the risk of exposure both on-site and off-site are anticipated to be less than significant with implementation of Mitigation Measures HAZ-1 through HAZ-13. During reclamation, 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. No impacts are anticipated.
- d) **Less than significant 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. Potential impacts from the risk of exposure both on-site and off-site are anticipated to be less than significant with implementation of Mitigation Measures HAZ-1 through HAZ-13.
- e) **No Impact.** As shown on San Bernardino County General Plan, Hazards Overlay Regional Map CJDJB (specific area CJ20), the Project Site does not occur within an airport influence area. Therefore, the Proposed Project would not result in safety hazard impacts from aircraft-related uses. No impact is anticipated.
- f) **No Impact.** The Project Site is not within the vicinity or approach/departure flight path of a private airstrip. Therefore, no impact is anticipated.
- g) **No Impact.** Activities associated with the Proposed 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 reclamation activities would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. No impact is anticipated.
- h) **No Impact.** As shown on San Bernardino County General Plan, Hazards Overlay Regional Map CJDJB (specific area CJ20), the Project Site does not occur within a Fire Safety Overlay District. Therefore, the Proposed Project would not result in any safety hazard



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impacts from wild fires. No impact is anticipated

**IX. HYDROLOGY AND WATER QUALITY - Would the project:**

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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 which would result in flooding on- or off-site?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) Otherwise substantially degrade water quality?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) Place within a 100-year flood hazard area structure which would impede or redirect flood flows?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

j) Inundation by seiche, tsunami, or mudflow?

☐
☐
☐
☒


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**SUBSTANTIATION:**

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- a, f) **Less Than Significant Impact.** Due to the low precipitation, lakebed hydrology (flat gradient of the lakebed), and sandy nature of the soil, drainage control does not present a significant impact. Run-off resulting from direct precipitation and uncontrolled run-off from surrounding lakebed areas have the potential to cause minor erosion and deposition, in both the reclaimed and downgradient areas. Area drainage would be retained within the basins and low-lying areas created during reclamation.

The objective of all drainage control measures will be to limit flow volumes and velocities to minimize or prevent erosion and to promote settling of suspended solids before the run-off leaves the Project Site. Drainage control measures will be implemented as needed based on seasonal precipitation and the impact, if any, to the operating areas. The area is the lowest spot within the surrounding watershed, therefore no downstream impacts will occur. Therefore, impacts are anticipated to be less than significant.

- b) **Less Than Significant Impact.** The Project Site is not within a groundwater storage or recharge area and, therefore, would not interfere with groundwater recharge. The Proposed Project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

An agreement with a local Rancher (Two Hawks Ranch) is in place to purchase water from their agricultural well. A 10,000 gallon water tank at the ranch site will be used. It is anticipated approximately 16,000 gallons of water per day will be required. Domestic water for drinking will be imported for employees. Domestic wastewater and septage will be collected and removed by a licensed operator. Less than significant impact is anticipated.

- c-e) **Less Than Significant Impact.** The Applicant would limit surface disturbance to those areas required for reclamation. Surface disturbance areas that would be subject to potential erosion and sediment loss would be limited through long-range planning, effective-design practices, phased reclamation of disturbed areas. The County will approve an on-site drainage control system. Therefore, less than significant impact is anticipated.

- g, h) **No Impact.** The Proposed Project does not occur within a 100-year flood plain, nor does it involve the construction of housing or would place housing within a flood plain. No impacts are anticipated.

- i) **Less Than Significant Impact.** According to County of San Bernardino Hazards Overlay Map CJDJB, the Project Site and surrounding area is located outside of any designated dam inundation area. The Proposed Project would not expose people or structures to a

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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, impacts are anticipated to be less than significant.

- j) **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.

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**X. LAND USE AND PLANNING** - Would the project:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Physically divide an established community?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

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***SUBSTANTIATION:***

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- a) **No Impact.** The Project Site is currently vacant and surrounded by open space lands. The Proposed Project is consistent with the County General Plan and would not physically divide an established community. No impacts would result.
- b) **No Impact.** The Proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project as the project is consistent with all applicable land use policies and regulations of the County of San Bernardino General Plan. No impacts are anticipated.
- c) **Less Than Significant Impact.** Approval of the Reclamation Plan per reclamation activities would not conflict with a habitat conservation plan or natural community conservation plan. Less than significant impact is anticipated.

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**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? ☐ ☐ ☐ ☒
- 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? ☐ ☐ ☐ ☒

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**SUBSTANTIATION:** (Check ☐ if project is located within the Mineral Resource Zone Overlay):  
«MRZ»

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- a-b) **No Impact.** The State's Guidelines for Classification and Designation of Mineral Lands help implement SMARA by providing the State Geologist with direction in carrying out mineral resource classification of lands in California that are threatened by uses that will be incompatible with, or will preclude quarrying. In addition, these guidelines describe how the State Mining and Geology Board (SMGB) may elect to designate mineral-bearing areas of statewide or regional significance.

Classification is the process of identifying lands containing significant mineral deposits. Designation is the formal recognition by the SMGB, after consultation with lead agencies and other interested parties, of areas containing mineral deposits of regional or statewide significance. The objective of classification and designation processes is to ensure, through appropriate lead agency policies and procedures, that mineral deposits of statewide or of regional significance are available when needed. Classification is completed by the State Geologist in accordance with the SMGB's priority list, into Mineral Resource Zones (MRZ). Classification is based on geologic and economic factors without regard to existing land use and land ownership. Within the classifications, "MRZ-2" is defined as areas that contain identified mineral resources.

The California Department of Conservation Division of Mines and Geology has not mapped the site. However, mining claims have been issued for the gypsum deposits. The Proposed Project would supply gypsum to the region. Therefore, the Proposed Project would not result in the loss of availability, however, would provide a mineral resource that would be of value to the region and the residents of the State. Therefore, no impacts are anticipated.



**XII. NOISE** - Would the project result in:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 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?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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 expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**SUBSTANTIATION:** (Check if the project is located in the Noise Hazard Overlay District ☐ or is subject to severe noise levels according to the General Plan Noise Element ☐):

- a,c,d **No Impact.** Approval of the project would require reclamation activities to conform to all applicable noise control regulations. There are no nearby noise sensitive land uses within the vicinity of the Project Site. Therefore, no impacts are anticipated.
- b) **Less Than Significant Impact.** Blasting is not proposed as part of reclamation activities. Reclamation would take place during phases and at the end of mining and would typically be conducted between normal daylight hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday. Therefore no significant impacts from excessive groundborne vibration or groundborne noise levels would result.

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- e, f) **No Impact.** The Project Site is not located within an airport land use plan nor within two miles of a public airport or public use airport, or within the vicinity of a private airstrip, that would expose people at the Project Site to excessive noise levels. Therefore, impacts from airport-related noise are not anticipated.

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**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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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**SUBSTANTIATION:**

- a) **No Impact.** The Proposed Project would not induce substantial population growth in an area either directly or indirectly. No impacts are anticipated.
- b) **No Impact.** The proposed use would not displace substantial numbers of existing housing units, or require the construction of replacement housing, as no housing units are proposed to be demolished as a result of this project. No impacts are anticipated.
- c) **No Impact.** Implementation of the Proposed Project would not displace substantial numbers of people necessitating the construction of replacement housing elsewhere, as no housing exists at the Project Site.

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#### 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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#### ***SUBSTANTIATION:***

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- a) **No Impact.**

The Proposed Project would not 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, 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 mining minerals with no permanent improvements proposed. After mining operations, the site would consist of vacant land. Therefore, no impacts are anticipated.

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## 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? ☐ ☐ ☐ ☒
- 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? ☐ ☐ ☐ ☒

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### ***SUBSTANTIATION:***

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a-b) **No Impact.**

Approval of the Proposed 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. No impacts are anticipated.

**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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) Result in inadequate emergency access?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety facilities?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**SUBSTANTIATION:**

**a-b) Less Than Significant Impact.**

The anticipated production rate will be up to 750 tons per day. Therefore, traffic generated by the project would include up 38 bottom dump truck trips per day, a water truck, and up to 4 personnel to and from the project site to conduct daily excavation/reclamation activities. Project-related vehicle traffic would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on



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roads, or congestion at intersections), or exceed, either individually or cumulatively, a level of service standard. Impacts would be less than significant.

- c) **No Impact.** Approval of the reclamation plan would not affect air traffic patterns because no airport facilities are located in the vicinity of the site. No impacts are anticipated.
- d) **No Impact.** Reclamation activities would not result in an additional truck trips beyond approved mining activities and would not involve any road developments or design features that could substantially increase hazards on public roads. Therefore, less than significant impact is anticipated.
- e-f) **No Impact.** Activities associated with the Proposed 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 Proposed 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.

**XVI. UTILITIES AND SERVICE SYSTEMS - Would the project:**

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded, entitlements needed?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**SUBSTANTIATION:**

- a,e) **No Impact.** The Proposed Project would not require sewer collection or treatment services and therefore no off-site discharge of treated wastewater would occur. No impacts related to wastewater treatment are anticipated.
- b) **No Impact.** Water would be used for dust control measures only. Water would be applied to the reclamation areas and transfer points. An agreement with a local Rancher (Two Hawks Ranch) is in place to purchase water from their agricultural well. A 10,000 gallon water tank at the ranch site will be used. It is anticipated approximately 16,000 gallons of water per day will be required. Domestic water for drinking will be imported for employees. Domestic wastewater and septage will be collected and removed by a licensed operator. Therefore,

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no impacts related to expanding a water treatment or distribution system would occur.

- c) **Less Than Significant Impact.** Due to low rainfall the site has little potential for erosion and sedimentation. All operations on-site would comply with a NPDES General Permit for Storm Water Discharges associated with industrial activities and employ storm water Best Management Practices. Less than significant impacts are anticipated.
- d) **Less Than Significant Impact.** An agreement with a local Rancher (Two Hawks Ranch) is in place to purchase water from their agricultural well. A 10,000 gallon water tank at the ranch site will be used. It is anticipated approximately 16,000 gallons of water per day will be required. Domestic water for drinking will be imported for employees. Domestic wastewater and septage will be collected and removed by a licensed operator. This Project would not have a significant impact on agricultural, potable or industrial users. Neither will the Project affect the water supply for any lower-income housing projects. Less than significant impact is anticipated.
- f, g) **No Impact.** Reclamation activities would not result in waste generation. Equipment maintenance will be done onsite. Waste oil, lubricants and solvents will be removed from the site and disposed of at permitted facilities. All refuse will be kept in closed containers and removed from the site to permitted facilities as needed. Upon reclamation, the Project Site would be monitored twice a year. No trash would be allowed to collect on the site. No impact is anticipated.

**XVII. 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 California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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)?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**SUBSTANTIATION:**

- a) **Less Than Significant Impact.** A biological field survey was prepared for the Proposed Project to analyze biological resources in the vicinity of the Project Site and summarize potential impacts to those resources that may occur as a result of project development. The Proposed Project could initially affect biological resources by grading of the site, and revegetation, throughout the proposed Quarry footprint. A Revegetation Plan was prepared for the proposed project. However, compliance with mitigation measures BIO-1 through BIO-14 would minimize impacts to less than significant levels.
- b) **Less Than Significant Impact.** This Initial Study has identified potentially significant impacts to cultural, biological resources, hazards and hazardous materials, and geology and soils. However, potentially significant impacts can be mitigated to levels of less than significant with mitigation incorporated.

In addition, 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 be cumulatively

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considerable.

Less than significant impact is anticipated.

- c) **Less Than Significant Impact.** Final reclamation will be undertaken upon completion of mining operations. Any remaining slopes will be reduced to 5H:1V and compacted areas scarified to a depth of one foot during final contouring and prior to revegetation of mine areas (refer to Sheet 1). Any waste material followed by salvaged surface material will be spread evenly within the pit area and revegetation conducted. The reclaimed end use will be open space and wildlife habitat.

Revegetation efforts will occur in the disturbed areas including the graded pit floor, shallow 5-foot side slopes, and the site's 1,400-foot access road. The goal of the revegetation program is to reduce potential erosion and visual impacts, and to reestablish native habitat compatible with that currently found surrounding the site. Native species, which currently occur on or adjacent to the site, will be utilized to maintain the genetic balance of the area and to avoid the introduction of foreign species. Approximately 10-percent of the disturbed area will be reseeded as to represent surrounding adjacent vegetation with the gypsum dry lake bed.

The disturbed area to be revegetated as mining is completed. These include the 5H:1V side slope, mine floors, mill site, and 1,400-foot access road. Compacted areas will be scarified to a depth of one foot, covered with stockpiled surface material, and revegetated.

The Applicant will be required to obtain air quality permits from MDAQMD to operate, and ultimately perform reclamation of the site. All emission levels associated with the Proposed Project were less than adopted thresholds and therefore impacts were determined to be less than significant.

The implementation of the Mitigation Measures identified in this Initial Study Checklist would ensure that no substantial adverse effects on human beings, either directly or indirectly will occur.

## **XIX. MITIGATION MEASURES**

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

**SELF MONITORING MITIGATION MEASURES:** Condition compliance will be verified by existing procedure.

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**MITIGATION MEASURES:** (Condition compliance will be verified by existing procedure)

- BIO-1.** All trash and food items should be promptly enclosed in raven proof containers (i.e. metal or solid plastic trash cans) and disposed of in a licensed disposal facility on a regular basis.
- BIO-2.** All project related vehicular traffic should be confined to existing roads and only those new roads authorized by this action.
- BIO-3.** Any desert tortoises observed during any phase of the project should be left to move out of the way on its own. Handling of desert tortoises is not authorized.
- BIO-4.** To assure observation and avoidance of desert tortoises in roadways, the proponent should travel no more than 20 mph on all roads not maintained by the county during tortoise active season (mid-March to mid-November).
- BIO-5.** Workers should inspect for desert tortoises under vehicles and equipment prior to moving them. If a desert tortoise is present, the worker should carefully move the vehicle or equipment only when necessary or should wait for the desert tortoise to move out from under the vehicle or equipment.
- BIO-6.** The proponent should notify the BLM Needles Field Office upon locating a dead or injured desert tortoise at the project site or along any access road. Any desert tortoise injured by project related activities should be transported to a veterinarian for treatment at the expense of the proponent.
- BIO-7.** BLM biologists should have the authority to halt any action that could cause harm to a desert tortoise. Should BLM personnel identify potential harm to a desert tortoise during any phase of the project, all project work identified as a source of potential harm to the tortoise would be required to cease until a suitable course of action has been identified, including, as needed, consultation pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended.
- BIO-8.** The proponent should notify the BLM Needles Field Office prior to any road improvements (widening, grating, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. The proponent should specify exactly where the improvements, construction, and/or maintenance would take place so that biological and cultural surveys may be undertaken prior to the proponent making any changes in the access roads.
- BIO-9:** All eighteen salt cedar individuals in the project vicinity should be removed prior to commencement of mining activities. GPS locations and approximate heights of these individuals have been provided in an appendix by the Needles field office invasive species coordinator. Removal of these trees will be done



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during the winter of 2008-2009 between October and February when the salt cedar is not in seed. Removal will be done by mechanical means. This will involve a backhoe or similar device used to pull the entire tree including the root system from the ground. Trees will be stacked in a location away from any areas with standing water.

- BIO-10:** Before entering the site, all vehicles should be inspected for any invasive plant materials and seeds. Any vehicles containing mud or vegetative materials will be cleaned. This should be done offsite using a wash station, compressed air station or a commercial car wash that should wash the under carriage of the vehicle. Possible locations for washing of the vehicles include Primm, Jean or Las Vegas, NV. The method used to remove invasive materials from the vehicle should be reviewed by the BLM invasive weed coordinator prior to approval.
- BIO-11:** Before entering the site all clothing and footwear should be checked and any plant material, especially stickers, and burs that may contain invasive non-native plant seeds should be removed and disposed of in a trash receptacle.
- BIO-12:** There should be a briefing on the importance of preventing the spread of noxious weeds in areas that are not currently infested, and controlling the proliferation of weeds already present. Impacts of noxious weeds on native vegetation, wildlife, and fire activity should be discussed including an explanation of how invasive grasses provide a fine fuel understory which can spread fire from shrub to shrub and how this has historically been absent in the native desert ecosystem.
- BIO-13:** Reclamation should include the following:
- a. All cacti and yucca should be saved for transplanting purposes. These plants should to be protected, stored in 5-gallon containers, watered and placed in a shaded environment during the period of storage. The aforementioned plants should be replanted according to the guidelines supplied by the BLM botanist.
  - b. The pit and new cross country access roads should be ripped and native seed should be spread over all disturbed areas. Planting of native seed should be done in accordance with guidelines to be supplied by the BLM botanist upon notification by the operator to BLM when reclamation is to be initiated.
  - c. The operator should notify the Authorized Officer when reclamation is completed to allow for inspection of reclamation activities.

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- BIO-14:** All pits/trenches and drill holes should be constructed in such a way as to avoid trapping or injury to livestock or burros.
- BIO-15:** Vehicle operators should be made aware by the proponent of the presence of livestock and burros and take steps to avoid vehicle collision.
- HAZ-1:** The proponent and associated project personnel should comply with all Federal, State and County regulations and codes, including but not limited to Occupational Safety and Health Administration and Environmental Protection Agency regulations. Requirements include provisions of the Resources Conservation and Recovery Act, Comprehensive Response, Compensation, and Liability Act, and Clean Water Act.
- HAZ-2:** A Health and Safety Plan (HASP) for the project should be developed and implemented prior to beginning site operations in accordance with 29 Code of Federal Regulations (CFR) 1910.120 and 1926.65. The plan should also be maintained on the project site and made available to, and reviewed by, all employees at all times that work is in progress and reviewed with those working on site.
- HAZ-3:** The HASP should include a separate site-specific ERP section of the HASP for the project in accordance with 29 CFR 910.120(b)(4)(ii)(H) and 1926.65(b)(4)(ii)(H). The ERP should be developed and implemented prior to beginning site operations.
- HAZ-4:** A copy of the HASP (including the ERP) should be submitted to the BLM Needles Field Office prior to beginning site operations.
- HAZ-5:** A written plan describing how the OSHA Hazard Communication Standard will be met should be prepared and implemented in accordance with 29 CFR 1910.1200. The plan should include a list of hazardous chemicals on site, hazardous chemical labeling and other forms of warning, material safety data sheets (MSDS) administration, and employee information and training.
- HAZ-6:** Prior to mobilization on the site, all equipment should be inspected to be sure it is operating correctly and free of leaks. Equipment should be inspected daily to ensure that there are no discharges. Equipment maintenance activities should not be conducted on the site. Appropriate spill containment material should be kept on site. All fuels and other materials used should be contained within the equipment or stored in appropriate containers. All materials should be removed from the site upon completion of construction activities.
- HAZ-7:** The operators should develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention

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measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities. A copy of this plan should be provided to the Authorized Officer prior to initiating the proposed activity.

- HAZ-8:** A copy of the list of project related OSHA hazardous chemicals should be provided to the Needles Field Office.
- HAZ-9:** Material Safety Data Sheets for fuel, oil, antifreeze, and all other chemicals characterized as hazardous by the OSHA should be made available at the location of use and should be properly/legally stored. Sealed containments should be installed under all generators, and tanks, and state and county permits required for tanks and other storage should be secured prior to use on site.
- HAZ-10:** Fuels, oils, and all hazardous materials should be transported and stored on site in U.S. Department of Transportation and OSHA approved containers, within a containment area with an impermeable lining. A spill response/removal kit for fuels/oils, consisting at a minimum of equipment and supplies to address the quantities of materials on site, should be on site for containment of spills and legal removal of contaminated soils.
- HAZ-11:** No regulated hazardous, radioactive, "special" or "universal" wastes should be brought onto the site without the prior approval of the Authorized Officer.
- HAZ-12:** If any serious injury or death occurs in connection with this project, the proponent should notify the BLM immediately and follow the initial report within 24 hours after the incident/accident with written report detailing the incident and resulting actions. The BLM should supply the necessary forms for reporting the incident and copies of ambulance and emergency room reports must also be submitted to the BLM.
- HAZ-13:** Contamination of soils with hydraulic fluids, oils or other lubricants would not be permitted. A tarpaulin, plastic, or other protective device should be required to prevent fluid/soil contact. Contaminated soils should be handled and disposed of in accordance with Environmental Protection Agency regulations for hazardous wastes. All costs associated with this cleanup should be borne by the proponent.

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## **GENERAL REFERENCES**

Association of Environmental Professionals, Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final - June 29, 2007.

CEQA Guidelines, Appendix G.

County of San Bernardino General Plan, 2007

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

MDAQMD Handbook

Reclamation Plan For Mesquite Lake Gypsum Mine, 2012

[http://www.energy.ca.gov/sitingcases/ivanpah/documents/applicant/AFC/Volume1/ISEGS\\_005.4\\_Geology.pdf](http://www.energy.ca.gov/sitingcases/ivanpah/documents/applicant/AFC/Volume1/ISEGS_005.4_Geology.pdf)

Jennings, C. W. 1994. Fault Activity Map of California and Adjacent Areas. Division of Mines and Geology.

Jennings, C. W. 1961. Geologic Map of California, Kingman Sheet. 1:250,000 scale. Division of Mines.

Revegetation Plan for Mesquite Lake Gypsum Mine, August 2012

# Appendix A

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**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
NEEDLES FIELD OFFICE**

**DECISION RECORD**

**JEDCO Mesquite Lake Gypsum Mine**

In accordance with 30 United States Code (U.S.C.) 22 and, 43 U.S.C. 1201 and 1701, it is my decision to approve Jedco Gypsum Company's proposal to conduct gypsum mining operations, as reviewed in Environmental Assessment CA-69-EA08-30 (CACA 050342) and described below. Conditioned through mitigation measures, I find that this action will not result in significant impacts on the human environment and that an Environmental Impact Statement is not required. I further find this action in conformance with applicable land use plans and that it will not cause unnecessary or undue degradation. Measures mitigating project impacts are formulated into the attached conditions of approval, incorporated by reference as the decision of the Bureau of Land Management regarding this action. A copy of this Decision Record and attendant stipulations shall be in the possession of the on-site operator during all undertakings approved herein.

Specifically, the approved action includes the following. The proponent will conduct a small surface mining operation to recover gypsum (gypsite) from the surface of Mesquite Dry Lake. The proposed mine site is located in Mesquite Valley, California, approximately five miles south of the town of Sandy Valley, Nevada. The gypsum occurs at the surface as wind blown gypsum sand and as a bedded evaporite deposit at depth. The gypsum sand contains some silt and clay impurities but is pure enough to be used as an agricultural soil additive without the need for any chemical beneficiation.

The operator will confine the surface disturbance area to a maximum of 160 acres in W½ E ½ of Section 5, T. 18 N., R. 13 E., as shown on the attached map. The operator will access the site by existing roads and approximately 2500 feet of new road, with a maximum width of twelve feet, from the existing county road to the site as shown on the attached map. The lake bed surface is flat and little if any preparation will be required for the "construction" of the new road segment. Other road work will consist of routine occasional maintenance during the life of the operation and will be confined to within the existing disturbed roadway. Removal of wind blown gypsum sand drifts are the primary source of the need for occasional maintenance.

Some areas of road widening not to exceed 20 feet in overall width will be necessary in selected areas on the roads that are located on Mesquite Dry Lake playa, to allow safe passage of vehicles from two directions. These selected areas will be confined to pull-off areas at strategic places and will not exceed 50 feet in length. The access route and pull-off areas will be identical to the approved Kummerfeld sites as shown on the attached map. Gypsite or interburden waste rock will be applied to some portions of the existing roads to suppress dust and repair or prevent rutting.



Information obtained from previous drilling has shown that the deposit, at shallow depths, is minable to a depth of approximately five (5) feet from the surface.

The operator will scrape the gypsum from the surface using a medium-sized bulldozer (e.g., Caterpillar D7 or D8) or front end loader. A front end loader will be used to move the gypsite to a crusher and screening assembly. The gypsite will be crushed as necessary and screen into three sizes. The sized material will be stockpiled adjacent to the loading site as depicted on the attached map. A diesel engine powered conveyor belt loader measuring approximately fifty feet in length and fifteen feet in height will be used to top load semi trailer bulk haulage trucks. These haulage trucks will transport the bulk product to market via the proposed access routes shown on the attached map.

Operations will begin as soon as possible. Initial operations will consist of one, eight to ten hour shift per day, six days per week, with a crew of three or four persons. The anticipated production rate will be approximately 325 tons per day (80,000 to 100,000 tons per year), assuming a weight of 1.9 tons per cubic yards, this will equate to approximately 50,000 cubic yards per year. Mining will be conducted year round January through December.

Sampling to date indicates that the thickness of economical grade gypsite is five feet. Maximum mine depth will be five feet, however, additional data could increase this depth and if so will be accomplished with submission and approval of a plan modification to BLM. There is little defined soil development at the surface and the surface is considered useable product so no topsoil stockpiling will be conducted. With depth the deposit is expected to become harder and more consolidated. When the more consolidated parts of the deposit are encountered at depth, a caterpillar mounted ripper will be used to loosen the bedded gypsum. Blasting or other use of explosives are not planned and will not be initiated without submission of a plan modification to BLM and obtaining required permits.

Equipment on site will consist of a medium-sized bulldozer, front end loader, scales, screener, conveyor belts, haul trucks, semi trailer bulk trucks, pickup fuel truck, diesel fuel tank, company or personal support vehicles, self contained portable toilet(s), water tank, small office and break room mobile trailer, and occasional pickup mounted auger drill rig. No onsite residency will be permitted and garbage and human wastes will be regularly disposed of in appropriate offsite, permitted facilities.

The 160 acre site, if mined to an average depth of three feet, will provide product for a period of approximately fifteen years of operation at anticipated levels of production (50,000 cubic yards per year) under this plan of operations. Operations exceeding five years in duration will require periodic review of this plan by BLM.

Pit walls will not exceed a 2:1 (vertical to horizontal) slope while the operation is active and will be reduced to a 1:2 (vertical to horizontal) slope during periods of temporary non-operation and final closure. The amount of interburden within the deposit has not been determined. Thin beds of interburden waste will be stockpiled within the 160 acre

site for return and spreading within the pit area upon closure. Thick beds of interburden waste rock will define mine depth since its removal will be uneconomic. During periods of temporary inactivity or final closure, all equipment and refuse will be removed from the site.

To the extent possible and as discussed above, reclamation of the site will adhere to the following standards. In accordance with Title 43 Code of Federal Regulations (CFR) 3809.0-6, assurance of adequate and responsible measures to prevent unnecessary or undue degradation of the Federal lands and to provide for reasonable reclamation is required of the proponent, after but not limited to 3809.0-5(k) and 3809.1-3(d). After 43 CFR 3809.1-5(c)(5), reclamation of all areas of disturbance will be completed to the following standards, and reasonable measures will be taken to prevent unnecessary and undue degradation of the Federal lands during operations, in accordance with 43 CFR 3809.0-5(k):

Access routes will be planned for only the minimum width needed for operations and will follow natural contours, where practicable to minimize cut and fill.

All tailings, dumps, deleterious materials or substances, and other waste produced by the operations will be disposed of so as to prevent unnecessary or undue degradation and in accordance with applicable with Federal and State laws and will require a SMARA mine and reclamation plan approved by San Bernardino County.

A Health and Safety Plan will be prepared which will incorporate the Needles Field Office Health and Safety Plan and will be submitted to the BLM Authorized Officer prior to commencing operations.

At the earliest feasible time, the operator will reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site damage to Federal lands.

Reclamation will include, but not be limited to:

Saving of topsoil for final application after reshaping of disturbed areas have been completed;

Measures to control erosion, landslides, and water runoff;

Measures to isolate, remove, or control toxic materials;

Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

Rehabilitation of fisheries and wildlife habitat.

Pursuant to Title 43 Code of Federal Regulations(CFR) 3809.0-6, during operations and upon cessation of mining activities, you are responsible for assuring adequate and

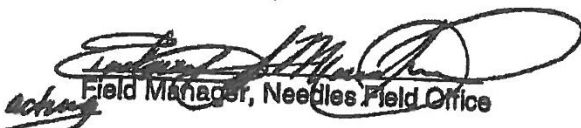
responsible measures to prevent unnecessary or undue degradation of the Federal lands and in providing for reasonable reclamation, after but not limited to CFR 3809.0-5(k) and 3809.1-3(d).

An appeal from this decision may be taken to the State Director, California State Office, Bureau of Land Management in accordance with the provisions in Title 43 Code of Federal Regulations 3809. If an appeal is taken, the notice of appeal must be filed with the Needles Resource Area Office, 1303 South Highway 95, Needles, California 92363 within thirty (30) days from receipt of this decision. Do not send the notice of appeal to the State Director. The appeal and the case history will be sent to the State Director by the Resource Area Office. The appeal to the State Director must contain: 1. The name and mailing address of the appellant; 2. Where applicable, the name of the mining claim(s) and serial number(s) assigned to the mining claim(s) recorded pursuant to Part 3833 of this title which are subject to appeal; and 3. A statement of reasons for appeal and any arguments the appellant wishes to present which will justify reversal or modification of the decision. To avoid summary dismissal of the appeal, there must be strict compliance with the regulations.

During the appeal to the State Director, all decisions from which the appeal is taken shall be effective during the pendency of the appeal.

If no appeal is taken, this decision constitutes final administrative action of this Department as it affects the mining claim(s). No appeal, protest or petition for reconsideration will be entertained from this decision after the appeal period has expired.

Approved by:

  
Field Manager, Needles Field Office

  
Date August 15, 2010

**CONDITIONS OF APPROVAL AND ADVISORY:****CONTROL NUMBER: CA-069-EA08-30****PROJECT: JEDCO Mesquite Lake Gypsum Mine****Conditions of Approval**

1. All Federal, State and local laws and regulations shall be complied with.
2. All required permits must be obtained and filed with the BLM prior to the start of operations.
3. No hazardous materials shall be stored or used on site without the specific approval of the BLM.
4. All pits/trenches and drill holes shall be constructed in such a way as to avoid trapping or injury to livestock or burros.
5. The operator shall be responsible for informing all vehicle operators about the presence of livestock and burros in the area and take steps to avoid vehicle collision.
6. All trash and food items shall be promptly enclosed in raven proof containers (i.e. metal or solid plastic trash cans) and removed on a regular basis.
7. All project related vehicular traffic shall be confined to existing roads and only those new roads authorized by this action.
8. Any desert tortoises observed during any phase of the project shall be left to move out of the way on their own. Handling of desert tortoises is NOT permitted!
9. To assure observation and avoidance of desert tortoises in roadways, the operator shall travel no more than 20 mph on all roads not maintained by the county during desert tortoise active season (mid-March to mid-November).
10. Workers shall inspect for desert tortoises under vehicles and equipment prior to moving it. If a desert tortoise is present, the worker shall carefully move the vehicle or equipment only when necessary or shall wait for the desert tortoise to move out from under the vehicle or equipment.
11. The operator shall notify the BLM Needles Field Office upon locating any dead or injured desert tortoise at the project site or along any access road. Any injured desert tortoise shall be transported to a veterinarian for treatment at the expense of the operator.

13. BLM biologists have the authority to halt any action that could cause harm to a desert tortoise. Should BLM personnel identify potential harm to a desert tortoise during any phase of the project, all project work identified as a source of potential harm to the tortoise shall be required to cease until a suitable course of action has been identified, including, as needed, consultation pursuant to Section 7(a)(2) of the Endangered Species Act of 1973, as amended.
14. The operator shall notify the BLM Needles Field Office prior to any road improvements (widening, grading, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. The operator shall specify exactly where the improvements, construction, and/or maintenance would take place.
15. The operator shall meet all Federal and State Air Quality standards and regulations, and be in possession of all necessary permits. These permits shall be on file with the BLM and the operator is required to supply the BLM with copies of these permits before operations begin.
16. Operations which generate fugitive dust emissions shall be curtailed when wind speeds exceed 30 MPH.
17. Additional mitigation measures shall be implemented if fugitive dust emissions exceed the Mojave Desert Air Quality Management District (MDAQMD) standards or California Health and Safety Code Section 41700 and 41701.
18. MDAQMD permits shall be kept current.
19. Contamination of soils with hydraulic fluids, oils or other lubricants is not permitted. A tarpaulin, plastic, or other protective device is required to prevent fluid/soil contact. Contaminated soils must be handled and disposed of in accordance with Environmental Protection Agency regulations for hazardous wastes. The operator shall be liable for all costs associated with remediation of hazardous wastes.
20. Reclamation shall include the following:
  - a. All cacti and yucca shall be saved for transplanting purposes. These plants shall be protected, stored in 5-gallon containers, watered and placed in a shaded environment during the period of storage. The aforementioned plants shall be replanted according to the guidelines supplied by the BLM botanist.
  - b. The pit and cross country access roads shall be ripped and native seed shall be spread over all disturbed areas. Planting of native seed shall be done in accordance with guidelines to be supplied by the BLM botanist upon prior notification by the operator to BLM when reclamation is to be initiated.

- c. All pit slopes shall be reduced not to exceed 1:1 and all waste rock stockpiles shall be spread within the pit area.
- d. The operator shall notify the Authorized Officer when reclamation is completed to allow for inspection of reclamation activities.
21. The operator(s) shall immediately cease operations upon encountering any cultural resources (prehistoric/historic sites or objects) and/or paleontological resources (fossils) during permitted operations, bring the resources to the attention of the Authorized Officer and maintain the integrity of such resources pending subsequent investigation.
22. Actions other than those explicitly approved by the Bureau of Land Management, which result in impacts upon archaeological or historical resources, shall be subject to the provisions of the Archaeological Resources Protection Act of 1979, as amended, and the Federal Land Policy and Management Act of 1976. These statutes protect cultural resources for the benefit of all Americans. As property of the United States, no person may, without authorization, excavate, remove, damage, or otherwise alter or deface any historic or prehistoric site, artifact or object of antiquity located on public lands.
23. The operator shall prepare a reclamation cost estimate in accordance with regulations at 43 CFR 3809.500 for review and approval by the Authorized Officer. An irrevocable financial assurance instrument in an amount to be determined and approved by the Authorized Officer shall be delivered to BLM, Needles Field Office prior to initiation of mining operations. This bond shall be made payable to the following agencies, as shown: Bureau of Land Management, Needles Field Office, or County of San Bernardino, or State Department of Conservation. Return or release of the bond shall be contingent upon completion of satisfactory reclamation as determined by the Authorized Officer.
24. Prior to widening any portion of existing roads to allow safe passage of equipment and vehicles, the operator shall notify BLM and provide the location of the proposed widening. Road widening shall be limited to Mesquite Dry Lake Playa unless the operator can demonstrate a need for other locations based upon safety considerations. No road widening is allowed without the specific written approval of the Authorized Officer.
25. Portable toilets shall be provided in appropriate numbers for the numbers of employees on site in accordance with County Health Codes and shall be regularly serviced and dumped.
26. Fuel, oil, antifreeze, and all other fluids, which fall under hazardous and special materials and the proposed action, would produce solid, hazardous, and special wastes in the event of an accident, and/or are required to have a Material Safety Data Sheet available at the location of use, shall be properly/legally stored.



Sealed Containments shall be installed under all generators, and tanks, and state/county permits/licenses required for tanks and other storage shall be secured prior to use on site.

27. The proponent and associated project personnel shall comply with all Federal, State and County regulations and codes, including but not limited to the Occupational Safety and Health Administration and Environmental Protection Agency regulations. Requirements include provisions of the Resources Conservation and Recovery Act, Comprehensive Response, Compensation, and Liability Act, and Clean Water Act.
28. A Health and Safety Plan (HASP) for the project shall be developed and implemented prior to beginning site operations in accordance with 29 Code of Federal Regulations (CFR) 1910.120 and 1926.65. The plan shall also be maintained on the project site and made available to, and reviewed by, all employees at all times that work is in progress and reviewed with those working on site.
29. The HASP shall include a separate site-specific Emergency Response Plan (ERP) section of the HASP for the project in accordance with 29 CFR 1910.120(b)(4)(ii)(H) and 1926.65(b)(4)(ii)(H). The ERP shall be developed and implemented prior to beginning site operations.
30. A copy of the HASP (including the ERP) shall be submitted to the Needles Field Office and approved by the Authorized Officer prior to beginning site operations.
31. A written plan describing how the OSHA Hazard Communication Standard shall be met shall be prepared and implemented in accordance with 29 CFR 1910.1200. The plan shall include a list of hazardous chemicals on site, hazardous chemical labeling and other forms of warning, material safety data sheets (MSDS) administration, and employee information and training.
32. Prior to mobilization on the site, all equipment should be inspected to be sure it is operating correctly and free of leaks. Equipment should be inspected daily to ensure that there are no discharges. Equipment maintenance activities should not be conducted on the site. Appropriate spill containment material should be kept on site. All fuels and other materials used should be contained within the equipment or stored in appropriate containers. All materials should be removed from the site upon completion of construction activities.
33. The operators should develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities. A copy of this plan should be provided to the Authorized Officer prior to initiating the proposed activity.

34. A copy of the list of project related OSHA hazardous chemicals shall be provided to the Needles Field Office.
35. Material Safety Data Sheets for fuel, oil, antifreeze, and all other chemicals characterized as hazardous by the OSHA shall be made available at the location of use and shall be properly/legally stored. Sealed containments shall be installed under all generators, and tanks, and state and county permits required for tanks and other storage shall be secured prior to use on site.
36. Fuels, oils, and all hazardous materials shall be transported and stored on site in U.S. Department of Transportation and OSHA approved containers, within a containment area with an impermeable lining. A spill response/removal kit for fuels/oils, consisting at a minimum of equipment and supplies to address the quantities of materials on site, shall be on site for containment of spills and legal removal of contaminated soils.
37. No regulated hazardous, radioactive, "special" or "universal" wastes shall be brought onto the site without the prior approval of the Authorized Officer.
38. If any serious injury or death occurs in connection with this operation, the operator shall notify the BLM immediately and follow the initial report within 24 hours after the incident/accident with written report detailing the incident and resulting actions. The BLM shall supply the necessary forms for reporting the incident and copies of ambulance and emergency room reports must also be submitted to the BLM.
39. All eighteen salt cedar individuals in the project vicinity shall be removed prior to commencement of mining activities. GPS locations and approximate heights of these individuals have been provided in an appendix by the Needles field office invasive species coordinator. Removal of these trees shall be done during the winter of 2008-2009 between October and February when the salt cedar is not in seed. Removal shall be done by mechanical means. This shall involve a backhoe or similar device used to pull the entire tree including the root system from the ground. Trees shall be stacked in a location away from any areas with standing water.
40. Before entering the site, all vehicles shall be inspected for any invasive plant materials and seeds. Any vehicles containing mud or vegetative materials shall be cleaned. This shall be done offsite using a wash station, compressed air station or a commercial car wash that shall wash the under carriage of the vehicle. Possible locations for washing of the vehicles include Primm, Jean or Las Vegas, NV. The method used to remove invasive materials from the vehicle shall be reviewed by the BLM invasive weed coordinator prior to approval.
41. Before entering the site all clothing and footwear shall be checked and any plant

material, especially stickers, and burs that may contain invasive non-native plant seeds shall be removed and disposed of in a trash receptacle.

42. There shall be a briefing on the importance of preventing the spread of noxious weeds in areas that are not currently infested, and controlling the proliferation of weeds already present. Impacts of noxious weeds on native vegetation, wildlife, and fire activity shall be discussed including an explanation of how invasive grasses provide a fine fuel understory which can spread fire from shrub to shrub and how this has historically been absent in the native desert ecosystem.

**Advisory:**

1. An approved California State Mining and Reclamation Act permit is required prior to initiating operations.
2. The operator will be responsible for any damage or loss of livestock or herding fees as a result of this action.
3. This authorization applies only to public lands and does not infer any authorization for any use of private lands. The operator must reach agreement with private land owners for any access across or other use of private lands.
4. Another operation has BLM authorization to conduct operations in the immediate area. All operations must be conducted in a safe and courteous manner to avoid conflict or interference with all other authorized uses of the public lands.

## Appendix B

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**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
NEEDLES FIELD OFFICE**

**DECISION RECORD**

**JEDCO Mesquite Lake Gypsum Mine**

In accordance with 30 United States Code (U.S.C.) 22 and, 43 U.S.C. 1201 and 1701, it is my decision to approve Jedco Gypsum Company's proposal to conduct gypsum mining operations, as reviewed in Environmental Assessments CA-69-EA08-30 and DOI-BLM-CA-D090-2011-0029-EA (CACA 050342) and described below. Conditioned through mitigation measures, I find that this action will not result in significant impacts on the human environment and that an Environmental Impact Statement is not required. I further find this action in conformance with applicable land use plans and that it will not cause unnecessary or undue degradation. Measures mitigating project impacts are formulated into the attached conditions of approval, incorporated by reference as the decision of the Bureau of Land Management regarding this action. A copy of this Decision Record and attendant stipulations shall be in the possession of the on-site operator during all undertakings approved herein.

Specifically, the approved action includes the following. Dalton Trucking, Inc. currently conducts a small surface mining operation to recover gypsum (gypsite) from the surface of Mesquite Dry Lake under lease from JEDCO Gypsum Company. The mine site is located in Mesquite Valley, California, approximately five miles south of the town of Sandy Valley, Nevada. The gypsum occurs at the surface as wind blown gypsum sand and as a bedded evaporite deposit at depth. The gypsum sand contains some silt and clay impurities but is pure enough to be used as an agricultural soil additive without the need for any chemical beneficiation.

The Mine Site will be accessed from two routes via Interstate 15 (I-15), Sandy Valley Road and Excelsior Mine Road. Access to the operation from these routes is as follows: 1) Excelsior Mine Road traveling north from I-15 to Kingston Road east. Turn right at Texas Lane to access both the mill site and mine. 2) Sandy Valley Road to Kingston Road West, turn Left at Texas Lane to access both the mill site and mine.

The operator will confine the surface disturbance area to a maximum of 160 acres in W½ E ½ of Section 5, T. 18 N., R. 13 E., as shown on the attached map. The operator will access the site by existing roads and approximately 2500 feet of new road, with a maximum width of twelve feet, from the existing county road to the site as shown on the attached map. The lake bed surface is flat and little if any preparation will be required for the "construction" of the new road segment. Other road work will consist of routine occasional maintenance during the life of the operation and will be confined to within the

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existing disturbed roadway. Removal of wind blown gypsum sand drifts will be the primary source of the need for occasional maintenance.

Some areas of road widening not to exceed 20 feet in overall width has been necessary in selected areas on the roads that are located on Mesquite Dry Lake playa, to allow safe passage of vehicles from two directions. These selected areas have been confined to pull-off areas at strategic places and do not exceed 50 feet in length. The access route and pull-off areas are shown on the attached map. Gypsite or interburden waste rock will be applied to some portions of the existing roads to suppress dust and repair or prevent rutting.

Information obtained from previous drilling has shown that the deposit, at shallow depths, is minable to a depth of approximately five (5) feet from the surface.

The operator will scrape the gypsum from the surface using a medium-sized bulldozer (e.g., Caterpillar D7 or D8) or 623B Caterpillar scraper. A front end loader will be used to move the gypsite to a crusher and screening assembly. The gypsite will be crushed as necessary and screened into three sizes. The sized material will be stockpiled adjacent to the loading site as depicted on the attached map. A diesel engine powered conveyor belt loader measuring approximately fifty feet in length and fifteen feet in height will be used to top load semi trailer bulk haulage trucks. These haulage trucks will transport the bulk product to market via the proposed access routes shown on the attached map. Trips will vary between 5 and 25 trucks per day. Most of the loading will be between the hours of 6 am and 10 pm Monday through Friday. A loader (with on board scales) will be used to load the trucks.

The mine site will operate with 4 miners working 2 shifts Monday through Friday and with an occasional single day shift on Saturday. The first shift will be from 10 pm to 7 am. The miners will be operating a loader, feeding the screening plant with material stock piled from the second (AM) shift. The second shift will be from 6am and continue to approximately 3 pm. Evening operations will be supported by the night guard and 2 light towers to illuminate the area around the screening operation. All lights will be directed down and away from surrounding neighbors and properties. No onsite residency will be permitted and garbage and human wastes will be regularly disposed of in appropriate offsite, permitted facilities.

The anticipated production rate will be approximately 325 tons per day (80,000 to 100,000 tons per year), assuming a weight of 1.9 tons per cubic yards, this will equate to approximately 50,000 cubic yards per year. Mining will be conducted year round January through December.

Sampling to date indicates that the thickness of economical grade gypsite is five feet. Maximum mine depth will be five feet, however, additional data could increase this depth and if so will be accomplished with submission and approval of a plan modification to BLM. There is little defined soil development at the surface and the

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surface is considered useable product. However, the top six inches of surface material will be stockpiled and redistributed over mined areas on an annual basis as part of the reclamation operations. Mining will be conducted by stripping in approximately six (6) acre cells each year.

Methods for mining will include standard wheelloader excavation practices. The planned surface disturbance will be cleared of the sparse vegetation with the top six inches of surface material stockpiled along the perimeter of each annual phase or about 6-acre area. The gypsum will be scraped to a depth of up to 5 feet with a dozer, scraper, or dozer with or without a ripper/scarifiers. A front-end loader will feed material into the portable screen to achieve the desired consistency. A loader will load the screened gypsum into 25-ton haul trucks. The haul trucks will haul the gypsum to market or to the off-site mill site where it will be stockpiled, crushed (if needed), and bagged or possibly shipped in bulk.

With depth the deposit is expected to become harder and more consolidated. When the more consolidated parts of the deposit are encountered at depth, a caterpillar mounted ripper will be used to loosen the bedded gypsum. Blasting or other use of explosives are not planned and will not be initiated without submission of a plan modification to BLM and obtaining required permits.

Equipment on site will generally consist of a medium-sized bulldozer, scraper, motor grader, three front end loaders, scales, screener, conveyor belts, haul trucks, semi trailer bulk trucks, pickup fuel truck, diesel fuel tank, company or personal support vehicles, self contained portable toilet(s), water tank, small office and break room mobile trailer, and occasional pickup mounted auger drill rig. Equipment currently on site includes:

- 1 Cat D7 or D8 Dozer
- 1 623B Cat Scraper
- 2 980F Cat Loader
- 1 966D Cat Loader
- 1 12G Cat Motor Grader
- 1 15ft Adjustable Dual Gang Disc Attachment
- 1 McCloskey S190 Portable 5'x20'Screen Plant
- 1 4000 Gallon Water Truck
- 1 10 Wheel Dump Truck
- 1 Chevrolet 4500 Service Truck
- 1 International Fuel/Lube Truck
- 1 40ft Sea Container (Office/Storage)
- 1 3- Portable Light Towers
- 1 20kw China Diesel Portable Generator

Regular maintenance will be performed on site using the portable lube truck. All oil and grease will be stored and dispensed using an International Lube truck. An agreement with a local rancher (Two Hawks Ranch) to store bulk diesel fuel is in place. The

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International Lube Truck, Chevrolet 4500 Service Truck and the mine foreman's pickup truck will all be outfitted with appropriate diesel fuel tanks to transport fuel from bulk storage and fuel equipment at the mine site.

The 160 acre mine site, if mined to an average depth of three feet, will provide product for a period of approximately fifteen years of operation at anticipated levels of production (50,000 cubic yards per year) under this plan of operations. Operations exceeding five years in duration will require periodic review of this plan by BLM.

Pit walls will not exceed a 2:1 (vertical to horizontal) slope while the operation is active and will be reduced to a 1:2 (vertical to horizontal) slope during periods of temporary non-operation and final closure. The amount of interburden within the deposit has not been determined. Thin beds of interburden waste will be stockpiled within the 160 acre site for return and spreading within the pit area upon closure. Thick beds of interburden waste rock will define mine depth since its removal will be uneconomic. During periods of temporary inactivity or final closure, all equipment and refuse will be removed from the site.

During wet weather conditions, the last 2 to 3 miles of the dirt road leading into the mine may become muddy and unsafe to drive trucks over. Therefore, the 2, 5-acre mill sites (10 acres combined) will be used. The entire ten acre site will be disturbed for numerous stock piles, scales and loading facility. See the attached mill site map. A 2 month stock pile at the Mill Site is proposed. Depending on future volume, a 70-ft drive over truck scale to certify loads leaving from the Mill Site may be installed. Annual volume leaving the Mill Site for delivery to market is anticipated to be 20,000 tons per year.

To minimize dust, while screening the material, the screening plant will be outfitted with tarpaulin covers over all conveyers and water spray nozzles to wet the finished material as it comes off the conveyor belt. Dust control on the dirt roads, plant area, and mill site will be controlled as follows: establish a speed limit of 14 ½ MPH for trucks and mark the roads, plant area and mill site (when operated) with signs approximately every ¼ mile, and the roads are to be watered every morning. Water will also be sprayed on the stock piles of finished material at the mine and mill sites to form a crust and keep the material from blowing.

An agreement with a local Rancher (Two Hawks Ranch) is in place to purchase water from their agricultural well. A 10,000 gallon water tank at the ranch site will be used. It is anticipated approximately 16,000 gallons of water per day will be required. Domestic water for drinking will be imported for employees. Domestic wastewater and septage will be collected and removed by a licensed operator.

No wastewater will be generated as a result of excavation or screening operations. To protect soils and groundwater from potential contamination from run-off, fueling and maintenance areas shall be covered with impervious materials and equipped with

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berms and catch basins to capture accidental spills and insure that run-on and run-off from this area is not contaminated.

Upon completion of mining and the need for the mill site, all equipment and stockpiles will be removed and any remaining refuse will be disposed of at an appropriate disposal site. The surface material used to create the elevated stockpile area will be re-graded into place. The area will be scarified and seeded with BLM approved seed mix. A State Mining and Reclamation Act (SMARA) reclamation plan has been approved and a conditional use permit has been authorized by San Bernardino County. A modification to that plan and permit has been submitted to the county.

To the extent possible and as discussed above, reclamation of the site will adhere to the following standards. In accordance with Title 43 Code of Federal Regulations (CFR) 3809.0-6, assurance of adequate and responsible measures to prevent unnecessary or undue degradation of the Federal lands and to provide for reasonable reclamation is required of the proponent, after but not limited to 3809.0-5(k) and 3809.1-3(d). After 43 CFR 3809.1-5(c)(5), reclamation of all areas of disturbance will be completed to the following standards, and reasonable measures will be taken to prevent unnecessary and undue degradation of the Federal lands during operations, in accordance with 43 CFR 3809.0-5(k):

Access routes will be planned for only the minimum width needed for operations and will follow natural contours, where practicable to minimize cut and fill.

All tailings, dumps, deleterious materials or substances, and other waste produced by the operations will be disposed of to prevent unnecessary or undue degradation and in accordance with applicable with Federal and State laws and will require a SMARA mine and reclamation plan approved by San Bernardino County.

The Dalton Rucking JEDCO Mesquite Lake Gypsum Health and Safety Plan will be available and followed by all employees.

At the earliest feasible time, the operator will reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site damage to Federal lands.

Reclamation will include, but not be limited to:

Saving of topsoil for final application after reshaping of disturbed areas have been completed;

Measures to control erosion, landslides, and water runoff;

Measures to isolate, remove, or control toxic materials;

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Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

Rehabilitation of wildlife habitat.

### Appeals

An appeal from this decision may be taken to the State Director, California State Office, Bureau of Land Management in accordance with the provisions in Title 43 Code of Federal Regulations 3809. If an appeal is taken, the notice of appeal must be filed with the Needles Resource Area Office, 1303 South Highway 95, Needles, California 92363 within thirty (30) days from receipt of this decision. Do not send the notice of appeal to the State Director. The appeal and the case history will be sent to the State Director by the Resource Area Office. The appeal to the State Director must contain: 1. The name and mailing address of the appellant; 2. Where applicable, the name of the mining claim(s) and serial number(s) assigned to the mining claim(s) recorded pursuant to Part 3833 of this title which are subject to appeal; and 3. A statement of reasons for appeal and any arguments the appellant wishes to present which will justify reversal or modification of the decision. To avoid summary dismissal of the appeal, there must be strict compliance with the regulations.

During the appeal to the State Director, all decisions from which the appeal is taken shall be effective during the pendency of the appeal.

If no appeal is taken, this decision constitutes final administrative action of this Department as it affects the mining claim(s). No appeal, protest or petition for reconsideration will be entertained from this decision after the appeal period has expired.

Approved by:

  
Field Manager, Needles Field Office

1-30-2011  
Date

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**CONDITIONS OF APPROVAL AND ADVISORY:**

**CONTROL NUMBER:** DOI-BLM-CA-D090-2011-0029-EA  
**PROJECT:** JEDCO Mesquite Lake Gypsum Mine

**Conditions of Approval**

1. The operator shall designate a field contract representative (FCR) who will be responsible for overseeing compliance with protective conditions and for coordinating compliance with the Bureau of Land Management (BLM). The FCR must be onsite during all project activities. The FCR shall have the authority to halt all (project, event) activities that are in violation of the conditions. The FCR shall have a copy of the decision record and conditions of approval when work is being conducted on the site. The FCR may be a crew chief or field supervisor, a project manager, or any other employee of the operator.
2. The operator will comply with all conditions contained in this authorization unless otherwise approved in writing by the Authorized Officer. Non-compliance with these conditions by the operator or any of his agents may at the option of the Authorized Officer result in the cancellation or suspension of the authorization or adverse action against the operator.
3. The operator shall comply with applicable federal and state laws and regulations issued thereunder, existing or hereafter enacted or promulgated, affecting in any manner construction, operation, maintenance or termination of the authorization.
4. The operator shall confine all activities within the area specifically defined in the authorization.
5. When all development and rehabilitation have been completed, a joint compliance check of the project area will be made. The operator and the Authorized Officer shall hold a joint inspection of the project area to determine if compliance with the terms and conditions of this authorization has been completed. The operator shall perform at their own expense any required modifications or additional reclamation work needed to comply with the terms of this authorization as conclusively determined by the Authorized Officer.
6. All required permits must be obtained and filed with the BLM prior to the start of operations.
7. No hazardous materials shall be stored or used on site without the specific approval of the BLM.

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8. All pits/trenches and drill holes shall be constructed in such a way as to avoid trapping or injury to livestock or burros.
9. The operator shall be responsible for informing all vehicle operators about the presence of livestock and burros in the area and take steps to avoid vehicle collision.
10. All trash and food items shall be promptly enclosed in raven proof containers (i.e. metal or solid plastic trash cans) and removed on a regular basis.
11. All project related vehicular traffic shall be confined to existing roads and only those new roads authorized by this action. No cross-country travel is authorized.
12. Any desert tortoises observed during any phase of the project shall be left to move out of the way on their own. Handling of desert tortoises is NOT permitted!
13. To assure observation and avoidance of desert tortoises in roadways, the operator shall travel no more than 20 mph on all roads not maintained by the county during desert tortoise active season (mid-March to mid-November).
14. Workers shall inspect for desert tortoises under vehicles and equipment prior to moving it. If a desert tortoise is present, the worker shall carefully move the vehicle or equipment only when necessary or shall wait for the desert tortoise to move out from under the vehicle or equipment.
15. The operator shall notify the BLM Needles Field Office upon locating any dead or injured desert tortoise at the project site or along any access road. Any injured desert tortoise shall be transported to a veterinarian for treatment at the expense of the operator.
16. BLM biologists have the authority to halt any action that could cause harm to a desert tortoise. Should BLM personnel identify potential harm to a desert tortoise during any phase of the project, all project work identified as a source of potential harm to the tortoise shall be required to cease until a suitable course of action has been identified, including, as needed, consultation pursuant to Section 7(a)(2) of the Endangered Species Act of 1973, as amended.
17. The operator shall notify the BLM Needles Field Office prior to any road improvements (widening, grading, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. The operator shall specify exactly where the improvements, construction, and/or maintenance would take place.

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18. The operator shall meet all Federal and State Air Quality standards and regulations, and be in possession of all necessary permits. These permits shall be on file with the BLM and the operator is required to supply the BLM with copies of these permits before operations begin.
19. Operations which generate fugitive dust emissions shall be curtailed when wind speeds exceed 30 MPH.
20. Additional mitigation measures shall be implemented if fugitive dust emissions exceed the Mojave Desert Air Quality Management District (MDAQMD) standards or California Health and Safety Code Section 41700 and 41701.
21. MDAQMD permits shall be kept current.
22. Contamination of soils with hydraulic fluids, oils or other lubricants is not permitted. A tarpaulin, plastic, or other protective device is required to prevent fluid/soil contact. Contaminated soils must be handled and disposed of in accordance with Environmental Protection Agency regulations for hazardous wastes. The operator shall be liable for all costs associated with remediation of hazardous wastes.
23. Reclamation shall include the following:
  - a. All cacti and yucca shall be saved for transplanting purposes. These plants shall be protected, stored in 5-gallon containers, watered and placed in a shaded environment during the period of storage. The aforementioned plants shall be replanted according to the guidelines supplied by the BLM botanist.
  - b. The pit and new authorized access roads shall be ripped and native seed shall be spread over all disturbed areas. Planting of native seed shall be done in accordance with guidelines to be supplied by the BLM botanist upon prior notification by the operator to BLM when reclamation is to be initiated.
  - c. All pit slopes shall be reduced not to exceed 1:1 and all waste rock stockpiles shall be spread within the pit area.
  - d. The operator shall notify the Authorized Officer when reclamation is completed to allow for inspection of reclamation activities.
24. The operator(s) shall immediately cease operations upon encountering any cultural resources (prehistoric/historic sites or objects) and/or

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paleontological resources (fossils) during permitted operations, bring the resources to the attention of the Authorized Officer and maintain the integrity of such resources pending subsequent investigation.

25. Actions other than those explicitly approved by the Bureau of Land Management, which result in impacts upon archaeological or historical resources, shall be subject to the provisions of the Archaeological Resources Protection Act of 1979, as amended, and the Federal Land Policy and Management Act of 1976. These statutes protect cultural resources for the benefit of all Americans. As property of the United States, no person may, without authorization, excavate, remove, damage, or otherwise alter or deface any historic or prehistoric site, artifact or object of antiquity located on public lands.
26. The operator shall prepare a reclamation cost estimate in accordance with regulations at 43 CFR 3809.500 for review and approval by the Authorized Officer. An irrevocable financial assurance instrument in an amount to be determined and approved by the Authorized Officer shall be delivered to BLM, Needles Field Office prior to initiation of mining operations. This bond shall be made payable to the following agencies, as shown: Bureau of Land Management, Needles Field Office, or County of San Bernardino, or State Department of Conservation. Return or release of the bond shall be contingent upon completion of satisfactory reclamation as determined by the Authorized Officer.
27. Prior to widening any portion of existing roads to allow safe passage of equipment and vehicles, the operator shall notify BLM and provide the location of the proposed widening. Road widening shall be limited to Mesquite Dry Lake Playa unless the operator can demonstrate a need for other locations based upon safety considerations. No road widening is allowed without the specific written approval of the Authorized Officer.
28. Portable toilets shall be provided in appropriate numbers for the numbers of employees on site in accordance with County Health Codes and shall be regularly serviced and dumped. Toilets will be adequately anchored down to prevent from being tipped over and contents spilled on soil surface.
29. Fuel, oil, antifreeze, and all other fluids, which fall under hazardous and special materials and the proposed action, would produce solid, hazardous, and special wastes in the event of an accident, and/or are required to have a Material Safety Data Sheet available at the location of use, shall be properly/legally stored. Sealed Containments shall be installed under all generators, and tanks, and state/county permits/licenses required for tanks and other storage shall be secured prior to use on site.

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30. The proponent and associated project personnel shall comply with all Federal, State and County regulations and codes, including but not limited to the Occupational Safety and Health Administration and Environmental Protection Agency regulations. Requirements include provisions of the Resources Conservation and Recovery Act, Comprehensive Response, Compensation, and Liability Act, and Clean Water Act.
31. The Dalton trucking General Field Projects Health and Safety Plan (HASP) shall be maintained on the project site and followed by all employees at all times that work is in progress, in accordance with 29 Code of Federal Regulations (CFR) 1910.120 and 1926.65.
32. The HASP shall include a separate site-specific Emergency Response Plan (ERP) section of the HASP for the project in accordance with 29 CFR 910.120(b)(4)(ii)(H) and 1926.65(b)(4)(ii)(H). The ERP shall be developed and implemented prior to beginning site operations.
33. A copy of the HASP (including the ERP) shall be submitted to the Needles Field Office and approved by the Authorized Officer prior to beginning site operations.
34. Prior to mobilization on the site, all equipment should be inspected to be sure it is operating correctly and free of leaks. Equipment should be inspected daily to ensure that there are no discharges. Equipment maintenance activities should not be conducted on the site. Appropriate spill containment material should be kept on site. All fuels and other materials used should be contained within the equipment or stored in appropriate containers. All materials should be removed from the site upon completion of construction activities.
35. The operators should develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities. A copy of this plan should be provided to the Authorized Officer prior to initiating the proposed activity.
36. A copy of the list of project related OSHA hazardous chemicals shall be provided to the Needles Field Office.
37. Material Safety Data Sheets for fuel, oil, antifreeze, and all other chemicals characterized as hazardous by the OSHA shall be made available at the location of use and shall be properly/legally stored. Sealed containments shall be

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installed under all generators, and tanks, and state and county permits required for tanks and other storage shall be secured prior to use on site.

38. Fuels, oils, and all hazardous materials shall be transported and stored on site in U.S. Department of Transportation and OSHA approved containers, within a containment area with an impermeable lining. A spill response/removal kit for fuels/oils, consisting at a minimum of equipment and supplies to address the quantities of materials on site, shall be on site for containment of spills and legal removal of contaminated soils.
39. No regulated hazardous, radioactive, "special" or "universal" wastes shall be brought onto the site without the prior approval of the Authorized Officer.
40. If any serious injury or death occurs in connection with this operation, the operator shall notify the BLM immediately and follow the initial report within 24 hours after the incident/accident with written report detailing the incident and resulting actions. The BLM shall supply the necessary forms for reporting the incident and copies of ambulance and emergency room reports must also be submitted to the BLM.
41. All salt cedar trees in the project vicinity which have not been removed shall be removed. GPS locations and approximate heights of these individuals have been previously provided by the Needles Field Office invasive species coordinator. Removal of these trees shall be done during the winter of 2011-2012 between October and February when the salt cedar is not in seed. Removal shall be done by mechanical means. This shall involve a backhoe or similar device used to pull the entire tree including the root system from the ground. Trees shall be stacked in a location away from any areas with standing water. If any additional trees appear in the future they shall also be removed.
43. Before entering the site, all vehicles shall be inspected for any invasive plant materials and seeds. Any vehicles containing mud or vegetative materials shall be cleaned. This shall be done offsite using a wash station, compressed air station or a commercial car wash that shall wash the under carriage of the vehicle. Possible locations for washing of the vehicles include Primm, Jean or Las Vegas, NV. The method used to remove invasive materials from the vehicle shall be reviewed by the BLM invasive weed coordinator prior to approval.
44. Before entering the site all clothing and footwear shall be checked and any plant material, especially stickers, and burs that may contain invasive non-native plant seeds shall be removed and disposed of in a trash receptacle.

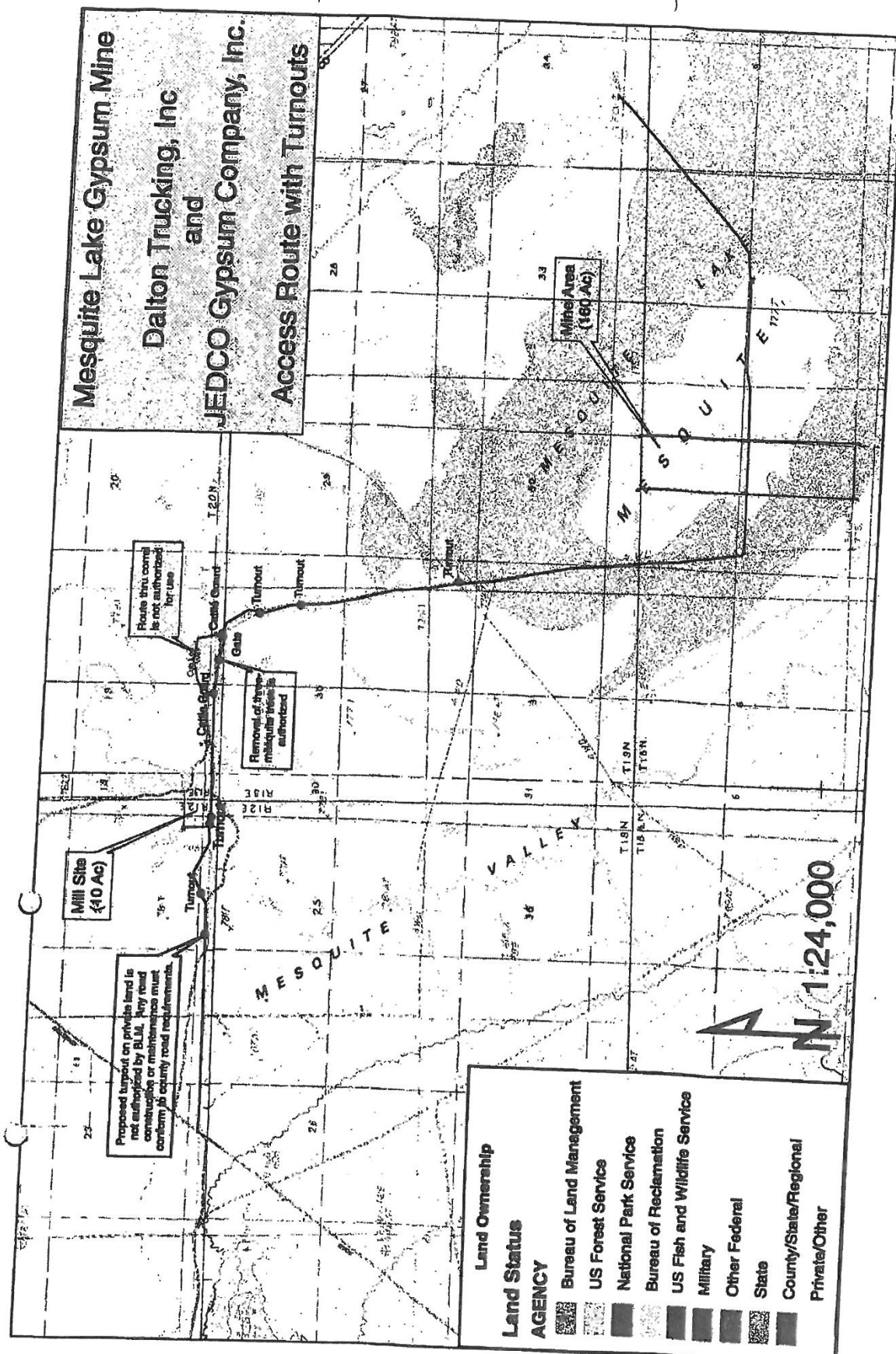
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45. There shall be a briefing on the importance of preventing the spread of noxious weeds in areas that are not currently infested, and controlling the proliferation of weeds already present. Impacts of noxious weeds on native vegetation, wildlife, and fire activity shall be discussed including an explanation of how invasive grasses provide a fine fuel understory which can spread fire from shrub to shrub and how this has historically been absent in the native desert ecosystem.
46. The operator shall install two cattle guards to replace existing gates at the locations shown on the attached map within 60 days of the date of this authorization. The operator shall be responsible for maintenance and repair of the cattle guards for the life of the mining operation.

**Advisory:**

1. An approved California State Mining and Reclamation Act permit is required prior to initiating operations.
2. The operator will be responsible for any damage or loss of livestock or herding fees as a result of this action.
3. This authorization applies only to public lands and does not infer any authorization for any use of private lands. The operator must reach agreement with private land owners for any access across or other use of private lands.
4. Another operation has BLM authorization to conduct operations in the immediate area. All operations must be conducted in a safe and courteous manner to avoid conflict or interference with all other authorized uses of the public lands.

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## **EXHIBIT D**

### **BLM DECISIONS OF RECORD & CONDITIONS FOR PLAN OF OPERATION (POO)**

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**BLM DECISION**  
**AUGUST 13, 2010**

**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
NEEDLES FIELD OFFICE**

**DECISION RECORD**

**JEDCO Mesquite Lake Gypsum Mine**

In accordance with 30 United States Code (U.S.C.) 22 and, 43 U.S.C. 1201 and 1701, it is my decision to approve Jedco Gypsum Company's proposal to conduct gypsum mining operations, as reviewed in Environmental Assessment CA-69-EA08-30 (CACA 050342) and described below. Conditioned through mitigation measures, I find that this action will not result in significant impacts on the human environment and that an Environmental Impact Statement is not required. I further find this action in conformance with applicable land use plans and that it will not cause unnecessary or undue degradation. Measures mitigating project impacts are formulated into the attached conditions of approval, incorporated by reference as the decision of the Bureau of Land Management regarding this action. A copy of this Decision Record and attendant stipulations shall be in the possession of the on-site operator during all undertakings approved herein.

Specifically, the approved action includes the following. The proponent will conduct a small surface mining operation to recover gypsum (gypsite) from the surface of Mesquite Dry Lake. The proposed mine site is located in Mesquite Valley, California, approximately five miles south of the town of Sandy Valley, Nevada. The gypsum occurs at the surface as wind blown gypsum sand and as a bedded evaporite deposit at depth. The gypsum sand contains some silt and clay impurities but is pure enough to be used as an agricultural soil additive without the need for any chemical beneficiation.

The operator will confine the surface disturbance area to a maximum of 160 acres in W½ E ½ of Section 5, T. 18 N., R. 13 E., as shown on the attached map. The operator will access the site by existing roads and approximately 2500 feet of new road, with a maximum width of twelve feet, from the existing county road to the site as shown on the attached map. The lake bed surface is flat and little if any preparation will be required for the "construction" of the new road segment. Other road work will consist of routine occasional maintenance during the life of the operation and will be confined to within the existing disturbed roadway. Removal of wind blown gypsum sand drifts are the primary source of the need for occasional maintenance.

Some areas of road widening not to exceed 20 feet in overall width will be necessary in selected areas on the roads that are located on Mesquite Dry Lake playa, to allow safe passage of vehicles from two directions. These selected areas will be confined to pull-off areas at strategic places and will not exceed 50 feet in length. The access route and pull-off areas will be identical to the approved Kummerfeld sites as shown on the attached map. Gypsite or interburden waste rock will be applied to some portions of the existing roads to suppress dust and repair or prevent rutting.

Information obtained from previous drilling has shown that the deposit, at shallow depths, is minable to a depth of approximately five (5) feet from the surface.

The operator will scrape the gypsum from the surface using a medium-sized bulldozer (e.g., Caterpillar D7 or D8) or front end loader. A front end loader will be used to move the gypsite to a crusher and screening assembly. The gypsite will be crushed as necessary and screen into three sizes. The sized material will be stockpiled adjacent to the loading site as depicted on the attached map. A diesel engine powered conveyor belt loader measuring approximately fifty feet in length and fifteen feet in height will be used to top load semi trailer bulk haulage trucks. These haulage trucks will transport the bulk product to market via the proposed access routes shown on the attached map.

Operations will begin as soon as possible. Initial operations will consist of one, eight to ten hour shift per day, six days per week, with a crew of three or four persons. The anticipated production rate will be approximately 325 tons per day (80,000 to 100,000 tons per year), assuming a weight of 1.9 tons per cubic yards, this will equate to approximately 50,000 cubic yards per year. Mining will be conducted year round January through December.

Sampling to date indicates that the thickness of economical grade gypsite is five feet. Maximum mine depth will be five feet, however, additional data could increase this depth and if so will be accomplished with submission and approval of a plan modification to BLM. There is little defined soil development at the surface and the surface is considered useable product so no topsoil stockpiling will be conducted. With depth the deposit is expected to become harder and more consolidated. When the more consolidated parts of the deposit are encountered at depth, a caterpillar mounted ripper will be used to loosen the bedded gypsum. Blasting or other use of explosives are not planned and will not be initiated without submission of a plan modification to BLM and obtaining required permits.

Equipment on site will consist of a medium-sized bulldozer, front end loader, scales, screener, conveyor belts, haul trucks, semi trailer bulk trucks, pickup fuel truck, diesel fuel tank, company or personal support vehicles, self contained portable toilet(s), water tank, small office and break room mobile trailer, and occasional pickup mounted auger drill rig. No onsite residency will be permitted and garbage and human wastes will be regularly disposed of in appropriate offsite, permitted facilities.

The 160 acre site, if mined to an average depth of three feet, will provide product for a period of approximately fifteen years of operation at anticipated levels of production (50,000 cubic yards per year) under this plan of operations. Operations exceeding five years in duration will require periodic review of this plan by BLM.

Pit walls will not exceed a 2:1 (vertical to horizontal) slope while the operation is active and will be reduced to a 1:2 (vertical to horizontal) slope during periods of temporary non-operation and final closure. The amount of interburden within the deposit has not been determined. Thin beds of interburden waste will be stockpiled within the 160 acre

site for return and spreading within the pit area upon closure. Thick beds of interburden waste rock will define mine depth since its removal will be uneconomic. During periods of temporary inactivity or final closure, all equipment and refuse will be removed from the site.

To the extent possible and as discussed above, reclamation of the site will adhere to the following standards. In accordance with Title 43 Code of Federal Regulations (CFR) 3809.0-6, assurance of adequate and responsible measures to prevent unnecessary or undue degradation of the Federal lands and to provide for reasonable reclamation is required of the proponent, after but not limited to 3809.0-5(k) and 3809.1-3(d). After 43 CFR 3809.1-5(c)(5), reclamation of all areas of disturbance will be completed to the following standards, and reasonable measures will be taken to prevent unnecessary and undue degradation of the Federal lands during operations, in accordance with 43 CFR 3809.0-5(k):

Access routes will be planned for only the minimum width needed for operations and will follow natural contours, where practicable to minimize cut and fill.

All tailings, dumps, deleterious materials or substances, and other waste produced by the operations will be disposed of so as to prevent unnecessary or undue degradation and in accordance with applicable Federal and State laws and will require a SMARA mine and reclamation plan approved by San Bernardino County.

A Health and Safety Plan will be prepared which will incorporate the Needles Field Office Health and Safety Plan and will be submitted to the BLM Authorized Officer prior to commencing operations.

At the earliest feasible time, the operator will reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site damage to Federal lands.

Reclamation will include, but not be limited to:

Saving of topsoil for final application after reshaping of disturbed areas have been completed;

Measures to control erosion, landslides, and water runoff;

Measures to isolate, remove, or control toxic materials;

Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

Rehabilitation of fisheries and wildlife habitat.

Pursuant to Title 43 Code of Federal Regulations (CFR) 3809.0-6, during operations and upon cessation of mining activities, you are responsible for assuring adequate and




responsible measures to prevent unnecessary or undue degradation of the Federal lands and in providing for reasonable reclamation, after but not limited to CFR 3809.0-5(k) and 3809.1-3(d).

An appeal from this decision may be taken to the State Director, California State Office, Bureau of Land Management in accordance with the provisions in Title 43 Code of Federal Regulations 3809. If an appeal is taken, the notice of appeal must be filed with the Needles Resource Area Office, 1303 South Highway 95, Needles, California 92363 within thirty (30) days from receipt of this decision. Do not send the notice of appeal to the State Director. The appeal and the case history will be sent to the State Director by the Resource Area Office. The appeal to the State Director must contain: 1. The name and mailing address of the appellant; 2. Where applicable, the name of the mining claim(s) and serial number(s) assigned to the mining claim(s) recorded pursuant to Part 3833 of this title which are subject to appeal; and 3. A statement of reasons for appeal and any arguments the appellant wishes to present which will justify reversal or modification of the decision. To avoid summary dismissal of the appeal, there must be strict compliance with the regulations.

During the appeal to the State Director, all decisions from which the appeal is taken shall be effective during the pendency of the appeal.

If no appeal is taken, this decision constitutes final administrative action of this Department as it affects the mining claim(s). No appeal, protest or petition for reconsideration will be entertained from this decision after the appeal period has expired.

Approved by:

  
acting Field Manager, Needles Field Office

  
August 13, 2010  
Date

**CONDITIONS OF APPROVAL AND ADVISORY:****CONTROL NUMBER: CA-069-EA08-30****PROJECT: JEDCO Mesquite Lake Gypsum Mine****Conditions of Approval**

1. All Federal, State and local laws and regulations shall be complied with.
2. All required permits must be obtained and filed with the BLM prior to the start of operations.
3. No hazardous materials shall be stored or used on site without the specific approval of the BLM.
4. All pits/trenches and drill holes shall be constructed in such a way as to avoid trapping or injury to livestock or burros.
5. The operator shall be responsible for informing all vehicle operators about the presence of livestock and burros in the area and take steps to avoid vehicle collision.
6. All trash and food items shall be promptly enclosed in raven proof containers (i.e. metal or solid plastic trash cans) and removed on a regular basis.
7. All project related vehicular traffic shall be confined to existing roads and only those new roads authorized by this action.
8. Any desert tortoises observed during any phase of the project shall be left to move out of the way on their own. Handling of desert tortoises is NOT permitted!
9. To assure observation and avoidance of desert tortoises in roadways, the operator shall travel no more than 20 mph on all roads not maintained by the county during desert tortoise active season (mid-March to mid-November).
10. Workers shall inspect for desert tortoises under vehicles and equipment prior to moving it. If a desert tortoise is present, the worker shall carefully move the vehicle or equipment only when necessary or shall wait for the desert tortoise to move out from under the vehicle or equipment.
11. The operator shall notify the BLM Needles Field Office upon locating any dead or injured desert tortoise at the project site or along any access road. Any injured desert tortoise shall be transported to a veterinarian for treatment at the expense of the operator.

13. BLM biologists have the authority to halt any action that could cause harm to a desert tortoise. Should BLM personnel identify potential harm to a desert tortoise during any phase of the project, all project work identified as a source of potential harm to the tortoise shall be required to cease until a suitable course of action has been identified, including, as needed, consultation pursuant to Section 7(a)(2) of the Endangered Species Act of 1973, as amended.
14. The operator shall notify the BLM Needles Field Office prior to any road improvements (widening, grading, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. The operator shall specify exactly where the improvements, construction, and/or maintenance would take place.
15. The operator shall meet all Federal and State Air Quality standards and regulations, and be in possession of all necessary permits. These permits shall be on file with the BLM and the operator is required to supply the BLM with copies of these permits before operations begin.
16. Operations which generate fugitive dust emissions shall be curtailed when wind speeds exceed 30 MPH.
17. Additional mitigation measures shall be implemented if fugitive dust emissions exceed the Mojave Desert Air Quality Management District (MDAQMD) standards or California Health and Safety Code Section 41700 and 41701.
18. MDAQMD permits shall be kept current.
19. Contamination of soils with hydraulic fluids, oils or other lubricants is not permitted. A tarpaulin, plastic, or other protective device is required to prevent fluid/soil contact. Contaminated soils must be handled and disposed of in accordance with Environmental Protection Agency regulations for hazardous wastes. The operator shall be liable for all costs associated with remediation of hazardous wastes.
20. Reclamation shall include the following:
  - a. All cacti and yucca shall be saved for transplanting purposes. These plants shall be protected, stored in 5-gallon containers, watered and placed in a shaded environment during the period of storage. The aforementioned plants shall be replanted according to the guidelines supplied by the BLM botanist.
  - b. The pit and cross country access roads shall be ripped and native seed shall be spread over all disturbed areas. Planting of native seed shall be done in accordance with guidelines to be supplied by the BLM botanist upon prior notification by the operator to BLM when reclamation is to be initiated.

- c. All pit slopes shall be reduced not to exceed 1:1 and all waste rock stockpiles shall be spread within the pit area.
  - d. The operator shall notify the Authorized Officer when reclamation is completed to allow for inspection of reclamation activities.
- 21. The operator(s) shall immediately cease operations upon encountering any cultural resources (prehistoric/historic sites or objects) and/or paleontological resources (fossils) during permitted operations, bring the resources to the attention of the Authorized Officer and maintain the integrity of such resources pending subsequent investigation.
  - 22. Actions other than those explicitly approved by the Bureau of Land Management, which result in impacts upon archaeological or historical resources, shall be subject to the provisions of the Archaeological Resources Protection Act of 1979, as amended, and the Federal Land Policy and Management Act of 1976. These statutes protect cultural resources for the benefit of all Americans. As property of the United States, no person may, without authorization, excavate, remove, damage, or otherwise alter or deface any historic or prehistoric site, artifact or object of antiquity located on public lands.
  - 23. The operator shall prepare a reclamation cost estimate in accordance with regulations at 43 CFR 3809.500 for review and approval by the Authorized Officer. An irrevocable financial assurance instrument in an amount to be determined and approved by the Authorized Officer shall be delivered to BLM, Needles Field Office prior to initiation of mining operations. This bond shall be made payable to the following agencies, as shown: Bureau of Land Management, Needles Field Office, or County of San Bernardino, or State Department of Conservation. Return or release of the bond shall be contingent upon completion of satisfactory reclamation as determined by the Authorized Officer.
  - 24. Prior to widening any portion of existing roads to allow safe passage of equipment and vehicles, the operator shall notify BLM and provide the location of the proposed widening. Road widening shall be limited to Mesquite Dry Lake Playa unless the operator can demonstrate a need for other locations based upon safety considerations. No road widening is allowed without the specific written approval of the Authorized Officer.
  - 25. Portable toilets shall be provided in appropriate numbers for the numbers of employees on site in accordance with County Health Codes and shall be regularly serviced and dumped.
  - 26. Fuel, oil, antifreeze, and all other fluids, which fall under hazardous and special materials and the proposed action, would produce solid, hazardous, and special wastes in the event of an accident, and/or are required to have a Material Safety Data Sheet available at the location of use, shall be properly/legally stored.

Sealed Containments shall be installed under all generators, and tanks, and state/county permits/licenses required for tanks and other storage shall be secured prior to use on site.

27. The proponent and associated project personnel shall comply with all Federal, State and County regulations and codes, including but not limited to the Occupational Safety and Health Administration and Environmental Protection Agency regulations. Requirements include provisions of the Resources Conservation and Recovery Act, Comprehensive Response, Compensation, and Liability Act, and Clean Water Act.
28. A Health and Safety Plan (HASP) for the project shall be developed and implemented prior to beginning site operations in accordance with 29 Code of Federal Regulations (CFR) 1910.120 and 1926.65. The plan shall also be maintained on the project site and made available to, and reviewed by, all employees at all times that work is in progress and reviewed with those working on site.
29. The HASP shall include a separate site-specific Emergency Response Plan (ERP) section of the HASP for the project in accordance with 29 CFR 1910.120(b)(4)(ii)(H) and 1926.65(b)(4)(ii)(H). The ERP shall be developed and implemented prior to beginning site operations.
30. A copy of the HASP (including the ERP) shall be submitted to the Needles Field Office and approved by the Authorized Officer prior to beginning site operations.
31. A written plan describing how the OSHA Hazard Communication Standard shall be met shall be prepared and implemented in accordance with 29 CFR 1910.1200. The plan shall include a list of hazardous chemicals on site, hazardous chemical labeling and other forms of warning, material safety data sheets (MSDS) administration, and employee information and training.
32. Prior to mobilization on the site, all equipment should be inspected to be sure it is operating correctly and free of leaks. Equipment should be inspected daily to ensure that there are no discharges. Equipment maintenance activities should not be conducted on the site. Appropriate spill containment material should be kept on site. All fuels and other materials used should be contained within the equipment or stored in appropriate containers. All materials should be removed from the site upon completion of construction activities.
33. The operators should develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities. A copy of this plan should be provided to the Authorized Officer prior to initiating the proposed activity.

34. A copy of the list of project related OSHA hazardous chemicals shall be provided to the Needles Field Office.
35. Material Safety Data Sheets for fuel, oil, antifreeze, and all other chemicals characterized as hazardous by the OSHA shall be made available at the location of use and shall be properly/legally stored. Sealed containments shall be installed under all generators, and tanks, and state and county permits required for tanks and other storage shall be secured prior to use on site.
36. Fuels, oils, and all hazardous materials shall be transported and stored on site in U.S. Department of Transportation and OSHA approved containers, within a containment area with an impermeable lining. A spill response/removal kit for fuels/oils, consisting at a minimum of equipment and supplies to address the quantities of materials on site, shall be on site for containment of spills and legal removal of contaminated soils.
37. No regulated hazardous, radioactive, "special" or "universal" wastes shall be brought onto the site without the prior approval of the Authorized Officer.
38. If any serious injury or death occurs in connection with this operation, the operator shall notify the BLM immediately and follow the initial report within 24 hours after the incident/accident with written report detailing the incident and resulting actions. The BLM shall supply the necessary forms for reporting the incident and copies of ambulance and emergency room reports must also be submitted to the BLM.
39. All eighteen salt cedar individuals in the project vicinity shall be removed prior to commencement of mining activities. GPS locations and approximate heights of these individuals have been provided in an appendix by the Needles field office invasive species coordinator. Removal of these trees shall be done during the winter of 2008-2009 between October and February when the salt cedar is not in seed. Removal shall be done by mechanical means. This shall involve a backhoe or similar device used to pull the entire tree including the root system from the ground. Trees shall be stacked in a location away from any areas with standing water.
40. Before entering the site, all vehicles shall be inspected for any invasive plant materials and seeds. Any vehicles containing mud or vegetative materials shall be cleaned. This shall be done offsite using a wash station, compressed air station or a commercial car wash that shall wash the under carriage of the vehicle. Possible locations for washing of the vehicles include Primm, Jean or Las Vegas, NV. The method used to remove invasive materials from the vehicle shall be reviewed by the BLM invasive weed coordinator prior to approval.
41. Before entering the site all clothing and footwear shall be checked and any plant



material, especially stickers, and burs that may contain invasive non-native plant seeds shall be removed and disposed of in a trash receptacle.

42. There shall be a briefing on the importance of preventing the spread of noxious weeds in areas that are not currently infested, and controlling the proliferation of weeds already present. Impacts of noxious weeds on native vegetation, wildlife, and fire activity shall be discussed including an explanation of how invasive grasses provide a fine fuel understory which can spread fire from shrub to shrub and how this has historically been absent in the native desert ecosystem.

**Advisory:**

1. An approved California State Mining and Reclamation Act permit is required prior to initiating operations.
2. The operator will be responsible for any damage or loss of livestock or herding fees as a result of this action.
3. This authorization applies only to public lands and does not infer any authorization for any use of private lands. The operator must reach agreement with private land owners for any access across or other use of private lands.
4. Another operation has BLM authorization to conduct operations in the immediate area. All operations must be conducted in a safe and courteous manner to avoid conflict or interference with all other authorized uses of the public lands.

BLM DECISION  
(REVISION)  
JANUARY 30, 2012

**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
NEEDLES FIELD OFFICE**

**DECISION RECORD**

**JEDCO Mesquite Lake Gypsum Mine**

In accordance with 30 United States Code (U.S.C.) 22 and, 43 U.S.C. 1201 and 1701, it is my decision to approve Jedco Gypsum Company's proposal to conduct gypsum mining operations, as reviewed in Environmental Assessments CA-69-EA08-30 and DOI-BLM-CA-D090-2011-0029-EA (CACA 050342) and described below. Conditioned through mitigation measures, I find that this action will not result in significant impacts on the human environment and that an Environmental Impact Statement is not required. I further find this action in conformance with applicable land use plans and that it will not cause unnecessary or undue degradation. Measures mitigating project impacts are formulated into the attached conditions of approval, incorporated by reference as the decision of the Bureau of Land Management regarding this action. A copy of this Decision Record and attendant stipulations shall be in the possession of the on-site operator during all undertakings approved herein.

Specifically, the approved action includes the following. Dalton Trucking, Inc. currently conducts a small surface mining operation to recover gypsum (gypsite) from the surface of Mesquite Dry Lake under lease from JEDCO Gypsum Company. The mine site is located in Mesquite Valley, California, approximately five miles south of the town of Sandy Valley, Nevada. The gypsum occurs at the surface as wind blown gypsum sand and as a bedded evaporite deposit at depth. The gypsum sand contains some silt and clay impurities but is pure enough to be used as an agricultural soil additive without the need for any chemical beneficiation.

The Mine Site will be accessed from two routes via Interstate 15 (I-15), Sandy Valley Road and Excelsior Mine Road. Access to the operation from these routes is as follows: 1) Excelsior Mine Road traveling north from I-15 to Kingston Road east. Turn right at Texas Lane to access both the mill site and mine. 2) Sandy Valley Road to Kingston Road West, turn Left at Texas Lane to access both the mill site and mine.

The operator will confine the surface disturbance area to a maximum of 160 acres in W½ E ½ of Section 5, T. 18 N., R. 13 E., as shown on the attached map. The operator will access the site by existing roads and approximately 2500 feet of new road, with a maximum width of twelve feet, from the existing county road to the site as shown on the attached map. The lake bed surface is flat and little if any preparation will be required for the "construction" of the new road segment. Other road work will consist of routine occasional maintenance during the life of the operation and will be confined to within the

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existing disturbed roadway. Removal of wind blown gypsum sand drifts will be the primary source of the need for occasional maintenance.

Some areas of road widening not to exceed 20 feet in overall width has been necessary in selected areas on the roads that are located on Mesquite Dry Lake playa, to allow safe passage of vehicles from two directions. These selected areas have been confined to pull-off areas at strategic places and do not exceed 50 feet in length. The access route and pull-off areas are shown on the attached map. Gypsite or interburden waste rock will be applied to some portions of the existing roads to suppress dust and repair or prevent rutting.

Information obtained from previous drilling has shown that the deposit, at shallow depths, is minable to a depth of approximately five (5) feet from the surface.

The operator will scrape the gypsum from the surface using a medium-sized bulldozer (e.g., Caterpillar D7 or D8) or 623B Caterpillar scraper. A front end loader will be used to move the gypsite to a crusher and screening assembly. The gypsite will be crushed as necessary and screened into three sizes. The sized material will be stockpiled adjacent to the loading site as depicted on the attached map. A diesel engine powered conveyor belt loader measuring approximately fifty feet in length and fifteen feet in height will be used to top load semi trailer bulk haulage trucks. These haulage trucks will transport the bulk product to market via the proposed access routes shown on the attached map. Trips will vary between 5 and 25 trucks per day. Most of the loading will be between the hours of 6 am and 10 pm Monday through Friday. A loader (with on board scales) will be used to load the trucks.

The mine site will operate with 4 miners working 2 shifts Monday through Friday and with an occasional single day shift on Saturday. The first shift will be from 10 pm to 7 am. The miners will be operating a loader, feeding the screening plant with material stock piled from the second (AM) shift. The second shift will be from 6am and continue to approximately 3 pm. Evening operations will be supported by the night guard and 2 light towers to illuminate the area around the screening operation. All lights will be directed down and away from surrounding neighbors and properties. No onsite residency will be permitted and garbage and human wastes will be regularly disposed of in appropriate offsite, permitted facilities.

The anticipated production rate will be approximately 325 tons per day (80,000 to 100,000 tons per year), assuming a weight of 1.9 tons per cubic yards, this will equate to approximately 50,000 cubic yards per year. Mining will be conducted year round January through December.

Sampling to date indicates that the thickness of economical grade gypsite is five feet. Maximum mine depth will be five feet, however, additional data could increase this depth and if so will be accomplished with submission and approval of a plan modification to BLM. There is little defined soil development at the surface and the

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surface is considered useable product. However, the top six inches of surface material will be stockpiled and redistributed over mined areas on an annual basis as part of the reclamation operations. Mining will be conducted by stripping in approximately six (6) acre cells each year.

Methods for mining will include standard wheel loader excavation practices. The planned surface disturbance will be cleared of the sparse vegetation with the top six inches of surface material stockpiled along the perimeter of each annual phase or about 6-acre area. The gypsum will be scraped to a depth of up to 5 feet with a dozer, scraper, or dozer with or without a ripper/scarifiers. A front-end loader will feed material into the portable screen to achieve the desired consistency. A loader will load the screened gypsum into 25-ton haul trucks. The haul trucks will haul the gypsum to market or to the off-site mill site where it will be stockpiled, crushed (if needed), and bagged or possibly shipped in bulk.

With depth the deposit is expected to become harder and more consolidated. When the more consolidated parts of the deposit are encountered at depth, a caterpillar mounted ripper will be used to loosen the bedded gypsum. Blasting or other use of explosives are not planned and will not be initiated without submission of a plan modification to BLM and obtaining required permits.

Equipment on site will generally consist of a medium-sized bulldozer, scraper, motor grader, three front end loaders, scales, screener, conveyor belts, haul trucks, semi trailer bulk trucks, pickup fuel truck, diesel fuel tank, company or personal support vehicles, self contained portable toilet(s), water tank, small office and break room mobile trailer, and occasional pickup mounted auger drill rig. Equipment currently on site includes:

- 1 Cat D7 or D8 Dozer
- 1 623B Cat Scraper
- 2 980F Cat Loader
- 1 966D Cat Loader
- 1 12G Cat Motor Grader
- 1 15ft Adjustable Dual Gang Disc Attachment
- 1 McCloskey S190 Portable 5'x20' Screen Plant
- 1 4000 Gallon Water Truck
- 1 10 Wheel Dump Truck
- 1 Chevrolet 4500 Service Truck
- 1 International Fuel/Lube Truck
- 1 40ft Sea Container (Office/Storage)
- 1 3- Portable Light Towers
- 1 20kw China Diesel Portable Generator

Regular maintenance will be performed on site using the portable lube truck. All oil and grease will be stored and dispensed using an International Lube truck. An agreement with a local rancher (Two Hawks Ranch) to store bulk diesel fuel is in place. The

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International Lube Truck, Chevrolet 4500 Service Truck and the mine foreman's pickup truck will all be outfitted with appropriate diesel fuel tanks to transport fuel from bulk storage and fuel equipment at the mine site.

The 160 acre mine site, if mined to an average depth of three feet, will provide product for a period of approximately fifteen years of operation at anticipated levels of production (50,000 cubic yards per year) under this plan of operations. Operations exceeding five years in duration will require periodic review of this plan by BLM.

Pit walls will not exceed a 2:1 (vertical to horizontal) slope while the operation is active and will be reduced to a 1:2 (vertical to horizontal) slope during periods of temporary non-operation and final closure. The amount of interburden within the deposit has not been determined. Thin beds of interburden waste will be stockpiled within the 160 acre site for return and spreading within the pit area upon closure. Thick beds of interburden waste rock will define mine depth since its removal will be uneconomic. During periods of temporary inactivity or final closure, all equipment and refuse will be removed from the site.

During wet weather conditions, the last 2 to 3 miles of the dirt road leading into the mine may become muddy and unsafe to drive trucks over. Therefore, the 2, 5-acre mill sites (10 acres combined) will be used. The entire ten acre site will be disturbed for numerous stock piles, scales and loading facility. See the attached mill site map. A 2 month stock pile at the Mill Site is proposed. Depending on future volume, a 70-ft drive over truck scale to certify loads leaving from the Mill Site may be installed. Annual volume leaving the Mill Site for delivery to market is anticipated to be 20,000 tons per year.

To minimize dust, while screening the material, the screening plant will be outfitted with tarpaulin covers over all conveyers and water spray nozzles to wet the finished material as it comes off the conveyer belt. Dust control on the dirt roads, plant area, and mill site will be controlled as follows: establish a speed limit of 14 ½ MPH for trucks and mark the roads, plant area and mill site (when operated) with signs approximately every ¼ mile, and the roads are to be watered every morning. Water will also be sprayed on the stock piles of finished material at the mine and mill sites to form a crust and keep the material from blowing.

An agreement with a local Rancher (Two Hawks Ranch) is in place to purchase water from their agricultural well. A 10,000 gallon water tank at the ranch site will be used. It is anticipated approximately 16,000 gallons of water per day will be required. Domestic water for drinking will be imported for employees. Domestic wastewater and septage will be collected and removed by a licensed operator.

No wastewater will be generated as a result of excavation or screening operations. To protect soils and groundwater from potential contamination from run-off, fueling and maintenance areas shall be covered with impervious materials and equipped with

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berms and catch basins to capture accidental spills and insure that run-on and run-off from this area is not contaminated.

Upon completion of mining and the need for the mill site, all equipment and stockpiles will be removed and any remaining refuse will be disposed of at an appropriate disposal site. The surface material used to create the elevated stockpile area will be re-graded into place. The area will be scarified and seeded with BLM approved seed mix. A State Mining and Reclamation Act (SMARA) reclamation plan has been approved and a conditional use permit has been authorized by San Bernardino County. A modification to that plan and permit has been submitted to the county.

To the extent possible and as discussed above, reclamation of the site will adhere to the following standards. In accordance with Title 43 Code of Federal Regulations (CFR) 3809.0-6, assurance of adequate and responsible measures to prevent unnecessary or undue degradation of the Federal lands and to provide for reasonable reclamation is required of the proponent, after but not limited to 3809.0-5(k) and 3809.1-3(d). After 43 CFR 3809.1-5(c)(5), reclamation of all areas of disturbance will be completed to the following standards, and reasonable measures will be taken to prevent unnecessary and undue degradation of the Federal lands during operations, in accordance with 43 CFR 3809.0-5(k):

Access routes will be planned for only the minimum width needed for operations and will follow natural contours, where practicable to minimize cut and fill.

All tailings, dumps, deleterious materials or substances, and other waste produced by the operations will be disposed of to prevent unnecessary or undue degradation and in accordance with applicable with Federal and State laws and will require a SMARA mine and reclamation plan approved by San Bernardino County.

The Dalton Rucking JEDCO Mesquite Lake Gypsum Health and Safety Plan will be available and followed by all employees.

At the earliest feasible time, the operator will reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site damage to Federal lands.

Reclamation will include, but not be limited to:

Saving of topsoil for final application after reshaping of disturbed areas have been completed;

Measures to control erosion, landslides, and water runoff;

Measures to isolate, remove, or control toxic materials;

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Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

Rehabilitation of wildlife habitat.

### **Appeals**

An appeal from this decision may be taken to the State Director, California State Office, Bureau of Land Management in accordance with the provisions in Title 43 Code of Federal Regulations 3809. If an appeal is taken, the notice of appeal must be filed with the Needles Resource Area Office, 1303 South Highway 95, Needles, California 92363 within thirty (30) days from receipt of this decision. Do not send the notice of appeal to the State Director. The appeal and the case history will be sent to the State Director by the Resource Area Office. The appeal to the State Director must contain: 1. The name and mailing address of the appellant; 2. Where applicable, the name of the mining claim(s) and serial number(s) assigned to the mining claim(s) recorded pursuant to Part 3833 of this title which are subject to appeal; and 3. A statement of reasons for appeal and any arguments the appellant wishes to present which will justify reversal or modification of the decision. To avoid summary dismissal of the appeal, there must be strict compliance with the regulations.

During the appeal to the State Director, all decisions from which the appeal is taken shall be effective during the pendency of the appeal.

If no appeal is taken, this decision constitutes final administrative action of this Department as it affects the mining claim(s). No appeal, protest or petition for reconsideration will be entertained from this decision after the appeal period has expired.

Approved by:

  
Field Manager, Needles Field Office

1-30-2012  
Date

JEDCO Mesquite Lake Gypsum Mine  
DOI-BLM-CA-D090-2011-0029-EA

**CONDITIONS OF APPROVAL AND ADVISORY:**

**CONTROL NUMBER:** DOI-BLM-CA-D090-2011-0029-EA

**PROJECT:** JEDCO Mesquite Lake Gypsum Mine

**Conditions of Approval**

1. The operator shall designate a field contract representative (FCR) who will be responsible for overseeing compliance with protective conditions and for coordinating compliance with the Bureau of Land Management (BLM). The FCR must be onsite during all project activities. The FCR shall have the authority to halt all (project, event) activities that are in violation of the conditions. The FCR shall have a copy of the decision record and conditions of approval when work is being conducted on the site. The FCR may be a crew chief or field supervisor, a project manager, or any other employee of the operator.
2. The operator will comply with all conditions contained in this authorization unless otherwise approved in writing by the Authorized Officer. Non-compliance with these conditions by the operator or any of his agents may at the option of the Authorized Officer result in the cancellation or suspension of the authorization or adverse action against the operator.
3. The operator shall comply with applicable federal and state laws and regulations issued thereunder, existing or hereafter enacted or promulgated, affecting in any manner construction, operation, maintenance or termination of the authorization.
4. The operator shall confine all activities within the area specifically defined in the authorization.
5. When all development and rehabilitation have been completed, a joint compliance check of the project area will be made. The operator and the Authorized Officer shall hold a joint inspection of the project area to determine if compliance with the terms and conditions of this authorization has been completed. The operator shall perform at their own expense any required modifications or additional reclamation work needed to comply with the terms of this authorization as conclusively determined by the Authorized Officer.
6. All required permits must be obtained and filed with the BLM prior to the start of operations.
7. No hazardous materials shall be stored or used on site without the specific approval of the BLM.

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8. All pits/trenches and drill holes shall be constructed in such a way as to avoid trapping or injury to livestock or burros.
9. The operator shall be responsible for informing all vehicle operators about the presence of livestock and burros in the area and take steps to avoid vehicle collision.
10. All trash and food items shall be promptly enclosed in raven proof containers (i.e. metal or solid plastic trash cans) and removed on a regular basis.
11. All project related vehicular traffic shall be confined to existing roads and only those new roads authorized by this action. No cross-country travel is authorized.
12. Any desert tortoises observed during any phase of the project shall be left to move out of the way on their own. Handling of desert tortoises is NOT permitted!
13. To assure observation and avoidance of desert tortoises in roadways, the operator shall travel no more than 20 mph on all roads not maintained by the county during desert tortoise active season (mid-March to mid-November).
14. Workers shall inspect for desert tortoises under vehicles and equipment prior to moving it. If a desert tortoise is present, the worker shall carefully move the vehicle or equipment only when necessary or shall wait for the desert tortoise to move out from under the vehicle or equipment.
15. The operator shall notify the BLM Needles Field Office upon locating any dead or injured desert tortoise at the project site or along any access road. Any injured desert tortoise shall be transported to a veterinarian for treatment at the expense of the operator.
16. BLM biologists have the authority to halt any action that could cause harm to a desert tortoise. Should BLM personnel identify potential harm to a desert tortoise during any phase of the project, all project work identified as a source of potential harm to the tortoise shall be required to cease until a suitable course of action has been identified, including, as needed, consultation pursuant to Section 7(a)(2) of the Endangered Species Act of 1973, as amended.
17. The operator shall notify the BLM Needles Field Office prior to any road improvements (widening, grading, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. The operator shall specify exactly where the improvements, construction, and/or maintenance would take place.

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18. The operator shall meet all Federal and State Air Quality standards and regulations, and be in possession of all necessary permits. These permits shall be on file with the BLM and the operator is required to supply the BLM with copies of these permits before operations begin.
19. Operations which generate fugitive dust emissions shall be curtailed when wind speeds exceed 30 MPH.
20. Additional mitigation measures shall be implemented if fugitive dust emissions exceed the Mojave Desert Air Quality Management District (MDAQMD) standards or California Health and Safety Code Section 41700 and 41701.
21. MDAQMD permits shall be kept current.
22. Contamination of soils with hydraulic fluids, oils or other lubricants is not permitted. A tarpaulin, plastic, or other protective device is required to prevent fluid/soil contact. Contaminated soils must be handled and disposed of in accordance with Environmental Protection Agency regulations for hazardous wastes. The operator shall be liable for all costs associated with remediation of hazardous wastes.
23. Reclamation shall include the following:
  - a. All cacti and yucca shall be saved for transplanting purposes. These plants shall be protected, stored in 5-gallon containers, watered and placed in a shaded environment during the period of storage. The aforementioned plants shall be replanted according to the guidelines supplied by the BLM botanist.
  - b. The pit and new authorized access roads shall be ripped and native seed shall be spread over all disturbed areas. Planting of native seed shall be done in accordance with guidelines to be supplied by the BLM botanist upon prior notification by the operator to BLM when reclamation is to be initiated.
  - c. All pit slopes shall be reduced not to exceed 1:1 and all waste rock stockpiles shall be spread within the pit area.
  - d. The operator shall notify the Authorized Officer when reclamation is completed to allow for inspection of reclamation activities.
24. The operator(s) shall immediately cease operations upon encountering any cultural resources (prehistoric/historic sites or objects) and/or

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paleontological resources (fossils) during permitted operations, bring the resources to the attention of the Authorized Officer and maintain the integrity of such resources pending subsequent investigation.

25. Actions other than those explicitly approved by the Bureau of Land Management, which result in impacts upon archaeological or historical resources, shall be subject to the provisions of the Archaeological Resources Protection Act of 1979, as amended, and the Federal Land Policy and Management Act of 1976. These statutes protect cultural resources for the benefit of all Americans. As property of the United States, no person may, without authorization, excavate, remove, damage, or otherwise alter or deface any historic or prehistoric site, artifact or object of antiquity located on public lands.
26. The operator shall prepare a reclamation cost estimate in accordance with regulations at 43 CFR 3809.500 for review and approval by the Authorized Officer. An irrevocable financial assurance instrument in an amount to be determined and approved by the Authorized Officer shall be delivered to BLM, Needles Field Office prior to initiation of mining operations. This bond shall be made payable to the following agencies, as shown: Bureau of Land Management, Needles Field Office, or County of San Bernardino, or State Department of Conservation. Return or release of the bond shall be contingent upon completion of satisfactory reclamation as determined by the Authorized Officer.
27. Prior to widening any portion of existing roads to allow safe passage of equipment and vehicles, the operator shall notify BLM and provide the location of the proposed widening. Road widening shall be limited to Mesquite Dry Lake Playa unless the operator can demonstrate a need for other locations based upon safety considerations. No road widening is allowed without the specific written approval of the Authorized Officer.
28. Portable toilets shall be provided in appropriate numbers for the numbers of employees on site in accordance with County Health Codes and shall be regularly serviced and dumped. Toilets will be adequately anchored down to prevent from being tipped over and contents spilled on soil surface.
29. Fuel, oil, antifreeze, and all other fluids, which fall under hazardous and special materials and the proposed action, would produce solid, hazardous, and special wastes in the event of an accident, and/or are required to have a Material Safety Data Sheet available at the location of use, shall be properly/legally stored. Sealed Containments shall be installed under all generators, and tanks, and state/county permits/licenses required for tanks and other storage shall be secured prior to use on site.

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30. The proponent and associated project personnel shall comply with all Federal, State and County regulations and codes, including but not limited to the Occupational Safety and Health Administration and Environmental Protection Agency regulations. Requirements include provisions of the Resources Conservation and Recovery Act, Comprehensive Response, Compensation, and Liability Act, and Clean Water Act.
31. The Dalton trucking General Field Projects Health and Safety Plan (HASP) shall be maintained on the project site and followed by all employees at all times that work is in progress, in accordance with 29 Code of Federal Regulations (CFR) 1910.120 and 1926.65.
32. The HASP shall include a separate site-specific Emergency Response Plan (ERP) section of the HASP for the project in accordance with 29 CFR 910.120(b)(4)(ii)(H) and 1926.65(b)(4)(ii)(H). The ERP shall be developed and implemented prior to beginning site operations
33. A copy of the HASP (including the ERP) shall be submitted to the Needles Field Office and approved by the Authorized Officer prior to beginning site operations.
34. Prior to mobilization on the site, all equipment should be inspected to be sure it is operating correctly and free of leaks. Equipment should be inspected daily to ensure that there are no discharges. Equipment maintenance activities should not be conducted on the site. Appropriate spill containment material should be kept on site. All fuels and other materials used should be contained within the equipment or stored in appropriate containers. All materials should be removed from the site upon completion of construction activities.
35. The operators should develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities. A copy of this plan should be provided to the Authorized Officer prior to initiating the proposed activity.
36. A copy of the list of project related OSHA hazardous chemicals shall be provided to the Needles Field Office.
37. Material Safety Data Sheets for fuel, oil, antifreeze, and all other chemicals characterized as hazardous by the OSHA shall be made available at the location of use and shall be properly/legally stored. Sealed containments shall be

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installed under all generators, and tanks, and state and county permits required for tanks and other storage shall be secured prior to use on site.

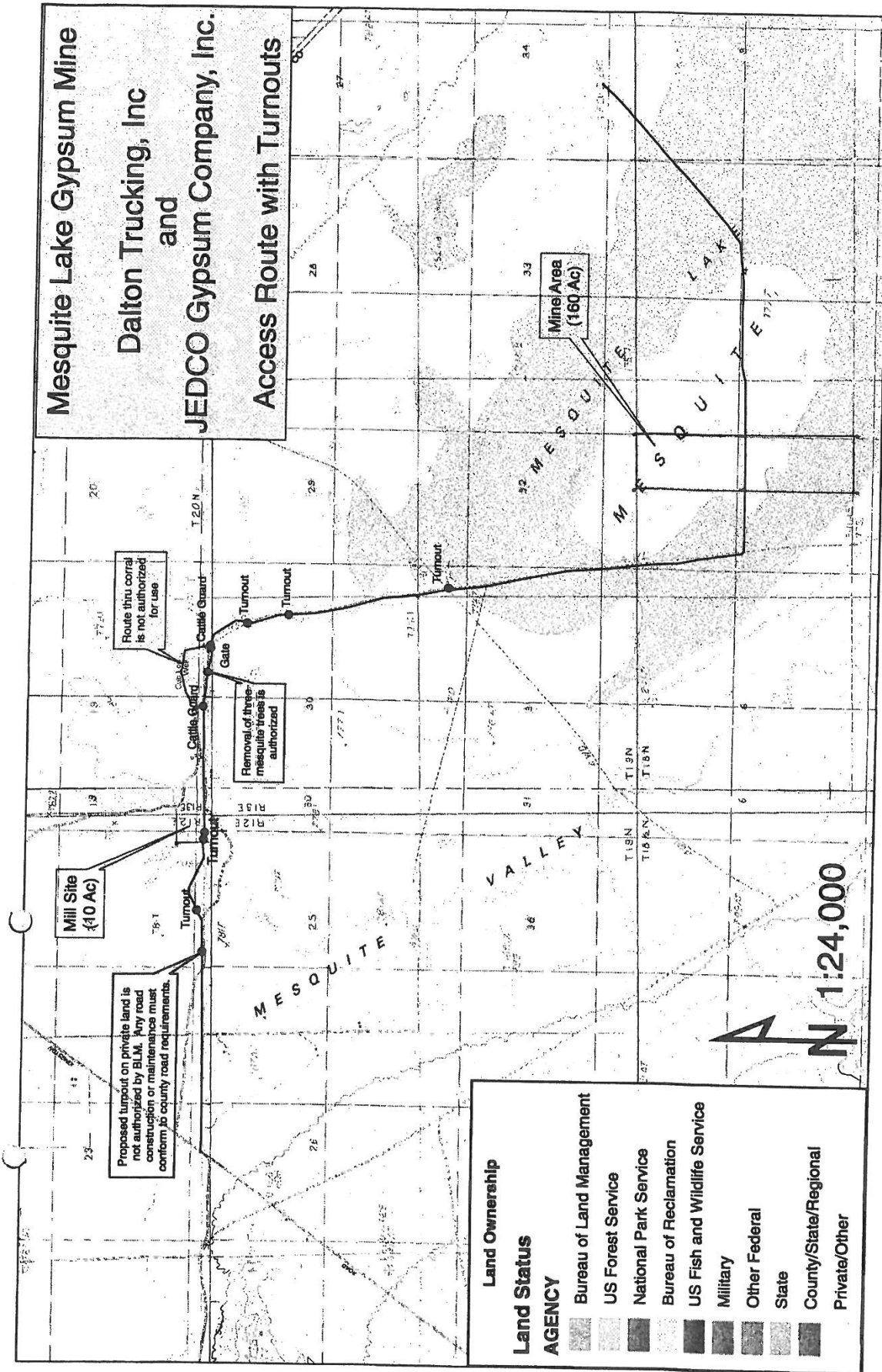
38. Fuels, oils, and all hazardous materials shall be transported and stored on site in U.S. Department of Transportation and OSHA approved containers, within a containment area with an impermeable lining. A spill response/removal kit for fuels/oils, consisting at a minimum of equipment and supplies to address the quantities of materials on site, shall be on site for containment of spills and legal removal of contaminated soils.
39. No regulated hazardous, radioactive, "special" or "universal" wastes shall be brought onto the site without the prior approval of the Authorized Officer.
40. If any serious injury or death occurs in connection with this operation, the operator shall notify the BLM immediately and follow the initial report within 24 hours after the incident/accident with written report detailing the incident and resulting actions. The BLM shall supply the necessary forms for reporting the incident and copies of ambulance and emergency room reports must also be submitted to the BLM.
41. All salt cedar trees in the project vicinity which have not been removed shall be removed. GPS locations and approximate heights of these individuals have been previously provided by the Needles Field Office invasive species coordinator. Removal of these trees shall be done during the winter of 2011-2012 between October and February when the salt cedar is not in seed. Removal shall be done by mechanical means. This shall involve a backhoe or similar device used to pull the entire tree including the root system from the ground. Trees shall be stacked in a location away from any areas with standing water. If any additional trees appear in the future they shall also be removed.
43. Before entering the site, all vehicles shall be inspected for any invasive plant materials and seeds. Any vehicles containing mud or vegetative materials shall be cleaned. This shall be done offsite using a wash station, compressed air station or a commercial car wash that shall wash the under carriage of the vehicle. Possible locations for washing of the vehicles include Primm, Jean or Las Vegas, NV. The method used to remove invasive materials from the vehicle shall be reviewed by the BLM invasive weed coordinator prior to approval.
44. Before entering the site all clothing and footwear shall be checked and any plant material, especially stickers, and burs that may contain invasive non-native plant seeds shall be removed and disposed of in a trash receptacle.

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45. There shall be a briefing on the importance of preventing the spread of noxious weeds in areas that are not currently infested, and controlling the proliferation of weeds already present. Impacts of noxious weeds on native vegetation, wildlife, and fire activity shall be discussed including an explanation of how invasive grasses provide a fine fuel understory which can spread fire from shrub to shrub and how this has historically been absent in the native desert ecosystem.
46. The operator shall install two cattle guards to replace existing gates at the locations shown on the attached map within 60 days of the date of this authorization. The operator shall be responsible for maintenance and repair of the cattle guards for the life of the mining operation.

**Advisory:**

1. An approved California State Mining and Reclamation Act permit is required prior to initiating operations.
2. The operator will be responsible for any damage or loss of livestock or herding fees as a result of this action.
3. This authorization applies only to public lands and does not infer any authorization for any use of private lands. The operator must reach agreement with private land owners for any access across or other use of private lands.
4. Another operation has BLM authorization to conduct operations in the immediate area. All operations must be conducted in a safe and courteous manner to avoid conflict or interference with all other authorized uses of the public lands.



## **EXHIBIT E**

### **RESPONSE TO COMMENTS**

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**Exhibit E**

**RESPONSE to COMMENTS**  
**for the**  
**Mesquite Lake Mine Reclamation Plan**  
**MITIGATED NEGATIVE DECLARATION**  
**AP 20120002**

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**County of San Bernardino**  
**Land Use Services Department**

**December 3, 2012**



California Natural Resources Agency  
DEPARTMENT OF FISH AND GAME  
Inland Deserts Region  
Blythe Field Office  
P.O. Box 2160  
Blythe, California 92225  
[www.dfg.ca.gov](http://www.dfg.ca.gov)

EDMUND G. BROWN, Jr. Governor  
JOHN McCAMMAN, Director



October 15, 2012

Ernie Perea  
County of San Bernardino  
Land Use Services Department – Advance Planning Division  
385 N. Arrowhead Avenue  
San Bernardino, CA 92415-0184

Re: Mitigated Negative Declaration and Initial Study for the Proposed Mesquite Lake Mining and Reclamation Plan project located in Mesquite Valley, California – SCH No. 2012091040

Dear Mr. Ernie Perea:

The Department of Fish and Game (Department) appreciates this opportunity to comment on the Mitigated Negative Declaration (MND) for the Mesquite Lake Mining and Reclamation Plan project. The Department is responding as a Trustee Agency for fish and wildlife resources [Fish and Game Code sections 711.7 and 1802 and the California Environmental Quality Act Guidelines (CEQA) section 15386] and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines section 15381), such as a Lake and Streambed Alteration Agreement (Section 1600 *et seq.*) or a California Endangered Species Incidental Take Permit (Fish and Game Code Sections 2080 and 2080.1). For this project the Department will be acting as both a Responsible and Trustee Agency.

The project involves a small surface mining operation to recover gypsum (gypsite) from the surface of Mesquite Dry Lake. The proposed mine site, which consists of 170 total acres, is located in Mesquite Valley, California, approximately five miles south of the town of Sandy Valley, Nevada. The gypsum occurs at the surface as wind blown gypsum sand and as a bedded evaporate deposit at depth. The gypsum sand contains some silt and clay impurities but is pure enough to be used as an agricultural soil additive without the need for any chemical beneficiation.

The operator will confine the surface disturbance area to a maximum of 160 acres in W ½ E ½ of Section 5, T. 18 N., R. 13 E. The operator will access the site by existing roads and approximately 2500 feet of new road, with a maximum width of twelve feet, from the existing county road to the site. The lake bed surface is flat and little if any preparation will be required for the "construction" of the new road segment. Other road work will consist of routine occasional maintenance during the life of the operation and will be confined to within the existing disturbed roadway. Removal of wind blown gypsum sand drifts are the primary source of the need for occasional maintenance.

*Conserving California's Wildlife Since 1870*

Some areas of road widening not to exceed 20 feet in overall width will be necessary in selected areas on the roads that are located on Mesquite Dry Lake playa, to allow safe passage of vehicles from two directions. These selected areas will be confined to pull-off areas at strategic places and will not exceed 50 feet in length. The access route and pull-off areas will be identical to the approved Kummerfeld sites. Gypsite or interburden waste rock will be applied to some portions of the existing roads to suppress dust and repair or prevent rutting.

Information obtained from previous drilling has shown that the deposit, at shallow depths, is minable to a depth of approximately five (5) feet from the surface.

The operator will scrape the gypsum from the surface using a medium-sized bulldozer (e.g. Caterpillar D7 or D8) or front end loader. A front end loader will be used to move the gypsite to a crusher and screening assembly. The gypsite will be crushed as necessary and screen into three sizes. The sized material will be stockpiled adjacent to the loading site. A diesel engine powered conveyor belt loader measuring approximately fifty feet in length and fifteen feet in height will be used to top load semi trailer bulk haulage trucks. These haulage trucks will transport the bulk product to market via the proposed access routes.

Operations would begin as soon as possible. Initial operations would consist of one, eight to ten hour shift per day, six days per week, with a crew of three or four persons. The anticipated production rate would be approximately 325 tons per day (80,000 to 100,000 tons per year). Assuming a weight of 1.9 tons per cubic yards, this would equate to approximately 50,000 cubic yards per year. Mining would be conducted year round January through December.

Maximum mine depth would be five feet; however, additional data could increase this depth and if so would be accomplished with submission and approval of a plan modification to BLM. There is little defined soil development at the surface and the surface is considered useable product so no topsoil stockpiling would be conducted. With depth the deposit is expected to become harder and more consolidated. When the more consolidated parts of the deposit are encountered at depth, a caterpillar mounted ripper would be used to loosen the bedded gypsum. Blasting or other uses of explosives are not planned.

Equipment on site would consist of a medium-sized dozer, front end loader, scales, screener, conveyor belts, haul trucks, semi trailer bulk trucks, pickup fuel truck, diesel fuel tank, company or personal support vehicles, self contained portable toilet(s), water tank, small office and break room mobile trailer, and occasional pickup mounted auger drill rig. No onsite residency would be permitted and refuge and human wastes would be regularly disposed of in appropriate offsite, permitted facilities (landfill, wastewater hauler).

Pit walls would not exceed a 2:1 (vertical to horizontal) slope while the operation is active and would be reduced to a 1:2 (vertical to horizontal) slope during periods of

temporary non-operation and final closure. The amount of interburden within the deposit has not been determined. Thin beds of interburden waste would be stockpiled within the 160 acre site for return and spreading within the pit area upon closure. Thick beds of interburden waste rock would define mine depth since its removal would be uneconomic. During periods of temporary inactivity or final closure, all equipment and refuse would be removed from the site.

As mining progresses, the pit slopes may be up to 5 feet in height with slopes ranging less steep than 5H:1V. The project boundary's perimeter slopes are planned to be reclaimed concurrently to an overall slope gradient of 5H:1V during operations to meet reclamation performance standards as stated in Article 9, Reclamation Standards §3704(d) in 14 CCR. Phased reclamation will take place on an annual basis. Prior to mining, the top 6 inches of material will be scraped from the area to be mined into small perimeter berms. The area mined would average approximately 6 acres per year if maximum production is realized. Upon completion of mining in this area, the site would be scarified and the surface material graded into place. The surface material used to create the elevated stockpile area will be re-graded into place. Revegetation would be conducted and the area flagged off to avoid further disturbance.

Final reclamation will be undertaken upon completion of mining operations. Any remaining slopes will be reduced to 5H:1V and compacted areas scarified to a depth of one foot during final contouring and prior to revegetation of mine areas. Any waste material followed by salvaged surface material will be spread evenly within the pit area and revegetation conducted. The reclaimed end use will be open space and wildlife habitat.

The Reclamation Plan requires the implementation of revegetation activities as mining phases are completed at Mesquite Dry Lake and at the operation mill site. Baseline data was collected at both sites and success criteria was calculated. Based on the results of the baseline surveys, successful revegetation of the mill site would be achieved at 6.5% cover, density of 12 shrubs per 100m<sup>2</sup> plot, and 1 shrub species per 100m<sup>2</sup> plot. Successful revegetation of the lakebed would be achieved at 2.0% cover, a density of 1 shrub per 100m<sup>2</sup> plot, and 1 shrub species per 100m<sup>2</sup> plot. Due to the unique site conditions at the mine site that include lack of top soil, frequent winds, and annual flooding, it is recommended that optimal conditions for revegetation be created on portions of the site. Revegetation of the lakebed would be limited by the availability of salvage material for the creation of aeolian sand dunes that mimic the surrounding undisturbed lakebed. The purpose of the dunes is to increase the potential for plant establishment and survivorship. Annual assessments of the reclamation area will be conducted by a qualified botanist to determine the success of the revegetation effort until said criteria are achieved.

As part of this revegetation program, the following two methods will be used for revegetation:



1. Broadcasting Seeding – Commercially available seeds of local native species will provide the broadcast seed mix. Revegetation recommendations as follows:

*Mill Site*

Site preparation for revegetation at the mill site area should rip compacted soil surfaces and create textured rough soil surfaces with shallow rills and furrows to create optimal conditions for revegetation. The soil mix should include shadescale, iodine bush, inkblight, and honey mesquite.

*Dry Lakebed*

Site preparation of the dry lakebed will require the creation of undulating aeolian dunes that mimic those of the surrounding undisturbed lakebed for revegetation. Due to the harsh environmental conditions, conventional scarifying of soils prior to seeding is not recommended. In order to improve the potential for revegetation it is suggested that enhanced revegetation areas be created in the form of undulating aeolian dunes utilizing salvage material as available. It is anticipated that these dunes will be more resilient to withstand the flooding and wind conditions and will therefore increase the potential for plant establishment and survivorship. Revegetation activities should be conducted with a seed mix comprised of shadescale and iodinebush seeds.

2. Transplanting – The approved POO requires the salvaging of all cacti and yuccas from the project area. The project site does not have any cacti or yucca. Prior to disturbance of any areas, any cactus and yuccas which meet the County's criteria for native plant protection, will be identified and removed by a qualified botanist or arborist and transplanted immediately adjacent onsite.

Revegetation shall be done in accordance with the Revegetation Plan and guidelines supplied by the BLM botanist upon notification by the operator that reclamation is to be initiated. Revegetation will commence upon completion of mining in phased mining areas. Note that during operations, areas where mining has been completed to the 5-foot depth will be flagged off for avoidance, scarified, covered with stockpiled surface material, and revegetated. Only locally occurring native seeds and salvaged cacti and yucca tolerant to existing soil and rainfall conditions will be used.

Revegetation efforts will be annually monitored after seeding and planting of the revegetated areas and will be summarized annually as part of the overall monitoring program. Monitoring will continue as required by the BLM or for a minimum of five years after completion of mining. Due to the extreme climate, soil conditions, and existing sparse vegetation, standard success criteria based on plant densities may

not be representative. Baseline plant transects will be conducted and the revegetated areas will be compared to the baseline data.

Equipment and any portable structures will be removed from the project site. No permanent structures are planned for the site. Any remaining refuse will be disposed of at an appropriate disposal site.

Upon reclamation, the site will appear as a shallow 5-foot deep vegetated depression with 5H:1V side slopes. With time, it is likely that the depression will refill due to water and wind erosion. Any stockpiles of marketable material will be removed and overburden will be spread within the pit.

#### Department Comments

The Department advises that any biological habitat assessments or walkovers be conducted within a year of distribution of the CEQA document. A thorough assessment of rare plants and rare natural communities should follow the Department's November 2009 guidance with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. The guidance document can be found at the following link:  
[http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols\\_for\\_Surveying\\_and\\_Evaluating\\_Impacts.pdf](http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols_for_Surveying_and_Evaluating_Impacts.pdf)

Habitat assessments that identify the possibility of listed, threatened or endangered plants or animals should also provide the results of any focus surveys in the CEQA document. The Department requests that data found through assessments and surveys be submitted to the California Natural Diversity Database (CNDDDB) using the online field survey form along with a map indicating rare populations or other key information. The CNDDDB form to report findings can be found at the following link:  
[http://www.dfg.ca.gov/biogeodata/cnddb/submitting\\_data\\_to\\_cnddb.asp](http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp).  
CEQA documents that rely on future surveys or regulatory compliance (with the exception of pre-construction surveys for burrowing owl or bird nests) as mitigation may not satisfy the Department's obligations under CEQA and may require future supplemental documents processed via CEQA.

The following sensitive species were found on or near the proposed project site according to the CNDDDB:

Desert tortoise (*Gopherus agassizii*)  
Mesquite bosque  
Preuss' milkvetch (*Astragalus preussii* var. *preussii*)  
Pahrump Valley buckwheat (*Eriogonum bifurcatum*)



The Department is specifically concerned with potential temporary or permanent adverse impacts to the desert tortoise, which is federally and state listed as threatened.

The desert tortoise inhabits river washes, rocky hillsides, and flat desert having sandy or gravelly soil. Creosote bush, burrobush, saltbush, Joshua tree, Mojave yucca and cacti are often present in the habitat along with other shrubs, grasses, and wildflowers. The desert tortoise ranges from southern Nevada and extreme southwestern Utah south through southeastern California and southwestern Arizona into northern Mexico. In California, desert tortoises occur in northeastern Los Angeles, eastern Kern, and southeastern Inyo counties, and over most of San Bernardino, Riverside, and Imperial counties.

The desert tortoise is severely threatened by the cumulative effects of habitat loss, degradation, fragmentation from construction, urbanization, development, population losses due to disease, and human-caused impacts. Habitat degradation has occurred, due to a combination of human-related activities including livestock grazing, introduction of exotic plant species, energy and mineral development, and off-highway vehicle (OHV) use. Populations can also reach non-recoverable levels through fragmentation into smaller populations and increased mortality within these fragmented populations. Urbanization and development of desert habitat poses a significant and increasing threat to the desert tortoise. The increase in housing, industrial, and commercial developments and corresponding transportation corridors has altered the quality of desert tortoise habitat and led to its fragmentation. An increase in the number of roads exposes a larger portion of the desert tortoise population to routine traffic and illegal OHV activity. For more information regarding desert tortoise, please visit:

[http://www.dfg.ca.gov/wildlife/nongame/t\\_e\\_spp/docs/2004/t\\_ereptiles.pdf](http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/docs/2004/t_ereptiles.pdf).

Desert tortoises are known to occur in the project vicinity, and the area supports suitable desert tortoise habitat. To our knowledge, no recent desert tortoise surveys have been conducted in the immediate footprint of the 170 acre project site. Due to a lack of current survey data for the proposed project areas surrounding the 170 acre site, the Department recommends that updated desert tortoise focused surveys should be conducted in all of the proposed project areas. Without updated desert tortoise surveys, the MND has not adequately established the baseline condition as it pertains to presence or absence of desert tortoise as well as density, distribution, and quality of habitat in the project area. This information is critical for assessing impacts the proposed project will have on desert tortoise and its associated habitat as well as for developing appropriate mitigation measures to offset such impacts.

#### California Endangered Species Act (CESA)

A preliminary review of records from the CNDDDB and other area resources indicate that the desert tortoise may occur in the project vicinity. The Department has determined that the proposed project as described in the MND and Initial Study has the potential for temporary and/or permanent adverse effects on desert tortoise along with their associated habitat and has the potential to result in incidental take. The take of threatened and endangered species is prohibited under the California Endangered Species Act (CESA). "Take" is defined in Section 86 of Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for incidental take to otherwise lawful development projects. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project caused losses of listed species populations and their essential habitats.

The Department may authorize the take of a listed species for a project if the project has the potential to take a species listed under CESA. The MND does not acknowledge permitting requirements under CESA for authorizing incidental take of a state listed threatened, endangered, and/or candidate species. The project as proposed has the potential to adversely affect the desert tortoise and may impact other species listed under CESA both onsite and offsite. An Incidental Take Permit is required pursuant to Fish and Game Code Section 2081. Temporary or permanent loss of acreage and the direct and/or indirect impacts to adjacent habitats is significant and could require modification to the project's design, additional mitigation measures, and in-kind replacement requirement for impacted habitats. The Department recommends that the project proponent's comply with CESA prior to implementation and commencement of project activities. The Department acknowledges that this may have been an oversight and looks forward to initiating discussions on permitting requirements.

Sections 2081(b) and (c) of the Fish and Game Code allow the Department to issue an Incidental Take Permit for a State listed threatened and endangered species only if specific criteria are met. These criteria are reiterated in Title 14 CCR, Sections 783.4(a) and (b), and are as follows:

- 1) The authorized take is incidental to an otherwise lawful activity;
- 2) The impacts of the authorized take are minimized and fully mitigated;
- 3) The measures required to minimize and fully mitigate the impacts of the authorized take:
  - a. are roughly proportional in extent to the impact of the taking on the species,
  - b. maintain the applicant's objectives to the greatest extent possible, and
  - c. are capable of successful implementation;
- 4) Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures; and

- 5) Issuance of the permit will not jeopardize the continued existence of a State-listed species.

The Department recommends submitting an Incidental Take Permit application early on to the DFG Regional Office where the permitted activity will take place. Modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. Applications for incidental take permits must include all of the information listed in the California Code of Regulations, Title 14, sections 783.2 and 783.3. Consultation with a qualified wildlife biologist should be considered if the project applicant cannot completely respond to the species-specific information requested. Include all CEQA documents prepared in association with any other related permitting requirements (e.g., local agencies, etc.) to assist the Department in timely processing of the application. For instructions and additional information, please visit:

[http://www.dfg.ca.gov/habcon/cesa/incidental/CodeRegT14\\_783.pdf](http://www.dfg.ca.gov/habcon/cesa/incidental/CodeRegT14_783.pdf).

#### Lake and Streambed Alteration Agreement (LSAA)

Fish and Game Code section 1600 et seq. require project applicants to notify the Department prior to any activity that will divert, obstruct or change the natural flow or the bed, channel, or bank (which includes associated wetland/riparian resources) of a river, stream or lake, or use material from a streambed. Streams include, but are not limited to, intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams, and watercourses with subsurface flow. As it pertains to this project, the Department has direct authority under Fish and Game Code 1600 et seq. for those areas designated as wetlands (defined above), as well as all intermittent and ephemeral drainages/depressions, desert washes, and blue-line streams occurring within all areas affected directly or indirectly by any and all components of the project.

A Lake and Streambed Alteration Agreement (LSAA) notification package must be completed and submitted with the appropriate fees to the Eastern Sierra and Inland Deserts Region (Region 6) LSA Program. The Department recommends submitting a notification early on, because modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Streambed Alteration notification package, please visit:

<http://www.dfg.ca.gov/habcon/1600/forms.html>.

The proposed project as described may require a master agreement versus a standard agreement as a combination of multiple activities. "Master agreement" means an agreement with a term of greater than five years that: (1) covers multiple projects that are not exclusively projects to extract gravel, sand, or rock; not exclusively projects that are included in a timber harvesting plan approved by the California Department of Forestry and Fire Protection; or not exclusively routine maintenance projects that the entity will need to complete separately at different



time periods during the term of the agreement; and (2) describes a procedure the entity must follow for construction, maintenance, or other projects the agreement covers. "Standard agreement" means any agreement other than an agreement for gravel, rock, or sand extraction, an agreement for timber harvesting, an agreement for routine maintenance, a master agreement, or a master agreement for timber operations.

An example of a project for which the department would issue a master agreement is a large-scale development proposal comprised of multiple projects for which specific, detailed design plans have not been prepared at the time of the original notification. Notification for the LSAA is required for the following activities as described in the proposed project:

- 1) A gravel/sand/rock extraction agreement on site at the dry lakebed,
- 2) A standard agreement for the mill site; and,
- 3) A standard agreement for the 2500 feet of new road construction.

The master agreement will specify a process the Department and entity will follow before each project begins and may identify various measures the entity will be required to incorporate as part of each project in order to protect fish and wildlife resources. As a general rule, the process specified in the master agreement will require the entity to notify the Department before beginning any project the agreement covers and submit a filing fee based on the cost of the project. After the department receives the notification, it will confirm that the master agreement covers the project and propose measures to protect fish and wildlife resources in addition to any included in the master agreement, if such measures are necessary for the specific project. The following information will be required for the processing of a LSAA and the Department recommends incorporating this information to avoid subsequent CEQA documentation and project delays.

- 1) Delineation of lakes, streams, and associated habitat that will be temporarily and/or permanently impacted by the proposed project (include an estimate of impact to each habitat type);
- 2) Discussion of avoidance measures to reduce project impacts; and,
- 3) Discussion of potential mitigation measures required to reduce the project impacts to a level of insignificance.

Section 15370 of the CEQA guidelines includes a definition of mitigation. It states that mitigation includes:

- 1) Avoiding the impact altogether by not taking a certain action or parts of an action,
- 2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation,
- 3) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment,

- 4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action,
- 5) Compensating for the impact by replacing or providing substitute resources or environments.

In the absence of current biological survey data and specific mitigation measures in the CEQA documents, the Department believes that it cannot fulfill its obligations as a Trustee and Responsible Agency for fish and wildlife resources. Permit negotiations conducted after and outside of the CEQA process deprive the public of its rights to know what project impacts are and how they are being mitigated in violation of CEQA Section 15002.

Thank you for this opportunity to comment. Should you have any questions or concerns, please contact Victoria Chau at (760) 922 – 6783 or [vchau@dfg.ca.gov](mailto:vchau@dfg.ca.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Hayes", followed by the word "FOR" in blue capital letters.

Chris Hayes  
Deputy Regional Manager

Cc: Rebecca Jones  
California Department of Fish and Game

## Response to California Department of Fish & Game

---

The proposed project is entirely on federal lands managed by the Bureau of Land Management (BLM). The BLM reviewed and approved the project per their Record of Decision on January 30, 2012 (DOI-BLM-CA-D090-2011-0029-EA). The EA included review of biological resources and determined no impact would occur to sensitive wildlife and plant species. The sites were found not to be desert tortoise habitat and the mill and lakebed sites were not habitat for any sensitive wildlife or plant species per the EA findings.

Per the California Department of Fish and Game's (CDFG) letter of October 15, 2012, the CDFG provided comments in three areas including potential occurrence of desert tortoise, potential occurrence of sensitive plant species, and the required notification to CDFG under F&G Code 1600 for a Lake and Streambed Alteration Agreement.

In response to the above comments, the County requested the applicant to update desert tortoise and sensitive plant studies to reaffirm the previous conclusions and findings made through the BLM decision record and EA. Attached herein are updated studies on the presence/absence of desert tortoise in the project areas and the potential occurrence of sensitive plant species.

The desert tortoise study found no desert tortoise sign and there is no desert tortoise habitat found in or adjacent to the project areas as the soils and vegetation are not favorable desert tortoise habitat.

Plant surveys conducted for the preparation of the revegetation plan per OMR and County comments and focused sensitive plant survey conducted on late October 2012, did not find any of the sensitive plant species listed. The dry gypsum lake bed site consisted only of very isolated islands of two plants including shadescale (*Atriplex confertifolia*) and iodinebush (*Allenrolfea occidentalis*). The mill site was dominated by inkblight or Mojave seabligh (*Sueda moquinii*) and also included the two species above and honey mesquite (*Prosopis glandulosa*). One acre of mesquite bosque, which is considered a natural community plant is located on the southwestern portion of the property. In order to mitigate impacts to this natural community, the following mitigation measure will be added to the project:

*BIO-16. The approximately one acre of mesquite bosque (a habitat type characterized by mesquite) located on the southwestern corner of the lakebed mine site be avoided by prominently marking this area in the field. In addition, the mill site boundaries should be prominently marked in the field to avoid any impacts to mesquite bosque habitat outside of the mill site.*

Mitigation Measure BIO- 13 is revised as follows to clarify the requirements for preventing the transport of invasive, non-native plant species to and from site:



*BIO-13: Reclamation should include the following:*

- a. All cacti and yucca, if any, should be saved for transplanting purposes. These plants should be protected, stored in 5-gallon containers, watered and placed in a shaded environment during the period of storage. The aforementioned plants should be replanted according to the guidelines supplied by the BLM botanist.*
- b. The mill area and new cross country access roads that are not designated to remain after reclamation and closure should be ripped to create textured rough soil surfaces with shallow rills and furrows and native seed should be spread over the sites per the approved Revegetation Plan. The mining areas within the lakebed will be reclaimed with designated "islands" to revegetate disturbed areas. Islands shall constitute approximately 10% of the total area to be reclaimed and covered with approximately 2 feet of salvaged surface material and seeded with native seed per the approved Revegetation Plan and in accordance with guidelines to be supplied by the BLM botanist upon notification by the operator to BLM when reclamation is to be initiated.*
- c. The operator should notify the County and BLM Authorized Officer when reclamation is completed to allow for inspection of reclamation activities.*

The CDFG also states that notification to CDFG under F&G Code 1600 for a Lake and Streambed Alteration Agreement will be required to avoid or reduce impacts to fish and wildlife resources. The County will condition the applicant to comply with the F&G Code 1600 and submit a notification package to the CDFG prior to implementation of the proposed project. It is not standard practice for the County to require, or for an applicant to submit, a notification package prior to a project being approved by the County's decision-making body.

The County understands that submittal of the notification package is not mitigation. However, the County has taken into account the BLM's EA and their decision record, OMR's review of the reclamation/revegetation plan, BLM, OMR, and County personnel site visits, the Reclamation Plan's design measures which incorporate applicable "mitigation," and in particular the updated desert tortoise and sensitive plant surveys to determine that no significant biological impacts are expected. Mitigation is only required if an impact is potentially significant. The Plan's design measures and conditions strive to avoid and minimize unnecessary area impacts through phasing; rectify vegetation impact through concurrent reclamation and revegetation; and reduce long-term impacts through final reclamation requirements of removing all equipment and stockpiles, regrading as necessary, revegetation, and ongoing monitoring and remediation during and after completion of mining. The CDFG may determine additional measures are required per their review of a formal notification package by the applicant.

The specific measures incorporated in the Reclamation Plan and/or included as Conditions of Approval include the following:

- Mining activities and the existing road are required to stay within planned boundaries as specified on the plot plans and verified by a professional surveyor and prominently marked in the field;

- No activities and no vehicles are allowed to occur outside said boundaries;
- Mining activities will occur in phases not to exceed approximately 6 acres at any one time;
- Concurrent reclamation is required within one year of completion of a mining phase and after completion of all mining;
- Reclamation includes the salvaging the top 6 inches of surface material and plant material from onsite islands of vegetation and storing said material along the site perimeter; and
- Revegetation is required per the Reclamation Plan as reviewed by OMR and includes the following:
  - Placing salvaged surface material and organic material into “islands” or “dunes” to mimic the existing conditions;
  - Adding additional seeds of native plants occurring onsite as listed in Plan;
  - Monitoring revegetation efforts and remediate as necessary to achieve the success criteria as recommended by OMR.

The County appreciates the CDFG comments and recommendations and has incorporated them into the Conditions of Approval.

**DESERT TORTOISE PRESENCE/ABSENCE SURVEY  
FOR  
MESQUITE LAKE GYPSUM MINE**

**Prepared for:**

**DALTON TRUCKING INC.**  
13560 Whittram Ave.  
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**Prepared by:**

**LILBURN CORPORATION**  
1905 Business Center Drive  
San Bernardino, CA 92408

**November 2012**

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## 1.0 PROJECT DESCRIPTION

Dalton Trucking Company plans to operate a 170-acre gypsum scraping or mining operation at Mesquite Dry Lake; the operation includes a 10-acre mill site and 160 acres on the dry lake bed. The gypsum material occurs on the dry lake bed surface as windblown gypsum sand and as bedded evaporate deposit at depth of not more than 5 feet.

The project is located in northeastern San Bernardino County approximately 5 miles south of Sandy Valley, Nevada, northeast of the Clark Mountains within the dry lakebed of Mesquite Lake (Figure 1). Specifically, the gypsum scraping operation occurs at W½ E½ of Section 5, Township 18 North, Range 13 East, San Bernardino Base and Meridian. Access to the site is available from Interstate-15 located south of the project site or from Stateline Road located northeast of the project site.

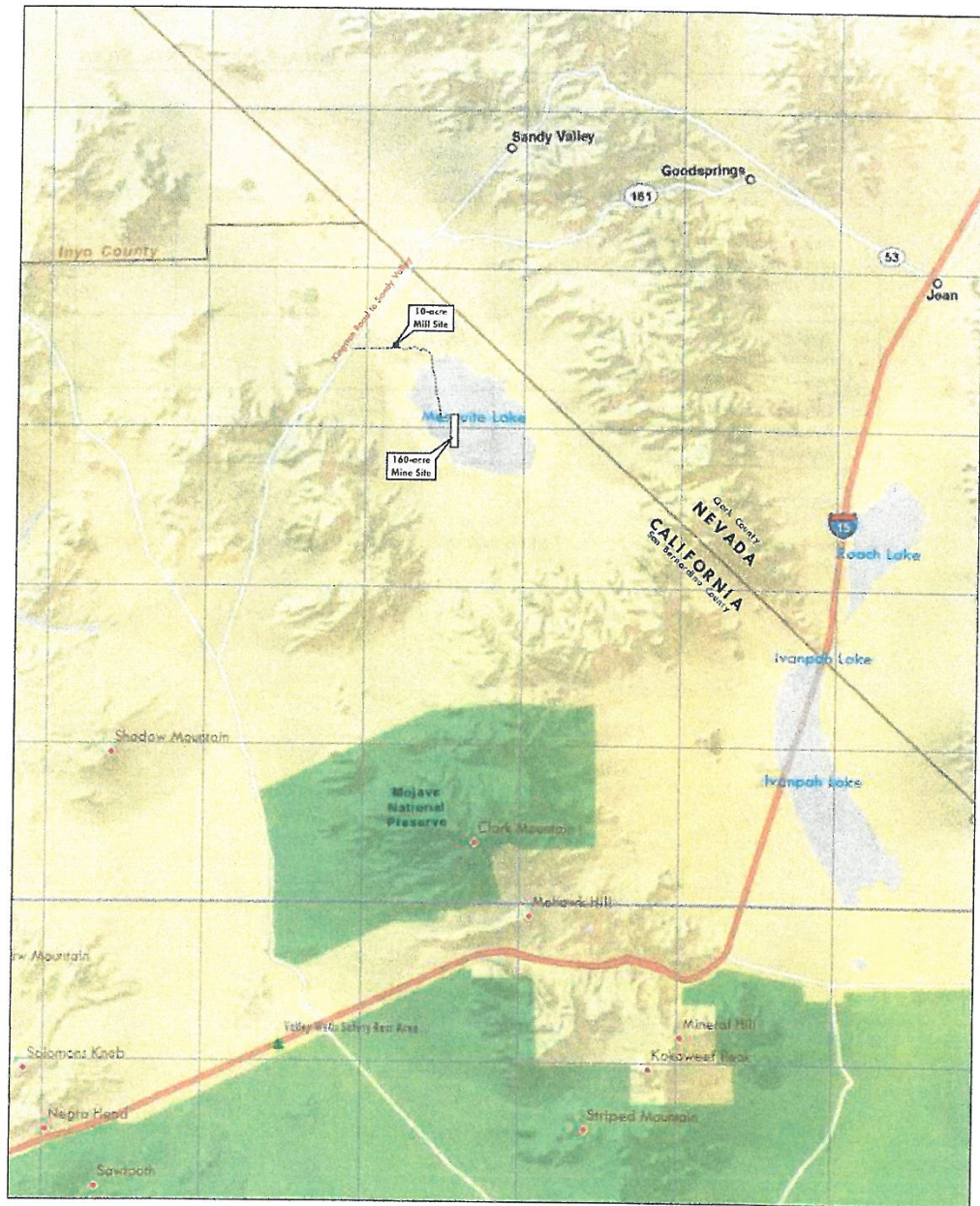
## 2.0 PURPOSE OF THE REPORT

The County of San Bernardino prepared a Mitigated Negative Declaration (MND) and Initial Study for the Proposed Mesquite Lake Reclamation Plan project in September 2012. As part of the public review process, a comment letter was received from the California Department of Fish and Game (CDFG). The CDFG determined that the Dalton Trucking Company Mesquite Dry Lake gypsum scraping operation occurs within the Desert Tortoise Habitat Overlay of the County of San Bernardino General Plan Biotic Resources Overlay map. The desert tortoise (*Gopherus agassizii*), is a listed threatened species in both the State and federal Endangered Species Acts. CDFG recommended that an updated desert tortoise focused survey should be conducted in the project areas. In response to the CDFG recommendation, this report has been prepared to evaluate the potential for desert tortoise in the 170-acre project site; portions of the project determined to occur in habitat suitable for the desert tortoise were surveyed according to the United States Fish and Wildlife Service protocol survey for the desert tortoise. The findings are reported herein.

## 3.0 METHODOLOGY

The 10-acre mill site and 160 acres of dry lake were evaluated to determine their suitability as desert tortoise habitat. The portions of the project area identified as potential desert tortoise habitat were evaluated in accordance with the United States Fish and Wildlife Service General Ecology and Survey Protocol for Determining Presence/Absence and Abundance for the Desert Tortoise – Mojave Population. A pedestrian survey of all areas of potential desert tortoise was conducted by walking transects 30 feet apart for 100% coverage of the project site and project areas of influence. All tortoise sign (live tortoises, shells, bones, scutes, limbs, scats, burrows, pellets, tracks, egg shells fragments, courtship rings, drinking sites, mineral licks, etc.) within the survey area were mapped using Global Positioning Systems (GPS).





**PROJECT LOCATION**  
Mesquite Lake Mine



## 4.0 RESULTS

Approximately 170 acres of the project boundaries were surveyed for potential desert tortoise habitat, on October 25, 2012.

### Mill Site

Ten acres in the proposed mill site area were surveyed. Three additional transects in the project area of influence were surveyed at 200 meters, 400 meters, and 600 meters around the mill site project boundary. Existing conditions at the mill site included graded pads and material stockpiling. Vegetation characteristic of the mill site prior to disturbance was recorded in the area of influence. No tortoise sign or live tortoise were observed in the additional area of influence transects. The area consisted of inkblight or Mojave seablight (*Sueda moquinii*) with shadescale (*Atriplex confertifolia*) as second dominant. Other observed shrub species were honey mesquite (*Prosopis glandulosa*) and iodinebush (*Allenrolfea occidentalis*). The proposed mill site area is within the active hydrologic inlet flow for Mesquite Dry Lake therefore making the mill site area subject to periodic floods. The vegetation found in this area is halophytic in nature, and very sparse in vegetative coverage. The braided stream channels adjacent to the mill site area have higher concentrations of honey mesquite-due to the higher amount of available water. This type of habitat is not very favorable to desert tortoise, and desert tortoise are rarely found in this habitat type (B. Bury and others- U.S. Fish and Wildlife Research).

### Mine Site

The 160-acre mine site in the Mesquite Lake bed was surveyed. The dry lakebed is not considered potential habitat for the desert tortoise due to the lack of appropriate vegetative or geologic cover, and the occurrence of recurring flooding during winter and monsoonal rain events. Sparse vegetation on the dry lake bed is characterized as shadescale (*Atriplex confertifolia*) dominant, with iodinebush as secondary dominant. The dry lake contains aeolian sand dunes, formed by the accumulation of sand around shadescale shrubs. The dry lakebed is predominantly devoid of vegetation.

## 5.0 RECOMMENDATIONS

No desert tortoise or desert tortoise sign were observed on the mill site or on the mine site. Furthermore, habitat occurring at the mill and mine sites is not considered suitable for desert tortoise.

## 6.0 CONCLUSION

No desert tortoise habitat was identified at the Dalton Trucking Company Mesquite Dry Lake gypsum mining operation 170-acre project site. Surveys for desert tortoise were conducted according to the USFWS protocol for determining presence/absence and abundance. The survey area encompassed the disturbed ten-acre mill site location, its area of influence, and the 160-acre mine site. No desert tortoise, tortoise burrows, or desert tortoise sign were observed within the survey area. The mine site project areas, were determined to not have desert tortoise habitat, due to frequent inundation of the area by winter and monsoonal rain events.

## 7.0 REFERENCES

Bury, R, Tsque C. Todd, DeFalco, Lesley A. *Distribution, Habitat Use, and Protection of the Desert Tortoise in the Eastern Mojave Desert*. U.S. Fish and Wildlife Service.

USFWS (United States Fish and Wildlife Service). Desert Tortoise Handbook *CHAPTER 4. GENERAL ECOLOGY AND SURVEY PROTOCOL FOR DETERMINING PRESENCE/ABSENCE AND ABUNDANCE FOR THE DESERT TORTOISE - MOJAVE POPULATION*

USFWS (United States Fish and Wildlife Service). 2008. *Draft revised recovery plan for the Mojave population of the desert tortoise (Gopherus agassizii)*. U.S. Fish and Wildlife Service, California and Nevada Region, Sacramento, California. 209 pp.

USFWS (United States Fish and Wildlife Service). Tortoise Pre-project Survey protocol 2010 Field Survey Season

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**RARE PLANTS REPORT  
FOR  
MESQUITE LAKE GYPSUM MINE**

*Prepared For:*

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**November 2012**

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## APPENDICES

- Appendix A Species Probability List
- Appendix B Observed Species List

## 1.1 INTRODUCTION

Dalton Trucking Company is operating a 170-acre gypsum scraping operation at Mesquite Dry Lake; the operation includes a ten-acre mill site and 160 acres of dry lakebed. The gypsum occurs on the dry lake bed surface as windblown gypsum sand and as bedded evaporate deposit at depth. Gypsum sand contains some silt and clay impurities but is pure enough to be used as an agricultural soil additive and other products without the need for any chemical beneficiation.

## 1.1 PROJECT LOCATION

The project is located in northeastern San Bernardino County approximately 5 miles south of Sandy Valley, Nevada, northeast of the Clark Mountains within the dry lakebed of Mesquite Lake (Figure 1). Specifically, the gypsum scraping operation occurs at W $\frac{1}{2}$  E $\frac{1}{2}$  of Section 5, Township 18 North, Range 13 East, San Bernardino Base and Meridian. Access to the site is available from Interstate 15 located south of the project site or from Stateline Road located northeast of the project site.

## 1.2 PURPOSE OF THE REPORT

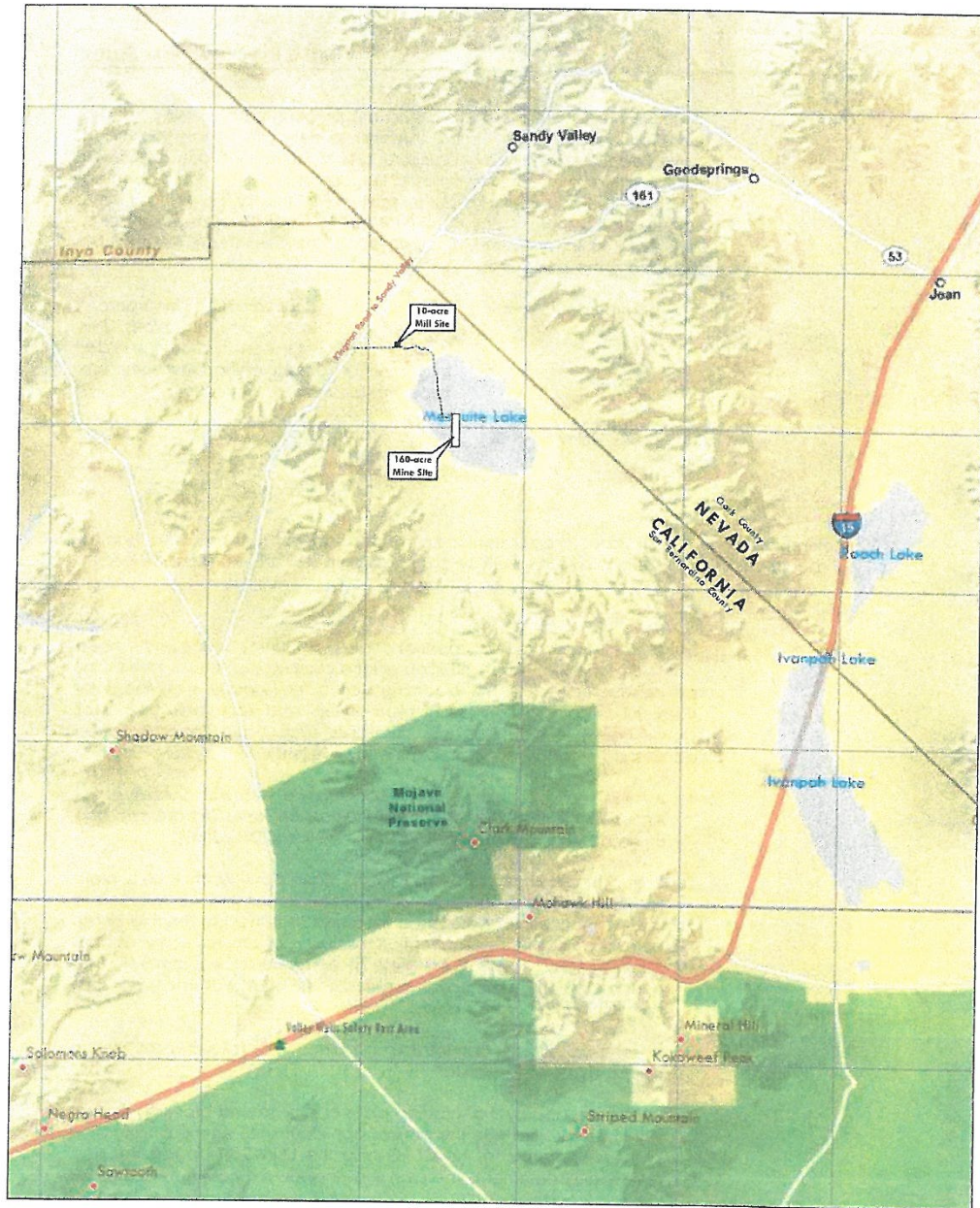
The County of San Bernardino prepared a Mitigated Negative Declaration (MND) and Initial Study for the Mesquite Lake Mining and Reclamation Plan project in September 2012. As part of the project public review process a comment letter was received from the California Department of Fish and Game (CDFG). The CDFG determined that the operation may include habitat for sensitive plant species and conducted a preliminary search in the California Natural Diversity Database of the project location and its vicinity. Records were found for sensitive plant species including: mesquite bosque (a habitat type characterized by mesquite [*Prosopis* sp.] series dominant plants found in xeric conditions), Preuss' milkvetch (*astragalus preussii* var. *preussii*), and Pahrump Valley buckwheat (*Eriogonum bifurcatum*). In response to the CDFG comment and preliminary findings for the potential of sensitive plant species and habitat in the project sites and its vicinity, the project sites were evaluated for the potential occurrence of sensitive plant resources. The findings are reported herein.

## 2.0 REGULATORY BACKGROUND

### Special Status Species

Special status species are those species that, because of their recognized rarity or vulnerability to habitat loss, or population declines are recognized by federal, state, or other agencies as deserving special consideration. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies, such as counties, cities, and special districts, to meet local conservation objectives. These species are referred to collectively as "special-status species" in this report. For purposes of this analysis, the term "special-status" includes those species that are:





**PROJECT LOCATION**  
Mesquite Lake Mine

- Federally listed or proposed (candidate) under the Federal Endangered Species Act (FESA, 50 Code of Federal Regulations [CFR] 17.11-17.12);
- State listed or proposed (candidate) under the California Endangered Species Act (CESA, 14 CCR670.5);
- Species and plant communities listed by the California Department of Fish and Game (CDFG) as rare or of special concern;
- Species or plant communities that meet the definition of threatened, endangered, or rare under the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15380 and Appendix G); and
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).

The potential for the project to impact a listed special status plant species was evaluated based on:

- Direct observation of the species in the project area or immediate vicinity during site visit(s);
- Data from the CDFG California Natural Diversity Data Base (CNDDB) and Biogeographic Information and Observation System (BIOS), as well as the United States Fish & Wildlife Service (USFWS) and California Native Plant Society species lists;
- Biological literature and professional expertise pertaining to the area;
- Known distributional range (CDFG) and/or critical habitat (USFWS) maps; and
- Suitable habitat (e.g. USFWS Primary Constitute Elements).

Finally, the potential for the project to impact a special status species was categorized within this report as follows:

- **Not Present:** The project site and/or immediate area does not support suitable habitat for a particular species and the project site is outside the species' known range.
- **Low Potential:** The project site and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside the project area.
- **Medium Potential:** The project site and/or immediate area provide suitable habitat for a particular species, and the proposed project may directly or indirectly affect suitable habitat, though no known populations would be affected.
- **Present/High Potential:** The project site and/or immediate area provide ideal habitat conditions for a particular species and suitable habitat would be directly affected. Known populations may be affected.

#### Federally-Listed Threatened or Endangered Species

##### *Federal Law Summary – Federal Endangered Species Law (FESA)*

Under the FESA, species may be listed as either endangered or threatened. If listed as “endangered”, a species is believed to be in danger of extinction throughout all or a significant portion of its range, while “threatened” means a species is likely to become endangered within the foreseeable future. Candidate species are plants for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the FESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. Finally, the FESA also requires the designation of “critical habitat” for listed species when “prudent and determinable.” Critical habitat includes geographic areas that contain the physical or biological features, also known as principle constituent elements (PCEs), which are essential to the conservation of the species and may need special management or protection.

#### State-listed Threatened or Endangered species

##### *State Law Summary – California Endangered Species Law (CESA)*

This act establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species, if reasonable, and prudent alternatives are available that would avoid jeopardy. Under the CESA, the CDFG is responsible for permitting the “take” of state-listed species. “Take” means hunt, pursue, catch, capture, or kill, or attempts to hunt, pursue, catch, capture, or kill state-listed threatened or endangered species. In contrast with the FESA, the CESA does not recognize harm and harassment as “take”. If the project will “take” a state-listed species, an Incidental Take Permit (ITP) is required under CDFG Code Section 2080.1. In addition, there are no state agency consultation procedures under CESA. For projects that affect both a state and federal listed species, compliance with FESA would satisfy CESA if the CDFG determines that the federal incidental take authorization is consistent with CESA.

#### State Species of Special Concern – California Environmental Quality Act (Section 15380(d))

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on federal or state lists of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria modeled after the definition in the FESA and CESA. CEQA Guidelines Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on a species that has not yet been listed by either the USFWS or CDFG (i.e., candidate species) would occur. Thus, CEQA provides an agency with the ability to protect a species from a project’s potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.



California Native Plant Society – Native Plant Protection Act (NPPA)

California's Native Plant Protection Act requires all state agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. Provisions of NPPA prohibit the taking of special-status plants from the wild and require notification to CDFG at least 10 days in advance of any change in land use. This allows CDFG to salvage listed plant species that would otherwise be destroyed. Project proponents are required to conduct botanical inventories and consult with CDFG during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

CNPS has created five "lists" in an effort to categorize degrees of concern. The CNPS lists are described as follows:

**List 1A: Plants Presumed Extinct in California**

The plants of List 1A (less than 30 taxa) are presumed extinct because they have not been seen or collected in the wild in California for many years. This list includes plants that are both presumed extinct in California, as well as those plants which are presumed extirpated in California. A plant is extinct in California if it no longer occurs in or outside of California. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

All of the plants constituting List 1A meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to the California Environmental Quality Act (CEQA).

**List 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere**

The plants of List 1B are rare throughout their range with the majority of them endemic to California. Most of the plants of List 1B have declined significantly over the last century. List 1B plants constitute the majority of the plants in CNPS' Inventory with more than 1,000 plants assigned to this category of rarity.

All of the plants constituting List 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

**List 2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere**

Except for being common beyond the boundaries of California, the plants of List 2 would have appeared on List 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the Endangered Species Act. Until 1979, a similar policy was followed in California. However, after the passage of the Native Plant

Protection Act, plants were considered for protection without regard to their distribution outside the state.

With List 2, CNPS recognizes the importance of protecting the geographic range of widespread species. In this way, CNPS protects the diversity of the state's flora and helps maintain the evolutionary process and genetic diversity within species. All of the plants constituting List 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

#### **List 3: Review List**

The plants that comprise List 3 are united by one common theme - CNPS lack the necessary information to assign them to one of the other lists or to reject them. Nearly all of the plants remaining on List 3 are taxonomically problematic.

Some of the plants constituting List 3 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. The CNPS strongly recommends that List 3 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.

#### **List 4: Plants of Limited Distribution - A Watch List**

The plants in this category are of limited distribution or infrequent throughout a broader area in California, and their vulnerability or susceptibility to threat appears relatively low at this time.

Very few of the plants constituting List 4 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and few, if any, are eligible for state listing.

### **3.0 METHODOLOGY**

#### **3.1 FIELD SURVEY**

Field surveys were conducted in conformance with the California Department of Fish and Game *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (2009). Pedestrian botanical surveys of the proposed project area and adjacent reference areas were conducted on October 25, 2012. Plants were identified visually during a pedestrian survey. Plants which had morphological characteristics of any sensitive plant were either collected or photographed to later be identified using dichotomous keys, to confirm field observations.

### 3.2 LITERATURE SEARCH

A literature search was conducted to obtain information for this report. The following sources were used to gather species information, topographic data, biological resource value, federal and State jurisdictions, aeriels, and satellite images.

- California Natural Diversity Data Base; United States Geological Survey Topographic Quadrangles: Mesquite Lake, Mesquite Mountains, Clark Mountain, Ivanpah Lake, Pachalka Spring, Stateline Pass, Shenandoah Peak, and West of Shenandoah Peak
- United States Fish and Wildlife Service Critical Habitat Portal;
- United States Fish and Wildlife Service Environmental Conservation Online Service;
- CNPS *Electronic Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2007);
- Terraserver USA;
- Calflora;
- National Agricultural Imagery Program; and
- Landsat 7 Color Imagery.

According to the California Natural Diversity Data Base, 57 special status plant species identified by the CNPS list have been recorded in the Mesquite Lake, Mesquite Mountains, Clark Mountain, Ivanpah Lake, Pachalka Spring, Stateline Pass, Shenandoah Peak, and West of Shenandoah Peak topographic quadrangles. A list of sensitive plant species with a potential to occur at the Dalton Trucking Inc. Mesquite Lake Gypsum Mine is included as Appendix A; a list of observed species is included as Appendix B.

### 4.0 RESULTS

#### 4.1 GENERAL PLANTS/COMMUNITIES

Two vegetation communities were identified to occur in the project area. The ten-acre location for the Mesquite Lake Gypsum Mine mill site occurs approximately 2.5 miles northwest of the 160-acre gypsum scraping operation on the dry lakebed. The surrounding mill site area is characterized by Mojave seabligh/inkblight (*Sueda moqhini*) vegetation as the dominant species and shadescall (*Atriplex confertifolia*) as second dominant. Other species observed were: allscale (*Atriplex polycarpa*), honey mesquite (*Prosopis glandulosa*) and iodinebush (*Allenrolfea occidentalis*).

The dominant vegetation on the 160 acres gypsum mining area in the Mesquite Lake dry lakebed was shadescall (*Atriplex confertifolia*). Only one other shrub species, iodinebush (*Allenrolfea occidentalis*), was observed to occur on the dry lakebed. A small area of mesquite bosque with honey mesquite was observed in the extreme southwest corner of the mine area.



## 4.2 SPECIAL STATUS SPECIES

Plant species of concern to CDFG as indicated in their response comment letter to the Mitigated Negative Declaration and Initial Study for the Mesquite Lake Mining and Reclamation Plan Project include: Preuss' milkvetch, Pahrump Valley buckwheat/forked buckwheat, and habitat characterized as mesquite bosque. An updated CNDD records search for sensitive species within a five mile radius of the proposed project included six species listed on Table 1 (see Figure 2). None of the species are listed as threatened or endangered; however, they are identified in the California Native Plant Society lists.

Table 1  
Species of Concern in a 5-mile Radius

Scientific Name	Common Name	CNPS Listing
<i>Eriogonum bifurcatum</i>	Pahrump Valley buckwheat/forked buckwheat	List 1B.2
<i>Astragalus preussii</i> var. <i>preussii</i>	Preuss' milkvetch	List 2.3
<i>Astragalus tidestromii</i>	Tidestrom's milk-vetch	List 2.2
<i>Bouteloua trifida</i>	three-awned grama	List 2.3
<i>Coryphantha chlorantha</i>	desert pincushion	List 2.1
<i>Allium nevadense</i>	Nevada onion	List 2.3

No special status plant species were identified in habitat adjacent to the 10-acre mill site and no special status species were identified on the 160-acre mine location.

Mesquite bosque was identified to occur at the mill site and at the southwest edge of the dry lake bed. At the mill site, mesquite bosque occurs in the pronounced channels that enter and exit the site. The occurrence of mesquite bosque within the mill site boundaries could not be determined. The mine site area on the dry lake bed contained approximately one acre of mesquite bosque on the southwestern corner of the property.

## 5.0 RECOMMENDATIONS

It is recommended that the approximately one acre of mesquite bosque located on the southwestern corner of the lakebed mine site be avoided by prominently marking this area in the field. In addition, the mill site boundaries should be prominently marked in the field to avoid any impacts to mesquite bosque habitat outside of the mill site.

## 6.0 CONCLUSION

An area adjacent to the 10-acre Mill site area was surveyed to determine the presence of rare plants. The adjacent area was walked and plants observed identified and recorded. No special status plants were found. The 160-acre mine site was also surveyed and no rare plants were found, but one acre of mesquite bosque was found at the southwestern corner of the property, which is recommended to be avoided by operations. The dry lake bed had very sparse vegetation which is typical of this type of harsh alkali environment.



**Mojave Desert Air Quality Management District**

14306 Park Avenue, Victorville, CA 92392-2310

760.245.1661 • fax 760.245.2699

Visit our web site: <http://www.mdagmd.ca.gov>

Eldon Heaston, Executive Director

October 5, 2012

Gus Romo, Romo Planning  
San Bernardino County Land Use Services Department  
385 North Arrowhead Avenue  
San Bernardino, CA 92415-0182

**Project: AP20120002/SMAR (Dalton Trucking, Inc.)**

Dear Mr. Romo:

The Mojave Desert Air Quality Management District (District) has reviewed AP20120002/SMAR, a reclamation plan for Mesquite Lake Gypsum Mine, located on Stagehorn Road between Yucca Road and Ocotillo Road in the community of Kingston.

The District has a current permit for a portable screening plant for the screening of gypsum at this location and, based on the information available to us at this time, we have no comments.

Thank you for the opportunity to review this planning document. If you have any questions regarding this letter, please contact me at (760) 245-1661, extension 6726, or Tracy Walters at extension 6122.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan J. De Salvio".

**Alan J. De Salvio**  
Supervising Air Quality Engineer

AJD/tw

AP20120002 SMAR Dalton Trucking

2012 OCT 10 PM 2:53

7/10/2012 10:53 AM

City of Adelman    Town of Apple Valley    City of Barstow    City of Blythe    City of Hesperia    City of Needles    County of Riverside    County of San Bernardino    City of Twentynine Palms    City of Victorville    Town of Yucca Valley

## **Response to Mojave Desert Air Quality Management District**

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The County of San Bernardino Planning Department concurs with the District's comment that the Project has a "Less Than Significant" and "No Impact" for Air Quality issues.

## NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-6251  
Fax (916) 657-5390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
ds\_nahc@pacbell.net

RECEIVED  
CURRENT PLANNING

2012 OCT -9 PM 3:49

October 5, 2012

Mr. Ernest Perea, Project Planner

**County of San Bernardino Land Use Services Department  
Advance Planning Division**

385 North Arrowhead Avenue, First Floor  
San Bernardino, CA 92415

Re: SCH#2012091040; CEQA Notice of Completion; proposed Mitigated Negative Declaration; for the "Mesquite Lake Mining & Reclamation Plan (Dalton Trucking Co.) Project (to mine accumulated gypsum);" located on 170-acres at the former Mesquite Gypsum Mine site at Mesquite Lake five miles south of Sandy Valley, Nevada in far northeastern San Bernardino County, California

Dear Mr. Perea:

The Native American Heritage Commission (NAHC) is the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3<sup>rd</sup> 604).

This letter includes state and federal statutes relating to Native American historic properties or resources of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9. This project is also subject to California Government Code Section 65352.3.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC recommends that the lead agency request that the NAHC do a Sacred Lands File search as part of the careful planning for the proposed project.

The NAHC 'Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96.

Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests cooperation from other public agencies in order that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties, including archaeological studies. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and California Public Resources Code Section 21083.2 (Archaeological Resources) that requires documentation, data recovery of cultural resources, construction to avoid sites and the possible use of covenant easements to protect sites.

Furthermore, the NAHC if the proposed project is under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq.*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254( r) and may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for inadvertent discovery of human remains mandate the processes to be followed in the event of a discovery of human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built

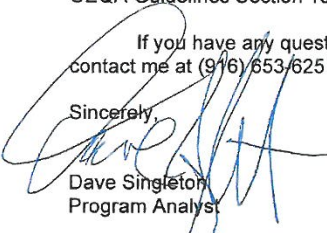


around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

Finally, when Native American cultural sites and/or Native American burial sites are prevalent within the project site, the NAHC recommends 'avoidance' of the site as referenced by CEQA Guidelines Section 15370(a).

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653/6251.

Sincerely,



Dave Singleton  
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List



**Native American Contacts  
San Bernardino County  
October 5, 2012**

Ramona Band of Cahuilla Mission Indians  
Joseph Hamilton, Chairman  
P.O. Box 391670 Cahuilla  
Anza, CA 92539  
admin@ramonatribe.com  
(951) 763-4105  
(951) 763-4325 Fax

San Manuel Band of Mission Indians  
Carla Rodriguez, Chairwoman  
26569 Community Center Drive Serrano  
Highland, CA 92346  
(909) 864-8933  
(909) 864-3724 - FAX  
(909) 864-3370 Fax

Chemehuevi Reservation  
Edward Smith, Chairperson  
P.O. Box 1976 Chemehuevi  
Chemehuevi Valley CA 92363  
chair1cit@yahoo.com  
(760) 858-4301  
(760) 858-5400 Fax

Fort Mojave Indian Tribe  
Timothy Williams, Chairperson  
500 Merriman Ave Mojave  
Needles, CA 92363  
(760) 629-4591  
(760) 629-5767 Fax

Colorado River Indian Tribe  
Eldred Enas, Chairman; Ginger Scott, Museum  
26600 Mojave Road Mojave  
Parker, AZ 85344 Chemehuevi  
crit.museum@yahoo.com  
(928) 669-9211-Tribal Office  
(928) 669-8970 ext 21  
(928) 669-1925 Fax

AhaMaKav Cultural Society, Fort Mojave Indian  
Linda Otero, Director  
P.O. Box 5990 Mojave  
Mohave Valley AZ 86440  
(928) 768-4475  
LindaOtero@fortmojave.com  
(928) 768-7996 Fax

Morongo Band of Mission Indians  
Michael Contreras, Cultural Heritage Prog.  
12700 Pumarra Road Cahuilla  
Banning, CA 92220 Serrano  
(951) 201-1866 - cell  
mcontreras@morongo-nsn.  
gov  
(951) 922-0105 Fax

San Manuel Band of Mission Indians  
Ann Brierty, Policy/Cultural Resources Departmen  
26569 Community Center, Drive Serrano  
Highland, CA 92346  
(909) 864-8933, Ext 3250  
abrierty@sanmanuel-nsn.  
gov  
(909) 862-5152 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed  
SCH#2012091040; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the Mesquite Lake Minging and  
Banning River Project located on 470 acres of Mesquite Lake in southeastern San Bernardino County, California.

## Response to Native American Heritage Commission

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Per the request of the Native American Heritage Commission (NAHC), the County requested that a Sacred Lands File Search be conducted.

The Sacred Lands File Search was conducted on October 19, 2012 and it was determined that "Native American cultural resources were not identified within one-half mile of the project site. A copy of the October 19, 2012 Sacred Lands File Search is attached.

Although the potential for unearthing Native American cultural resources is considered low, implementation of the following mitigation measure contained in the Mitigated Negative Declaration for the project would ensure potential impacts are reduced to a less than significant level:

**CR-1:** The proponent shall notify the BLM Needles Field Office prior to any road improvements (widening, grating, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. In the event that cultural resources, including paleontological resources, are encountered; mining activities in the immediate area of the find will be halted and the County Museum and BLM notified. Inspection of uncovered resources will be made and if necessary a recovery and curation plan implemented.

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
 SACRAMENTO, CA 95814  
 (916) 657-5390  
 Fax (916) 657-5390  
 Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
[ds\\_nahc@pacbell.net](mailto:ds_nahc@pacbell.net)



October 19, 2012

Mr. Ernest Perea, Contract Planner

**County of San Bernardino Planning Department**

385 N. Arrowhead Avenue, 1<sup>st</sup> Floor  
 San Bernardino, CA 92415

Sent by FAX to: 909-387-3223  
 No. of Pages: 5

Re: Sacred Lands File Search and Native American Contacts list for the proposed  
 Sacred Lands File Search and Native American Contacts list for the proposed  
"Mesquite Lake Mining & Reclamation Plan Project," located on 170-acres about six  
miles south of Sandy Valley, Nevada in northeast San Bernardino County, California

Dear Mr. Perea:

The Native American Heritage Commission (NAHC) conducted a Sacred Lands search based on the data provided and Native American cultural resource sites were not identified within one-half mile of the project site, the 'area of potential effect' (e.g. APE): you specified. Also the absence of archaeological fixtures and other cultural resource items does not preclude their existence at the subsurface level. In addition, please note; the NAHC Sacred Lands Inventory is not exhaustive and does not preclude the discovery of cultural resources during any project groundbreaking activity.

California Public Resources Code §§5097.94 (a) and 5097.96 authorize the NAHC to establish a Sacred Land Inventory to record Native American sacred sites and burial sites. These records are exempt from the provisions of the California Public Records Act pursuant to California Government Code §6254 (r). The purpose of this code is to protect such sites from vandalism, theft and destruction.

In the 1985 Appellate Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources, impacted by proposed projects including archaeological, places of religious significance to Native Americans and burial sites

The California Environmental Quality Act (CEQA – CA Public Resources Code §§ 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential

effect (APE), and if so, to mitigate that effect. CA Government Code §65040.12(e) defines "environmental justice" provisions and is applicable to the environmental review processes. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and California Public Resources Code Section 21083.2 (Archaeological Resources) that requires documentation, data recovery of cultural resources, construction to avoid sites and the possible use of covenant easements to protect sites.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Local Native Americans may have knowledge of the religious and cultural significance of the historic properties of the proposed project for the area (e.g. APE). Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). We urge consultation with those tribes and interested Native Americans on the list that the NAHC has provided in order to see if your proposed project might impact Native American cultural resources. Lead agencies should consider *avoidance* as defined in §15370 of the CEQA Guidelines when significant cultural resources as defined by the CEQA Guidelines §15064.5 (b)(c)(f) may be affected by a proposed project. If so, Section 15382 of the CEQA Guidelines defines a significant impact on the environment as "substantial," and Section 21083.2 which requires documentation, data recovery of cultural resources.

The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Partnering with local tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 4(f), Section 110 and (k) of the federal NHPA (16 U.S.C. 470 *et seq.*), Section 4(f) of the Department of Transportation Act of 1966 (23 CFR 774); 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C. 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The NAHC remains concerned about the limitations and methods employed for NHPA Section 106 Consultation.

Also, California Public Resources Code Section 5097.96, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery', another important reason to have Native American Monitors on board with the project.

To be effective, consultation on specific projects must be the result of an ongoing

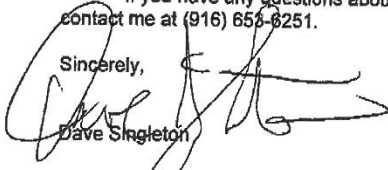


relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. An excellent way to reinforce the relationship between a project and local tribes is to employ Native American Monitors in all phases of proposed projects including the planning phases.

Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 656-6251.

Sincerely,



Dave Singleton

Attachment Native American Contact List

**Native American Contacts  
San Bernardino County  
October 19, 2012**

Ramona Band of Cahuilla Mission Indians  
Joseph Hamilton, Chairman  
P.O. Box 391670 Cahuilla  
Anza, CA 92539  
admin@ramonatribe.com  
(951) 763-4105  
(951) 763-4325 Fax

San Manuel Band of Mission Indians  
Carla Rodriguez, Chairwoman  
26569 Community Center Drive Serrano  
Highland, CA 92346  
(909) 864-8933  
(909) 864-3724 - FAX  
(909) 864-3370 Fax

Chemehuevi Reservation  
Edward Smith, Chairperson  
P.O. Box 1976 Chemehuevi  
Chemehuevi Valley CA 92363  
chair1cit@yahoo.com  
(760) 858-4301  
(760) 858-5400 Fax

Fort Mojave Indian Tribe  
Timothy Williams, Chairperson  
500 Merriman Ave Mojave  
Needles, CA 92363  
(760) 629-4591  
(760) 629-5767 Fax

Colorado River Indian Tribe  
Eldred Enas, Chairman; Ginger Scott, Museum  
26600 Mojave Road Mojave  
Parker, AZ 85344 Chemehuevi  
crit.museum@yahoo.com  
(928) 669-9211-Tribal Office  
(928) 669-8970 ext 21  
(928) 669-1925 Fax

AhaMaKav Cultural Society, Fort Mojave Indian  
Linda Otero, Director  
P.O. Box 5990 Mojave  
Mohave Valley AZ 86440  
(928) 768-4475  
LindaOtero@fortmojave.com  
(928) 768-7996 Fax

Morongo Band of Mission Indians  
Michael Contreras, Cultural Heritage Prog.  
12700 Pumarra Road Cahuilla  
Banning, CA 92220 Serrano  
(951) 201-1866 - cell  
mcontreras@morongo-nsn.  
gov  
(951) 922-0105 Fax

San Manuel Band of Mission Indians  
Ann Brierty, Policy/Cultural Resources Departmen  
26569 Community Center, Drive Serrano  
Highland, CA 92346  
(909) 864-8933, Ext 3250  
abrierty@sanmanuel-nsn.  
gov  
(909) 862-5152 Fax

This list is current only as of the date of this document.

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This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed Mesquite Lake Mining and Reclamation Plan Project; located six miles south of Sandy Valley, Nevada in northeastern San Bernardino County, California for which a Sacred Lands File search and Native American Contacts list were requested.



**Native American Contacts  
San Bernardino County  
October 19, 2012**

Fort Mojave Indian Tribe  
Nora McDowell, Cultural Resources Coordinator  
500 Merriman Ave Mojave  
Needles , CA 92363  
NoraMcDowall@fortmojave.  
(760) 629-4591  
(760) 629-5767 Fax

Serrano Nation of Mission Indians  
Goldie Walker, Chairwoman  
P.O. Box 343 Serrano  
Patton , CA 92369

(909) 528-9027 or  
(909) 528-9032

MOAPA Paiute Band of the Moapa Reservation  
Attn: Cultural Resources Department  
P.O. Box 56 Paiute  
Moapa , NV 89025  
lbradley@mvdsl.com  
(702) 865-2787  
(702) 865-2875 - FAX

Las Vegas Paiute Tribe  
Attn: Cultural Resources Department  
1 Paiute Drive Paiute  
Las Vegas , NV 89106  
contact@lvpaiute.com

(702) 386-3926  
(702) 383-4019 - FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed Mesquite Lake Mining and Reclamation Plan Project; located six miles south of Sandy Valley, Nevada in northeastern San Bernardino County, California for which a Sacred Lands File search and Native American Contacts list were performed.

ARCHAEOLOGICAL INFORMATION CENTER  
San Bernardino County Museum  
2024 Orange Tree Lane (909) 307-2669 x 255  
Redlands, CA 92374 FAX (909) 307-0689  
[rlaska@sbcn.sbcounty.gov](mailto:rlaska@sbcn.sbcounty.gov)



San Bernardino  
County

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HISTORICAL RESOURCES REVIEW  
FOR THE COUNTY OF SAN BERNARDINO LAND USE SERVICES DEPT

Invoice/Reference Number: 12-09-27-01  
Planning Number: **AP20120002/SMAR**  
Acres/Miles: 170 Acre(s)  
USGS Quad (s): Mesquite Lake, Shenandoah Peak & West of Shenandoah Peak 7.5' quads

Previously Inventoried Historical Resources (that is, resources older than 45 years in age including prehistoric and historic archaeological resources, historic resources, cultural landscapes and ethnic resources)

None known to exist within or adjacent to the project area.

Reported to exist within or adjacent to project area:

- 1 Prehistoric Archaeological Resources: SBR-5525—large habitation site
- 1 Historic Archaeological Resources: SBR-5225 H-Mesquite Lk Salt Works & Green's Mill
- 0 Historic Resources:
- 0 Cultural Landscapes:
- 0 Ethnic Resources:
- 3+ Resources shown on historic maps: roads & well

Historic Maps Examined: Blackburn, 1932; USGS Ivanpah, 1909/19; USGS Clark Mtn, 1956; USGS Shenandoah Peak, 1956; Beasley, 1892; AAA-various; Perris, 1896; Kremmerer, 1925; Crowell, 1903.

Previous Field Surveys for Resources: 1061402 covers the S  $\frac{1}{2}$  of T18N R13E Sec 5.

Comments:

Planning Number: **AP20120002/SMAR**

Potential for the Presence of Historical Resources:

Based on available information, the **potential** for the presence of historical resources within the project area is:

Prehistoric Archaeological Resources:	High
Historic Archaeological Resources:	High
Historic Resources: (built environment)	Low
Cultural Landscapes:	Unknown
Ethnic Resources:	Unknown

Comments: Potential for Prehistoric Archaeological Resources based on sites found in and around the project area. Potential for Historic Archaeological Resources based on sites found in and around the project area & roads/well shown on historic maps. Project area is partially within the historic Clark Mtn Mining District. Mesquite Lake Salt Mine dates from approximately 1881.

Recommendations: (following CEQA and NEPA guidelines)

1) In order to minimally comply with CEQA & NEPA, an archaeological survey by a qualified archaeologist is recommended to inventory all resources, to evaluate their significance and integrity and, if necessary, to propose appropriate mitigation measures.

2) Submission of a historical resources management report by the professional to document the survey, to any subsurface testing, to document archival research, to evaluate resource significance and integrity, and, if necessary, to evaluate project impacts and propose mitigation measures to mitigate potential adverse impacts in accordance with the appropriate laws.

If human remains are encountered on the property, then the San Bernardino County Coroner's Office **MUST** be contacted within 24 hours of the find, and all work halted until a clearance is given by that office and any other involved agencies. Contact the County Coroner at 175 South Lena Road, San Bernardino, CA 92415-0037 or (909) 387-2543.

For a list of qualified archaeologists, go to <http://chrisinfo.org/>.

If you have any further questions, please, contact me at (909) 307-2669 x 255, Monday through Friday between 8 AM and 4 PM.



Robin E. Laska  
Assistant Center Coordinator

27 September 2012  
Date

Report Cited

Document No.: 1061402  
LERCH, MICHAEL K.

Unpublished Report

1983 CULTURAL RESOURCES ASSESSMENT OF THE PROPOSED MESQUITE LAKE MINE,  
SAN BERNARDINO COUNTY, CALIFORNIA. SAN BERNARDINO COUNTY MUSEUM  
ASSOCIATION. SUBMITTED TO STEPHEN T. LILBURN & ASSOCIATES. UNPUBLISHED  
REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA  
92374.

Last Update: 05/01/1989

Ca

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San Bernardino County Museum  
2024 Orange Tree Lane (909) 307-2669 x 255  
Redlands, CA 92374 FAX (909) 307-0689  
[rlaska@sbcm.sbcounty.gov](mailto:rlaska@sbcm.sbcounty.gov)



San Bernardino  
County

INVOICE

Invoice Number: 12-09-27-01 Client Project Number:  
Title of Project: **AP20120002/SMAR**  
Investigator: Gus Roma for Dalton Trucking  
Firm: San Bernardino County LUS Planning  
Address: 385 N. Arrowhead Ave, First Floor  
San Bernardino, CA 92415-0182  
Phone Number: 909-387-3223

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Assistant Center Coordinator

27 September 2012  
Date

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## Response to the San Bernardino County Museum

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An initial Cultural Resources Assessment for the project area was conducted on the subject property in January 1984. (A copy of the January 1984 report is attached). The Report determined that there were "no adverse impacts to cultural resources are anticipated..."

Additional surveys were conducted in January 2004, June 2004, April 2005 and September 2008 by the Needles Field Office Archaeologist. The archaeological survey revealed no prehistoric or historic resource values associated with the proposed mining location or the access routes.

An additional archaeological records and literature search occurred in September 2011 for the proposed expansion/construction of the mill construction. In addition, that area for the proposed mill expansion was subjected to a pedestrian survey by the Needles Field Office archaeologist in September 2011. This included a survey of the entire 10 acre area and a small buffer. No historic or prehistoric resources were revealed during the survey or literature and records search. A review of the Needles Field Office sacred lands inventory revealed no areas of traditional or scared Native American values within the project area. "

The surveys conducted between January 2004 and September 2011 confirmed the findings made in the January 1984 Cultural Resources Assessment.

Although the potential for unearthing cultural resources is considered low, implementation of the following mitigation measure contained in the Mitigated Negative Declaration for the project would ensure potential impacts are reduced to a less than significant level:

**CR-1:** The proponent shall notify the BLM Needles Field Office prior to any road improvements (widening, grating, etc.), construction (turn-arounds, pull-outs, etc.), and/or maintenance of the access roads. In the event that cultural resources, including paleontological resources, are encountered; mining activities in the immediate area of the find will be halted and the County Museum and BLM notified. Inspection of uncovered resources will be made and if necessary a recovery and curation plan implemented.



ADDENDUM TO  
CULTURAL RESOURCES ASSESSMENT  
OF THE PROPOSED  
MESQUITE LAKE MINE,  
SAN BERNARDINO COUNTY, CALIFORNIA

*Cultural File*

Prepared by: Michael K. Lerch, Project Archaeologist  
San Bernardino County Museum Association  
2022 Orange Tree Lane  
Redlands, California 92373

Antiquities Permit #81-CA-088

Prepared for: Aspen Mining Corporation  
P. O. Box 471, Star Route 70  
Jean, Nevada 89019

January 1984

## INTRODUCTION

This report is an addendum to the cultural resources assessment for the Mesquite Lake Mine which was conducted by the San Bernardino County Museum Association for Aspen Mining Corporation in August 1983 (Lerch 1983a). That report addressed potential impacts to cultural resources from the proposed Mesquite Lake Mine, and included field survey of mining claims MESP #12, #13, #14, #15 and #16, for a total of 800 acres, plus four proposed alternate access roads. Subsequently, a minor reroute from Alternate Access Route B which had not been previously surveyed was field checked prior to actual construction of that route from the mining claims in the lakebed to the mill site in Clark County, Nevada (Lerch 1983b).

The purpose of this report is to document the archaeological survey of an additional 480 acres which was not addressed in the original study. The additional acreage includes claims MESP #9, #10, and #11, which are directly north and adjacent to the claims previously surveyed (see Figure 1). The survey was conducted by the San Bernardino County Museum Association under conditions of Antiquities Permit #81-CA-088, at the request of Dr. Allan F. Davis, Director of Exploration for Aspen Mining Corporation, in order to ensure that development of additional claims in the Mesquite Lake Mine would not affect cultural resources.

## METHODS OF DATA COLLECTION

The three mining claims surveyed are located in the North  $\frac{1}{2}$  of Section 5 and in the Northwest  $\frac{1}{4}$  of Section 4, T18N, R13E, SBEM. Field position was determined with reference to mining claim markers at each  $\frac{1}{4}$  section point, survey monuments, and the newly constructed mine access road which runs in an east/west direction across the center of Sections 4 and 5, between the previously surveyed claims (13, 14, 15) and the claims surveyed in this study (9, 10, 11).

The study area was surveyed intensively (Class III) on January 6, 1984, by a field crew consisting of Dr. Gerald A. Smith, Michael K.

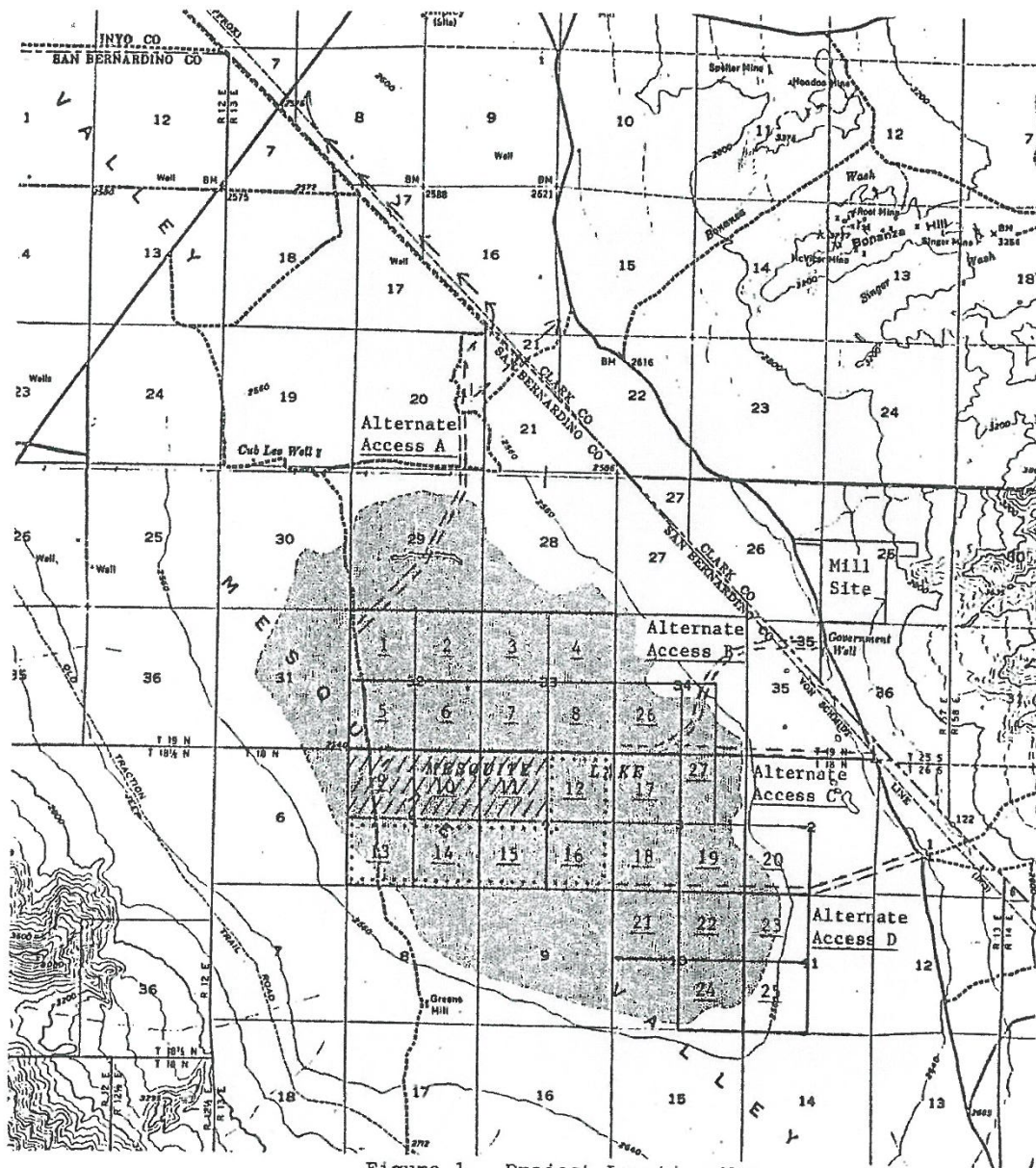
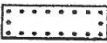
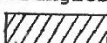


Figure 1. Project Location Map  
 Adapted from USGS 15' Shenandoah Peak and Clark Mountain Quadrangles  
 Previously Surveyed:  New Area Surveyed: 

Lerch, Harley Garbani, and James Benton. Walking transects were oriented in a north/south direction and spaced approximately 100 meters apart. Due to the low archaeological sensitivity of the lake bed, this coverage is considered to meet the objectives of a Class III inventory capable of locating all cultural resource sites potentially eligible for the National Register of Historic Places.

#### RESULTS

The survey area consisted entirely of lakebed sediments covered with very sparse vegetation or none at all. No shoreline environments are located in the survey area. A single mesquite tree in eastern portion of the survey area was the only large plant observed and the area around it was given additional survey coverage.

The results of the archaeological survey were entirely negative, with no historic or prehistoric cultural resources found to be present in claims MESP #9, #10, or #11.

#### RECOMMENDATIONS

Due to the negative results of the survey, no adverse impacts to cultural resources are anticipated if the three additional claims are developed for placer mining. No further archaeological investigation is recommended at this time.

Construction of the access road does not appear to have affected any cultural resources, and the only recorded site within the mining area, SBr-5221-H, the Mesquite Lake Salt Works, has been fenced and will be avoided during mining operations. Additional field survey will be necessary for any future mine expansion outside of Sections 4 and 5, T18N, R13E, SBBM.

#### REFERENCES

Lerch, Michael K.

1983a Cultural Resources Assessment of the Proposed Mesquite Lake Mine, San Bernardino County, California.

1983b Letter to Gerald E. Hillier, BLM, 11/18/83, re: Archaeological survey for minor reroute of access road.

**EXHIBIT F**

**RECLAMATION PLAN TEXT DOCUMENT  
(SEPTEMBER 2012)**

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**RECLAMATION PLAN  
FOR  
MESQUITE LAKE GYPSUM MINE**

***Prepared For:***

Dalton Trucking, Inc.  
13560 Whittram Ave.  
Fontana, CA 92335

***Submitted To:***

County of San Bernardino  
Planning Department  
385 North Arrowhead Avenue  
San Bernardino, California 92415

***Prepared By:***

Lilburn Corporation  
1905 Business Center Drive  
San Bernardino, California 92408

**September 2012**

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## SHEET

- 1 Mesquite Lake Gypsum Reclamation Plot Plan

## APPENDIX

- A Decision Record and Environmental Assessment – Mesquite Lake Gypsum Mine, Bureau of Land Management, CA-690-EA08-30, August 13, 2010, Revised August 2011.
- B Decision Record and Environmental Assessment – Mesquite Lake Gypsum Mine, Bureau of Land Management, CA-D090-2011-0029, January 30, 2012.
- C Revegetation Plan for Mesquite Lake Gypsum Mine, Lilburn Corporation, August 2012

# MESQUITE LAKE GYPSUM RECLAMATION PLAN

## INTRODUCTION

Dalton Trucking Inc. is submitting a Reclamation Plan in accordance with the Surface Mining Reclamation Act of 1975 (SMARA), Public Resources Codes 2770 et seq and San Bernardino County requirements for implementing SMARA. The Bureau of Land Management (BLM) in their Decision Record and Environmental Assessment approved a Plan of Operations (POO) for the site on August 13, 2010. A subsequent revision was submitted (August 2011) to include the use of a 2-parcel 10 acre Mill Site. The Mill Site will allow material to be stockpiled from the Mesquite Lake Gypsum Mine during wet weather. The POO per the revised operation to include the Mill Site was adopted on January 30, 2012. Refer to Appendix A and B for a copy of the POO, respectively.

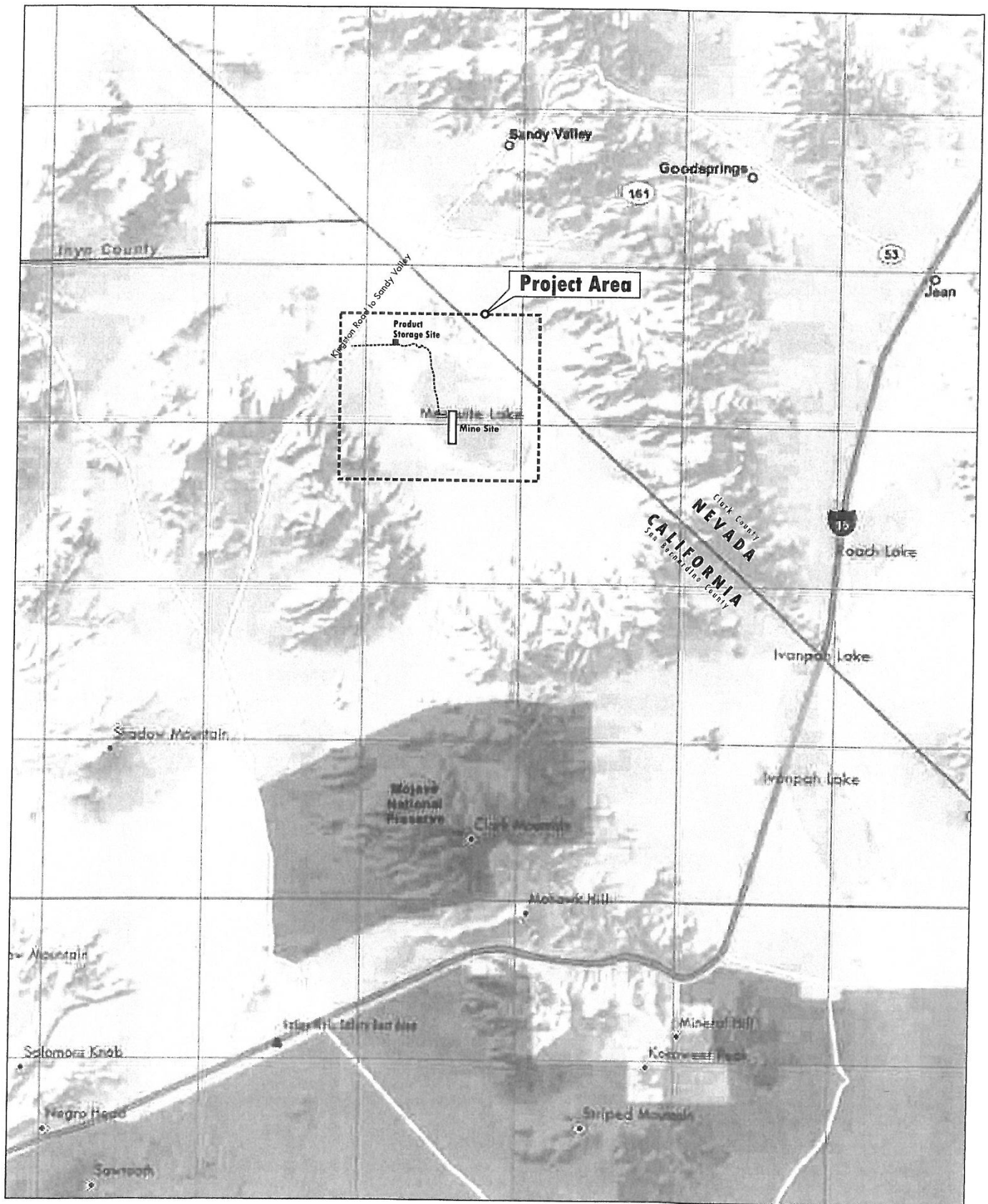
Section 1 of this plan discusses the mining and processing activities approved by the BLM for the project site. Section 2 describes reclamation, revegetation, and the planned end use for the site.

Dalton Trucking Inc. is the operator and JEDCO Gypsum Company's is the owner of the mining claims. Dalton Trucking Inc. has a lease from JEDCO to mine the 160 acres (2010 approval: 160 acres). The Mesquite Lake Gypsum Mine operations are located in northern San Bernardino County approximately 5 miles south of Sandy Valley, Nevada, northeast of the Clark Mountains within the dry lakebed of Mesquite Lake. The entire 10-acre Mill Site is anticipated to be disturbed for gypsum stockpiling. Refer to Figure 1 for Project location Map.

### *Legal Description as follows*

- 160-acres located W $\frac{1}{2}$ E $\frac{1}{2}$  of Section 5, Township 18 North, Range 13 East, San Bernardino Base and Meridian; and

10 acres: Mill Site 1 (330-feet by 660-feet)-the northern  $\frac{1}{2}$  of SE  $\frac{1}{4}$ , SE  $\frac{1}{4}$ , SE  $\frac{1}{4}$  of Section 24, Township 19 North, Range 12 East San Bernardino Base and Meridian and Mill Site 2 (330-feet by 660-feet)-the southern part of SE  $\frac{1}{4}$ , SE  $\frac{1}{4}$ , SE  $\frac{1}{4}$ , of Section 24, Township 19 North, Range 12 East San Bernardino Base and Meridian.



## PROJECT LOCATION

Mesquite Lake Mine  
San Bernardino County, California

**FIGURE 1**

## **1.0 MINE PLAN**

### **1.0 MINING OPERATIONS**

#### **Mining**

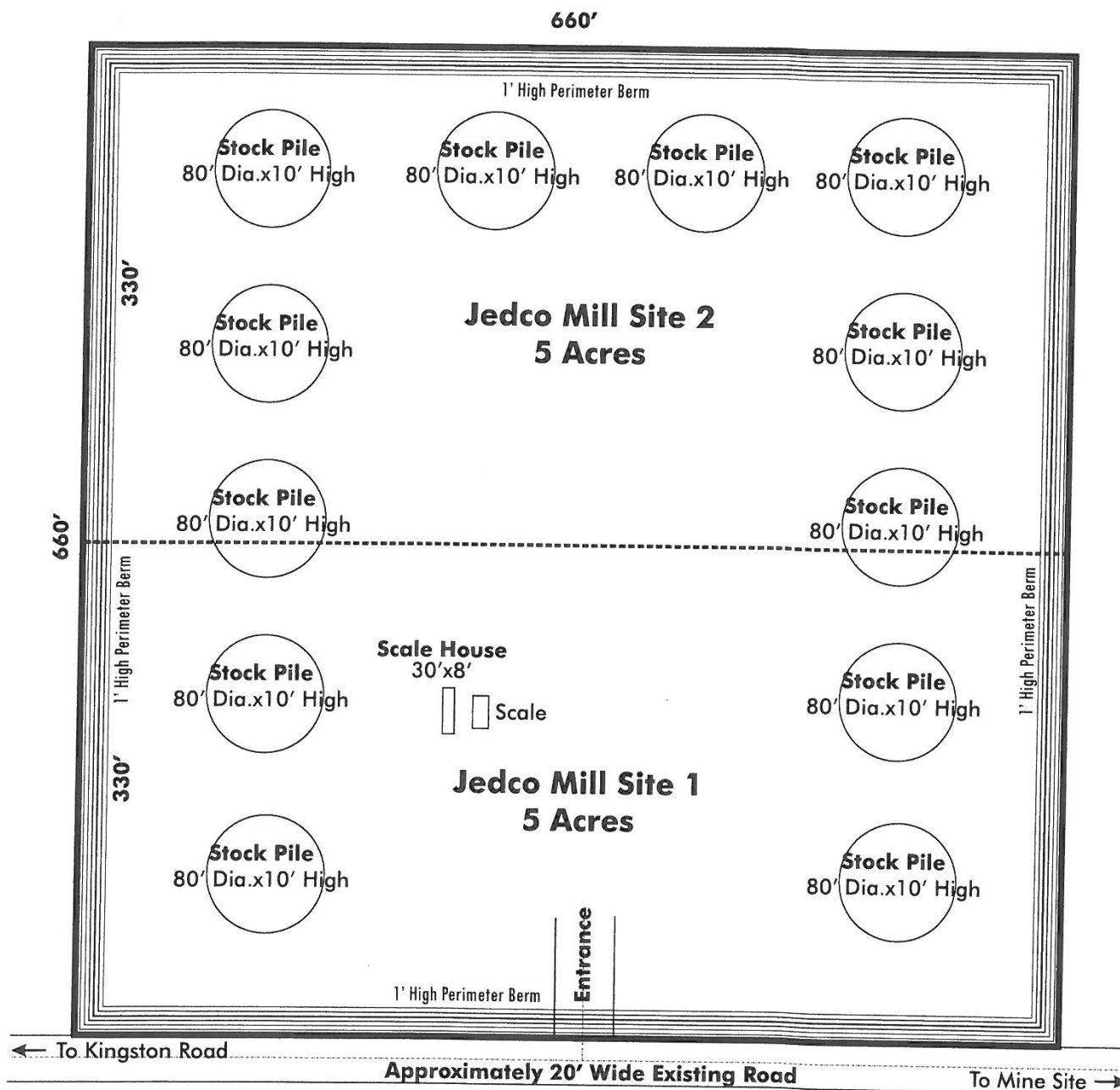
The BLM approved the Mesquite Lake Gypsum Mine POO to allow mining of the site as described below. Gypsite (Gypsum) is the industrial mineral commodity mined from the Mesquite Lake Mine. The gypsum occurs at the surface as wind blown gypsum sand and as a bedded evaporite deposit below the surface. The gypsum sand is pure enough to use as an agricultural additive without the need for any chemical beneficiation.

The mining operation is a simple scraping of the shallow gypsum deposited at the surface of the dry lakebed. The mine design includes a shallow 5-foot depth with a maximum operational slope of 5H: 1V. Refer to Figures 2 and 3 for a Reclamation and Mill Site detail, respectively. Sheet 1 shows the ultimate mine design and the typical planned contours of the mine. Methods for mining include standard wheel-loader excavation practices. The procedure generally includes:

- The planned surface disturbance is cleared of the sparse vegetation with the top six inches of surface material stockpiled along the perimeter of each annual phase or about 6-acre area;
- The gypsum is scraped to a depth of up to 5 feet with a dozer, scrapper, or dozer with or without a ripper/scarifiers;
- A front-end loader feeds material into the portable screen to achieve the desired consistency;
- A loader is used to load the gypsum into 25-ton haul trucks;
- The haul trucks haul the gypsum to market or to the off-site millsite where it will be stockpiled, crushed (if needed), and bagged or possibly shipped in bulk.

There is no defined soil development at the surface, and the surface material is usable product. However, the top 6 inches of surface material will be stockpiled and redistributed over mined out areas on an annual basis as part of mining or reclamation operations. With increased depth the deposit is expected to become much harder, more consolidated, and less desirable. When the more consolidated parts of the deposit are encountered, a ripper attachment may be used to loosen the bedded gypsum. Blasting operations are not proposed. Table 1 shows a typical equipment list.





**Table 1**  
**Typical Equipment List**  
**Mesquite Lake Gypsum Mine**

Quantity	Equipment Type
1	Cat D7 or D8 Dozer
1	623B Cat Scraper
2	980F Cat Loader
1	966D Cat Loader
1	12G Cat Motor Grader
1	15ft Adjustable Dual Gang Disc Attachment
1	McCloskey S190 Portable 5'x20'Screen Plant
1	4000 Gallon Water Truck
1	10 Wheel Dump Truck
1	Chevrolet 4500 Service Truck
1	International Fuel/Lube Truck
1	40ft Sea Container (Office/Storage)
1	3- Portable Light Towers
1	20kw China Diesel Portable Generator

The mine site will operate with 4 miners working 2 shifts Monday through Friday and with an occasional single day shift on Saturday. The first shift will be from 10 pm to 7 am. The miner will be operating a loader, feeding the screening plant with material stock piled from the second (AM) shift. The second shift will be from 6am and continue to approximately 3 pm. Evening operations will be supported by the night guard and 2 light towers to illuminate the area around the screening operation. All lights will be directed down and away from surrounding neighbors and properties. Refer to Appendix A for additional information.

### **Project Life**

The anticipated production rate will be up to 750 tons per day, assuming a weight of 1.9 tons per cubic yard. Annual production would be up to 150,000 tons per year depending on demand and the number of days worked or approximately 78,950 cubic yards per year.

Maximum mine depth is approximately 5 feet, however, drilling data could increase the depth with approval of a modified Plan of Operations from BLM. If the 170-acre (10 acre mill site is not to be mined) site were mined to an average depth of 5 feet, sufficient material would be available for approximately 25-years of operation. The applicant is requesting a Reclamation Plan approval for a 30-year (2 to 4 years to reclaim the site and obtain closure) period from the date of County approval. This 30-year period would coincide with the expected life of the planned mining.

### **Project Size**

The mine site will be a total disturbance of approximately 170 acres (10 acre Mill Site is not to be mined). Site access will be from an existing 1,400-foot by 20-foot wide road (0.65 acres). Refer to sheet 1 for access road and truck routes on public roads.

## **1.2 MINE WASTE**

There is little defined soil development at the surface. The top 6 inches of surface material will be stockpiled for use as a seed bank for reclamation. With increased depth, the deposit is anticipated to become harder and more consolidated. The amount of waste or unusable material is not known however, it is anticipated to be minimal. If thin beds of interburden waste are encountered, it would be stored in shallow stockpiles within the 160-acre site and water sprayed to form a crust to reduce wind erosion. Concurrent and final reclamation activities would spread the surface material and any unusable material within the shallow pit upon annual reclamation and closure. Thick beds of interburden waste rock would define mine depth, since its removal would not be economically feasible.

All domestic refuse will be collected in approved trash bins and hauled to the nearest approved landfill. Equipment will be maintained on-site by a mobile maintenance truck and all used oils, fuels and solvents will be collected in accordance with the Department of Toxic Substances and Control regulations and picked up by an approved hauler for recycling. To protect soils and groundwater from potential contamination, fueling and maintenance areas shall be covered with impervious materials and equipped with berms and catch basins to capture accidental spills.

The operator will be required to submit a Business Emergency Contingency Plan with the County Fire Department Hazardous Materials Division. No additional materials, beyond oil, fuel, grease, and solvents will be utilized on-site.

## **1.3 PROCESSING**

A portable screen will be utilized on-site prior to loading material into haul trucks. Due to the type of material, screening operations will be performed dry. No other types of processing, crushing, or grinding are proposed. Screened material is then delivered to market or hauled to the mill site with 25-ton on-road haul trucks for final shipment.

During wet weather conditions, the last 2 to 3 miles of the dirt road leading into the mine may become muddy and unsafe to drive trucks over. Therefore, the 2, 5-acre mill sites (10 acres combined) will be used. A 2 month stock pile at the Mill Site is proposed. Depending on future volume, a 70-ft drive over truck scale to certify loads leaving from the Mill Site may be installed. Annual volume leaving the Mill Site for delivery to market is anticipated to be 20,000 tons per year.

## **1.4 PRODUCTION WATER**

There are no water requirements for processing or washing the material. An agreement with a local Rancher (Two Hawks Ranch) is in place to purchase water from their agricultural well. A 10,000 gallon water tank at the ranch site will be used. It is anticipated approximately 16,000 gallons of water per day will be required. A 4,000 gallon water truck fills up at a 10,000 gallon elevated water tower at the Sandy Valley Ranch. The water truck is used to bring water to the site to be used for dust control along the access roads, haul roads and within the active surface

mining areas. Domestic water for drinking will be imported for employees. Domestic wastewater and septage will be collected and removed by a licensed operator.

No wastewater will be generated as a result of excavation or screening operations. To protect soils and groundwater from potential contamination from run-off, fueling and maintenance areas shall be covered with impervious materials and equipped with berms and catch basins to capture accidental spills and insure that run-on and run-off from this area is not contaminated.

## **1.5 EROSION AND SEDIMENTATION CONTROL**

The project site is located within Mesquite Lake, a dry lakebed. The area is the lowest spot within the surrounding watershed, therefore no downstream impacts will occur as a result of the mining activity. No significantly developed watercourses exist within the vicinity. The area acts as one large settling basin. The lakebed is dry for most of the year, however, after periods of heavy rainfall, standing water is evident. 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 planned control practices for the site are described in the following:

### **Limiting Surface Disturbance**

The operator will limit surface disturbance to those areas required for planned mining operations. At maximum production, approximately 6 acres per year will be mined. Disturbance of new areas will not commence until existing areas have been mined out and undergoing reclamation.

### **Diverting Undisturbed Area Run-Off**

Diversion of surface run-off from undisturbed areas is effective in minimizing the amount of run-off which enters the pit and comes in contact with disturbed areas and limiting erosion. Run-off from undisturbed upgradient areas can be diverted around active mining areas through the use of diversion berms.

### **Disturbed Area Drainage Control**

Due to the low precipitation, lakebed hydrology (flat gradient of the lakebed), and sandy nature of the soil, drainage control does not present a significant impact. Run-off resulting from direct precipitation and uncontrolled run-off from surrounding lakebed areas have the potential to cause minor erosion and deposition, in both the disturbed and downgradient areas. All disturbed area drainage is retained within the basins and low-lying areas created by the excavations.

Erosion control measures along the access road and around the perimeter of stockpiled material will include construction of temporary diversion and collection ditches, berms, sediment fences, and other measures individually or in combination as necessary.

The objective of all drainage control measures will be to limit flow volumes and velocities to minimize or prevent erosion and to promote settling of suspended solids before the run-off leaves the disturbed area. Drainage control measures will be implemented as needed based on seasonal precipitation and the impact, if any, to the operating areas. The area is the lowest spot within the surrounding watershed, therefore no downstream impacts will occur as a result of the mining activity.

### **Stabilization of Disturbed Areas**

Disturbed areas will be stabilized to minimize both short- and long-term erosion through regrading and revegetation. In the case of mine roads, short-term stabilization measures include construction of temporary diversion and collection ditches, berms, sediment fences, and other measures individually or in combination as necessary. Stabilization of the shallow cut slopes, including grading and revegetation, will be performed upon completion of mining. Erosion from any stockpiled material will be prevented by water spraying to form a crust.

Long-term stabilization or reclamation will generally involve grading or reshaping disturbed areas to match existing gradients, establishing effective drainage, and revegetation.

## **1.6 BLASTING**

Blasting of consolidated gypsum deposits is not proposed.

## **2.0 RECLAMATION**

### **2.1 LAND USE**

The area surrounding the site is undisturbed and remains in a natural state. Activities occurring within the immediate area include recreational off-road vehicle travel and commercial livestock grazing. The site as well as the surrounding area are within the Resource Conservation (RC) Official Land Use District and are primarily used for grazing activities. The area is within a grazing allotment and burro Herd Management Area. The Mesquite Lake Area of Critical Environmental Concern begins in the foothills surrounding the lakebed approximately 3,500 feet southwesterly at its closest point to the site. The BLM property within the area is identified within the California Desert Conservation Area Plan as being a Multiple Use Class L (Limited Use) Area. Class L areas are designed to protect sensitive, natural, scenic, ecological, and cultural resources. Public lands designated as Class L are managed to provide for generally lower-intensity, controlled multiple-use of resources, while ensuring that sensitive values are not significantly diminished.

### **2.2 GEOLOGY**

Gypsite (Gypsum) is the industrial mineral commodity mined from the Mesquite Lake Mine. The gypsum occurs at the surface as wind blown gypsum sand and as a bedded evaporite deposit below the surface. The gypsum sand is pure enough to use as an agricultural additive without the need for any chemical beneficiation. There is no defined soil development at the surface of the dry lakebed. With increased depth the deposit becomes harder and more consolidated, and less desirable for commercial purposes.

### **2.3 HYDROLOGY**

The project site is located within Mesquite Lake, a dry lakebed, which is the lowest spot within the surrounding watershed. No significantly developed watercourses exist within the vicinity. The area acts as one large settling basin or sink. The lakebed is dry for most of the year. However, after periods of heavy rainfall, standing water is evident.

### **2.4 WILDLIFE**

As a dry lakebed in the upper desert, the project area is sparsely vegetated and the disturbance to wildlife will be minimal (BLM EA CA-069-EA7-21, dated April 4, 1997, Refer to Appendix B). Vegetation on the site consists of widely spaced cheesebush (*Hymenoclea salsola*), burrobush (*Ambrosia deltoidea*), fourwing saltbush (*Atriplex canescens*), and creosote (*Larrea tridentata*).

The desert tortoise (*Gopherus agassizii*) is listed as a threatened species by both the US Fish and Wildlife Service and the State of California. The tortoise occurs in the area surrounding the project site; however, a survey conducted May 9, 1996 by the BLM did not reveal any tortoise sign or individuals. Other wildlife known in the vicinity of the mine site includes wild burros, and domestic livestock. The mine is not within the habitat of the threatened willow flycatcher



(*Empidonax traillii extimus*). No other species, or their habitat, listed by the state or federal government as threatened or endangered is anticipated to be effected by this mine.

In accordance with the approved POO Conditions of Approval (CA-690-EA08-30, August 13, 2010, revised August 2011) the operator shall take the following precautions in order to avoid injury to range livestock or burros:

1. All pits and trenches shall be constructed in such a way as to avoid trapping or injury to livestock or burros.
2. Vehicle operators shall be made aware of the presence of livestock and burros by the operator and take steps to avoid vehicle collision.

In accordance with the approved Plan of Operations the operator shall take the following precautions in order to avoid impacts to threatened wildlife species:

1. All trash and food items shall be promptly enclosed in raven-proof containers (metal or solid plastic trashcans) and removed on a regular basis.
2. All vehicular traffic shall be confined to existing roads and new roads authorized by the approved Plan of Operations.
3. Any tortoises observed during any phase of the project shall be left to move out of the way on its own. Handling of tortoises is not permitted.
4. To assure observation and avoidance of any tortoise in the roadways, speed limits on all dirt roadways shall be limited to 20 MPH during active tortoise season (mid-March to mid-November).
5. Workers shall inspect for desert tortoises under vehicles and equipment prior to moving it. If a desert tortoise is present, the worker shall carefully move the vehicle or equipment only when necessary or shall wait for the desert tortoise to move out from under the vehicle or equipment.
6. The operator shall notify the BLM Needles Field Office upon locating any dead or injured desert tortoise at the project site or along any access road. Any injured desert tortoise shall be transported to a veterinarian for treatment at the expense of the operator.

## **2.5 RECLAMATION**

As mining progresses, the pit slopes may be up to 5 feet in height with slopes ranging less steep than 5H:1V. The project boundary's perimeter slopes are planned to be reclaimed concurrently to an overall slope gradient of 5H:1V during operations to meet reclamation performance standards as stated in Article 9, Reclamation Standards §3704(d) in 14 CCR. Phased reclamation will take place on an annual basis. Prior to mining, the top 6 inches of material will be scraped from the area to be mined into small perimeter berms. The area mined would average approximately

if the demand for the product exists, horizontal expansion would likely be feasible within the surrounding lakebed and within the holdings or claims area in support of future market demand.

## **2.9 SLOPES AND SLOPE TREATMENT**

Operational slopes will be mined to approximately 5H:1V with a maximum depth of 5 feet. Any oversteepened slopes at the time of reclamation will be recontoured to 5H:1V. Due to the shallow depth of the quarry, additional slope protection will not be required. Since no structural end use is contemplated, slope compaction will not be needed to maintain slope stability. Dozer walking of slopes will provide adequate soil preparation to aid in the collection of seeds and moisture.

## **2.10 SOILS AND FINE TEXTURED WASTE**

There is no defined soil development at the surface. The surface is considered usable product, however the top 6 inches of surface material will be stockpiled as part of mining or reclamation operations. Compacted areas including the 1,400-foot access road will be ripped then covered with surface material prior to revegetation efforts.

## **2.11 DRAINAGE AND EROSION CONTROLS**

On-site drainage will be retained within the shallow depression where it will percolate into the soil. Off-site drainage flows are minimal since the entire lakebed acts as a drainage sump for the surrounding area.

## **2.12 PUBLIC SAFETY**

No refuse or dangerous material will remain onsite. Final slopes will be mined at 5H:1V to protect public safety and the pit will only be mined to a 5-foot depth. During revegetation efforts, flags around the perimeter of each area undergoing reclamation will be posted noting that the areas is a being revegetated.

## **2.13 MONITORING AND MAINTENANCE**

The operator will be required under SMARA (Public Resources Code §2207), to submit an annual status report on forms provided by the California Department of Conservation - Office of Mine Reclamation. SMARA (Section 2774(b)) requires the lead agency to conduct an inspection of the mining operation within six months of receipt of the required Annual Report.

Upon completion of mined areas (approximately 6 acres a year), reclamation and revegetation will be initiated and will be monitored annually for five years to monitor and assess revegetated areas in accordance with BLM guidelines. A Monitoring Report submitted by the operator to the BLM and County, will be part of the overall compliance with conditions.

## **2.14 RECLAMATION ASSURANCE**

In addition to the monitoring through inspections and reporting, the operator is required to assure reclamation of the site in accordance to the approved Reclamation Plan in compliance with Section 2773.1 of SMARA. The financial assurances may be in the form of surety bonds, an irrevocable letter of credit, trust funds or other forms of financial assurances approved by and payable to the BLM, the County, and the Department of Conservation. A Financial Assurance Cost Estimate has been approved by the County on March 2011.

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