

## LAND USE SERVICES DEPARTMENT

### PLANNING COMMISSION STAFF REPORT

**HEARING DATE: January 21, 2016** 

**Project Description** 

APN: 0518-181-13
Applicant: Daily Transit Mix

**Community:** Fort Irwin/1<sup>st</sup> Supervisorial District

**Location:** South side of Paradise View Road, 0.9 Miles

east of Fort Irwin Road.

Project No: AP20130116

Staff: Reuben J. Arceo
Applicant Rep: Lori Clifton

Proposal: Mining Conditional Use Permit and Reclamation

Plan to increase the acreage of the surface mining operation from 12.2 acres to 14.5 acres and to extend the mining expiration date from

2014 to December 31, 2044.

7 Hearing Notices Sent On: January 8, 2016

AGENDA ITEM # 3
Vicinity Map



Report Prepared By: Reuben J. Arceo

#### SITE INFORMATION

Project Size: 38.4 Acres

**<u>Terrain:</u>** Generally flat Mojave Desert alluvial terrain with mountain ridges northeast of the site.

**Vegetation:** Desert scrub, creosote bush, buckwheat and brome grasses.

#### SURROUNDING LAND DESCRIPTION:

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
Site	Existing Quarry	Resource Conservation (RC)
North	Vacant/Undeveloped	Resource Conservation (RC)
South	Vacant/Undeveloped	Resource Conservation (RC)
East	Vacant/Undeveloped	Resource Conservation (RC)
West	Vacant/Undeveloped	Resource Conservation (RC)

#### **AGENCY**

City Sphere of Influence:

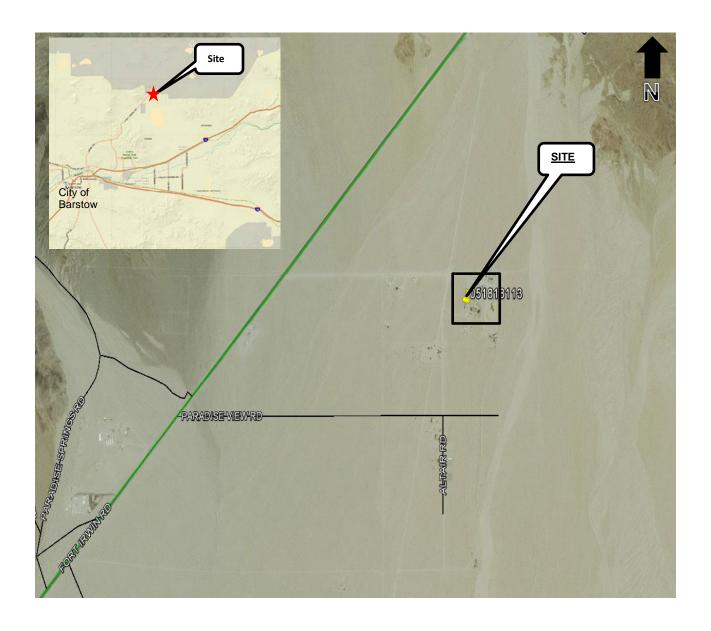
Water Service: Well and Bottled water for employees

Sewer Service: Portable Toilets

**STAFF RECOMMENDATION:** That the Planning Commission ADOPT the Mitigated Negative Declaration, ADOPT the Findings, and APPROVE the revised Mining Conditional Use Permit and Reclamation Plan subject to the attached Conditions of Approval and incorporated Mitigation Measures, and FILE the Notice of Determination.

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.

## LOCATION MAP R. Hove Fort Irwin Pit



# OFFICIAL LAND USE DISTRICT MAP ZONING DESIGNATION Resource Conservation (RC)

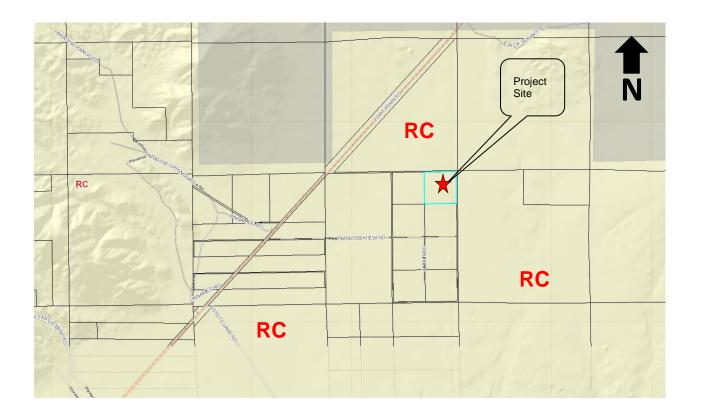
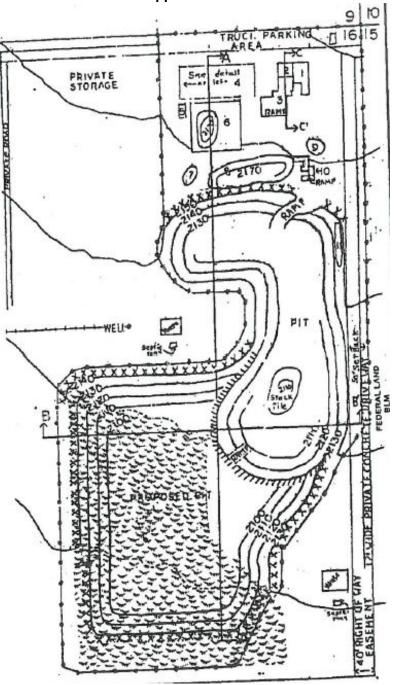
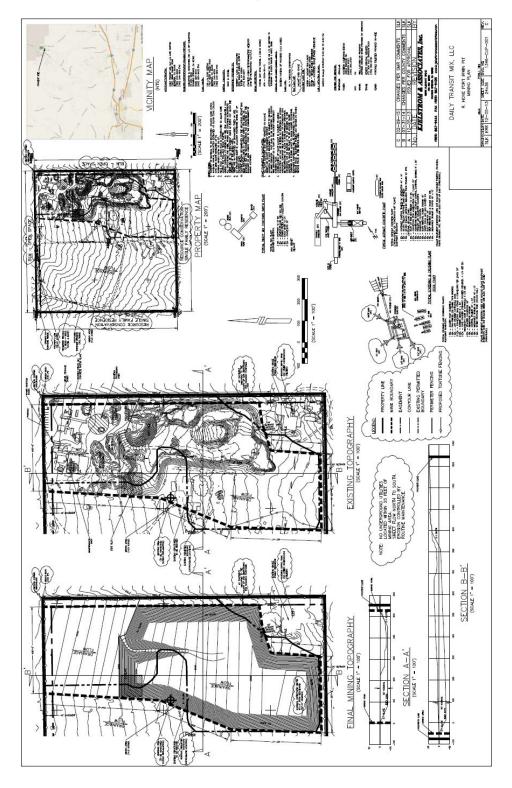


FIGURE 1

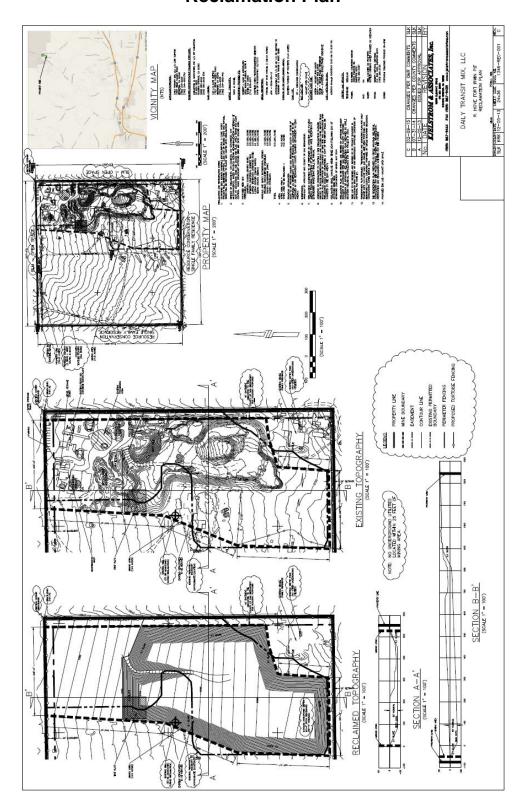
R. Hove Fort Irwin Pit
2001 Approved Site Plan



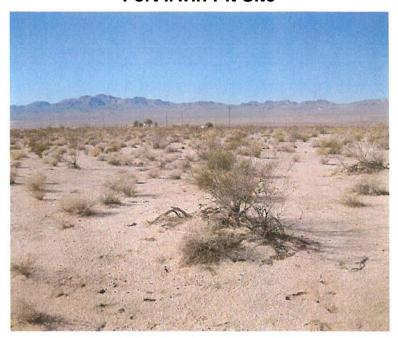
# FIGURE 2 Fort Irwin Pit Mining Plan



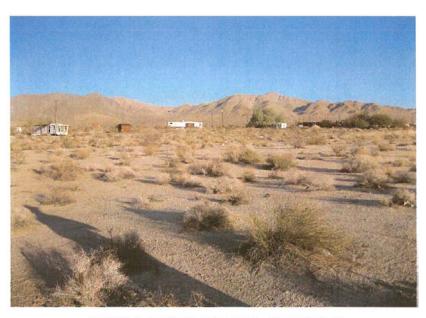
## FIGURE 3 Fort Irwin Pit Reclamation Plan



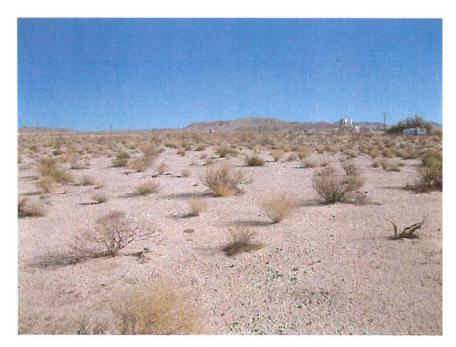
# FIGURE 4 SITE PHOTOS Fort Irwin Pit Site



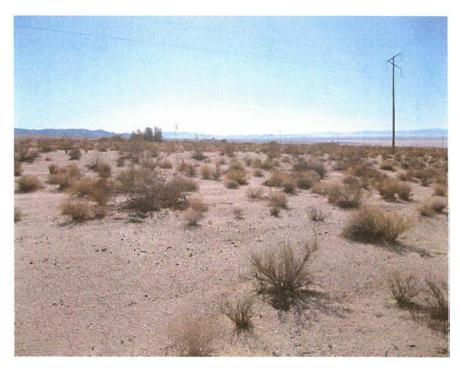
NORTHEAST CORNER LOOKING SOUTHWEST



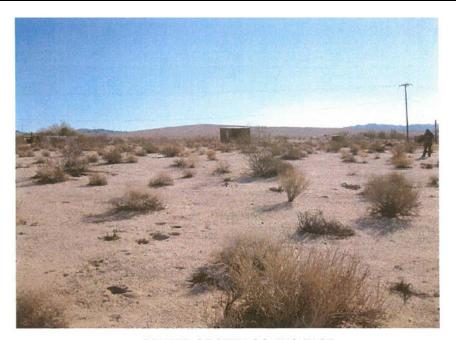
SOUTHEAST CORNER LOOKING NORTHWEST



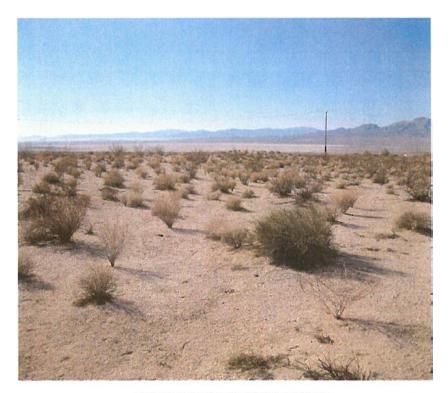
SOUTHWEST CORNER LOOKING NORTHEAST



NORTHWEST CORNER LOOKING SOUTHEAST



CENTER OF SITE LOOKING EAST



CENTER OF SITE LOOKING SOUTH

#### PROJECT DESCRIPTION AND BACKGROUND:

<u>Project</u>. This project (Project) is a revision to an approved Conditional Use Permit (CUP) and Reclamation Plan for a sand and gravel surface mining operation to increase the disturbed acreage from 12.2 acres to 14.5 acres on a portion of a 38.43-acre property as noted in Figure 2. Also, the revision allows for the sand and gravel pit to be mined up to a depth of fifty (50) feet and extends the mine's expiration from 2014 to 2044. The surface mine, the R. Hove Fort Irwin Pit (formerly known as the Gordon Lint Mine), is located approximately 22 miles northeast of Barstow and is accessed via Paradise View Road from Fort Irwin Road.

<u>Environmental Setting</u>. The Project site is located entirely on private land and bordered on the north and east by lands administered by the U.S. Bureau of Land Management (BLM). There are no U.S. Fish and Wildlife Service (USFWS)-designated critical habitats that will be affected by the proposed Project, nor are there any protected candidate, sensitive or special status species designated by the California Department of Fish and Wildlife. A power line easement runs through the property owned by California Electrical Corp. No other easements for utilities are present on the property. An existing well west of the disturbed area supplies water to the rock plant and for future processing plants.

<u>Site History</u>. The surface mining operation originally obtained Planning Commission approval on November 29, 2001, to legalize a former sand and gravel mining operating as shown in Figure 1. Mining and associated activities have been conducted five days per week up to twelve hours per day (based on the season) between the hours of 6 a.m. and 6 p.m. to supply materials for Fort Irwin construction needs. The operation was divided into two phases. The first phase involved mining the existing open pit to a depth of thirty (30) feet. The second phase was an expansion of the mining excavation to the southwest of the existing pit. The operation includes a concrete batch plant. The Reclamation Plan, if approved, provides that the site will become reclaimed to Vacant Open Space, once mining is completed.

Mining Operational Parameters. The proposed expansion of the R. Hove Fort Irwin surface mining operation would allow production up to 65,000 tons per year of sand and gravel for use on construction projects in San Bernardino County. The operations will proceed as a single phase, which consists of mining the southern 10.3 acre portion of the site up to a depth of 50 feet. Blasting is not needed or proposed as part of this operation. The northern 4.2 acre portion of the disturbed area will be used for processing that includes a screening and crushing plant, a concrete batching plant and proposed future asphaltic concrete batch and recycling plant as shown in Figure 2. As noted in Table 1 below, the mine will operate up to six days a week, Monday through Saturday from 5:00 a.m. to 5:00 p.m., with maintenance occurring in the evening hours prior to 10 p.m. On various occasions, construction projects may demand night-time operations, especially during the summer months to service the nearby military base, which is the applicant's primary customer. The ready mix concrete batch plant operations are intended to service the U.S. Army Fort Irwin installation. The operator also intends to build a future asphalt concrete plant and recycle plant operation, which will utilize the pit's aggregate resource.

**Table 1: Mine Operations** 

Table 1: Willie Operations		
Quantity	Proposed	
Acreage	38.43	
Annual Production Rate	65,000 tons per year	
No. of Employees	2	
Days of Operation	Monday thru Saturday	
Hours of Operation	5 am to 5 pm	
Truck Trips	20	
Operational Mining Period	December 31, 2044 (30 years)	

R. Hove Fort Irwin Pit AP20130116 APN# 0518-181-13 Planning Commission Staff Report January 21, 2016 Page 11

<u>Ore Processing</u>. Ore processing will be conducted in conjunction with the quarry operation for producing marketable sand and gravel products. The processing plant consists of conveyors, a feeder, screening decks and crushers. The mineral materials will be processed, sorted and conveyed to predetermined stockpiles. Raw material too large to pass through the first screening is collected and conveyed to a crusher. The ready mix concrete plant is used to combine sand, gravel, cement and water to produce concrete. The asphalt concrete plant will utilize materials that have been cycled through the processing crushing system as well, which will then be mixed with an emulsion to produce asphalt concrete.

<u>Reclamation</u>: The Reclamation Plan No. 2001M-05, attached as Exhibit D, details the methods and procedures and sequences to be employed to reclaim the disturbed areas as noted in Figure 3 and proposed expansion area and will establish a monitoring program and financial assurances as required by SMARA to ensure that reclamation is completed in accordance with the approved Reclamation Plan.

On January 5, 2016 in conformance with SMARA Section 2774 (d)(2), the County informed the state Office of Mine Reclamation (OMR) of the Project's scheduled January 21, 2016 Planning Commission hearing. In conjunction with the required hearing notice, the County included responses to OMR's comments raised in their January 8, 2015, letter, attached as Exhibit G. The Reclamation Plan will be required to address OMR's comments. The requirements are included in the Conditions of Approval. After incorporating the changes suggested by OMR, the Project's Mining CUP and Reclamation Plan will meet SMARA and Development Code requirements.

#### **ANALYSIS:**

Land Use Compatibility. The surface mining operation is located within the Resource Conservation (RC) Land Use District, which allows for mineral resource development (mining) subject to Planning Commission approval of the proposed Revision to an Approved Plan. The properties surrounding the site are similarly zoned RC. The Project would not physically divide an established community, and is consistent with all applicable land use policies and regulations of the County's General Plan and Development Code.

The Project area is located in the West Mojave Plan Area of the California Desert Conservation Area (CDCA). Compliance with the Mitigation Measures for biological resources contained within the Initial Study ensures that the Project would not conflict with the West Mojave Plan, or any other adopted Habitat, Conservation Plan, Natural Community Conservation Plan or any other approved local, regional or state habitat conservation plan.

California Environmental Quality Act (CEQA). In compliance with the California Environmental Quality Act (CEQA), an Initial Study and Mitigated Negative Declaration, attached as Exhibit C, was completed and posted for the twenty (20) day review and comment period, which closed on January 15, 2016. Staff received no written or verbal comments either from agencies or from interested parties or persons on the initial study/MND. All issues evaluated in the Project's initial study can be mitigated below a level of significant impact. The Project incorporates mitigation measures pursuant to the recommendations cited in the Habitat Assessment & Focused Burrowing Owl Survey, dated November 6, 2013 and Focused Desert Tortoise Survey, dated November 5, 2013 prepared by RCA Associates, LLC, attached as Exhibits E and F. The mitigations, incorporated as conditions of approval will minimize impacts to biological and cultural resources.

Reclamation Plan. The goal of the Project's Reclamation Plan #2001M-05 is to return the site to privately-owned Vacant Open Space consistent with the Resource Conservation (RC) Land Use

R. Hove Fort Irwin Pit AP20130116 APN# 0518-181-13 Planning Commission Staff Report January 21, 2016 Page 12

District as shown in the Reclamation Plan, so that the potential for future mining is not impeded. Reclamation of disturbed areas will commence immediately after mining is completed. Final reclamation should be completed within five (5) years of the termination of mining activities scheduled for December 31, 2044. Complete reclamation of the site will include:

- Removal of all equipment.
- Contour- grading of slopes where necessary at a proposed 2:1 inclination.
- Mitigation of any potential hazards.
- Erosion Control and Revegetation with native plant species.

#### **RECOMMENDATION:** That the Planning Commission:

- 1) **ADOPT** the Mitigated Negative Declaration based on a finding that the Initial Study was completed in compliance with CEQA, that it has been reviewed and considered prior to approval of the Project, and that the Initial Study/Mitigated Negative Declaration and supporting documents reflects the independent judgment of the County of San Bernardino;
- 2) ADOPT the Findings per Development Code Sections 85.06.040 and 88.03.060(k);
- 3) **APPROVE** the Mining Conditional Use Permit and Reclamation Plan 2001M-05 as revised subject to the Conditions of Approval;
- 4) **FILE** the Notice of Determination.

#### **FIGURES:**

- 1. Fort Irwin 2001 Approved Site Plan
- 2. Fort Irwin Mining Pit Mining Plan
- 3. Fort Irwin Mining Pit Reclamation Plan
- 4. Photos

#### **ATTACHMENTS:**

Exhibit A: Findings

Exhibit B: Conditions of Approval

Exhibit C: Mitigated Negative Declaration/Initial Study Exhibit D: R. Hove Fort Irwin Pit Reclamation Plan

Exhibit E: Habitat Assessment & Focused Burrowing Owl Survey, November 6, 2013

Exhibit F: Focused Desert Tortoise Survey, November 5, 2013

Exhibit G: OMR Comment Letter

### **EXHIBIT A**

## **Findings**

**FINDINGS** for approval of the Revision to an Approved Action (Conditional Use Permit) to increase the acreage of the surface mining operation from 12.2 acres to 14.5 acres and to exceed the mining expiration date from 2014 to May 2044.

1. The site for the proposed use is adequate in terms of shape and size to accommodate the proposed extractive mining operation. The 38.4 acre quarry will be excavated and reclaimed in a plan intended to minimize impacts as mining and reclamation activities occur. The Project conforms to all the requirements of the Development Code for the proposed use and incorporates the necessary conditions to safeguard the public health, safety and welfare, including biological, hydrology and reclamation conditioning to ensure the site is reclaimed in accordance with the adopted reclamation plan.

General Plan Goal LU 9: Development will occur in a phased sequence to ensure that the operator is able to maximize the site's mining potential while concurrently commencing reclamation efforts in areas where deposits are depleted or the approved depth reached in accordance with the approved Reclamation Plan

- 2. The site for the proposed use has adequate access, which means that the site design incorporates appropriate street and highway characteristics to serve the proposed use. The Project site has adequate access via Fort Irwin Road south from Interstate 15. Fort Irwin Road will not be significantly impacted by the twenty (20) daily truck trips per day that are projected to occur. In that the Project is located in a remote area surrounded by vacant land, there are no conflicts with access to surrounding properties
- 3. The proposed use will not have a substantial adverse effect on abutting property or the allowed use of the abutting property, which means that the use will not generate excessive noise, traffic, vibration, or other disturbance. In addition, the use will not substantially interfere with the present or future ability to use solar energy systems. The proposed mining operation and Project improvements have been designed to incorporate the necessary mitigation and improvement to comply with the County's SMARA Ordinance and recommendations by the State Office of Mining and Reclamation (OMR).
- 4. The proposed use and manner of development are consistent with the goals, maps, policies and standards of the General Plan and any applicable community or specific plan. The proposed site plan together with the provisions for the mine's phased expansion, excavation and reclamation are consistent with the County General Plan and Resource Conservation (RC) land use designation. The Project specifically implements the following goals:

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

General Plan Goal CO 7: The County will protect the current and future extraction of mineral resources that are important to the County's economy while minimizing impacts of this use on the public and the environment.

5. There is supporting infrastructure, existing or available, consistent with the intensity of development, to accommodate the proposed development without significantly lowering

service levels. The site is in a remote rural location significantly isolated from residential and commercial uses and where mining has operated since the 2001. The Project would permit an expansion of the mining site and slight reconfiguration of the quarries to allow greater depth excavations and for the operator to phase in mining excavation without burdening the existing road and other infrastructure serving the existing uses. No additional supporting infrastructure is required to extend mining into the proposed site.

- 6. The lawful conditions stated in the approval are deemed reasonable and necessary to protect the overall public health, safety and general welfare because the conditions of approval include measures to mitigate biological impacts, air quality impacts, cultural resources impacts, greenhouse gas impacts, hydrology and water impacts while enforcing performance standards
- 7. The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities.
- 8. The Initial Study and the related Mitigated Negative Declaration have been prepared in compliance with the California Environmental Quality Act (CEQA) and represent the independent judgment of the County acting as lead agency for the project. Therefore, if approved, a Notice of Determination will be filed.

### <u>FINDINGS</u> for the Fort Irwin Mining/Reclamation Plan (Reclamation Plan) on 38.4 acres (APN: 0518-181-13, Mine ID# 91-36-0161)

Pursuant to Development Code Section 88.03.060(k)(2), the following findings must be made in the affirmative in order to approve the Project's mining reclamation plan:

- 1. The Reclamation Plan No. 2001M-05 as conditioned complies with SMARA (Public Resources Code Sections 2772-2773) and any other applicable provisions.
- 2. The Reclamation Plan as conditioned complies with applicable requirements of State regulations (California Code of Regulations Sections 3500-3505 and 3700-3713).
- 3. The end use of land reclaimed as conditioned is in compliance with the Reclamation Plan and are consistent with the Development Code, General Plan and any applicable resource plan or element.
- 4. The Reclamation Plan has been reviewed as required by the California Environmental Quality Act 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.
- 5. The land and/or resources will be reclaimed to a condition that is compatible with, and blends in with, the surrounding natural environment, topography, and other resources.
- 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. With regard to this Project, that use is open space.
- 7. The Project's conditions of approval incorporate the recommendations provided by the California Department of Conservation (DOC) in its January 8, 2015 transmittal. The County informed the DOC on January , 2016, of its intention to recommend approval of the proposed Fort Irwin expansion scheduled for the January 21, 2016, Planning Commission hearing.

**Conditions of Approval** 

#### **CONDITIONS OF APPROVAL**

## R. HOVE FORT IRWIN PIT CA MINE ID #91-36-0161 MINING AND RECLAMATION PLAN

## GENERAL REQUIREMENTS Conditions of Operation and Procedures

#### LAND USE SERVICES – Planning (909) 387-8311

- 1. Project Description. This Revision to an Approved Action is for Mining Conditional Use Permit (CUP) and Reclamation Plan No. 2001M-05 for the R. Hove Fort Irwin Pit (Gordon Lint Mine) to continue mining sand and gravel on 14.5 acres of a 38.43-acre project site for an additional period of 30 years. The project site is located 0.9 miles east of the Fort Irwin Road approximately 22 miles northeast of Barstow, California. A copy of Mining and Reclamation Plan No. 2001M-05 shall be kept on site during operations at all times. Legal access to the site is via Paradise View Road.
- 2. <u>Effect of Project Approval</u>. The Project site is an existing sand and gravel mine. Approval of the Project will:
  - A. Extend the planning operation period to December 31, 2044.
  - B. Expand the Reclamation Plan boundary to match and accommodate the existing area of the disturbance.
- 3. <u>Timing of New Requirements</u>. Requirements for the applicant to perform pursuant to this approval will be stated in terms of completion within a given time frame, beginning upon approval by the Planning Commission. Failure to comply with requirements in a timely manner will be subject to enforcement action, as authorized under the County Code and SMARA, up to and including revocation of this approval.
- 4. <u>Mine and Reclamation Documentation</u>. The Mine and Reclamation Plan text and maps, including the Revegetation Plan, shall be revised to reflect the project as approved by the Planning Commission and to address comments from the State Office of Mine Reclamation. The corrected plan, maps and any supporting technical reports shall be submitted within 120 days of the Planning Commission approval.
- 5. <u>Reclamation Plan Recordation</u>. Pursuant to SMARA, Section 2772.7, Planning will prepare a "Notice of Reclamation Plan Approval" on a form to be approved by the County Recorder's Office. The operator shall pay any and all review and recording fees.
- 6. <u>Mine and Reclamation Plan</u>. A copy of Mining and Reclamation Plan No. 2001M-05 shall be kept on site during active operations at all times. The

Planning Commission Hearing: January 21, 2016

approved Mining and Reclamation Plan shall be bounded and shall incorporate the County-approved text and reclamation plan maps, revegetation plan, most recent slope stability analyses, most recent biological resources survey reports, Habitat Assessment and Focused Burrowing Owl Survey, dated November 6, 2013, Focused Desert Tortoise Survey, dated November 5, 2013 and Revegetation and Monitoring Plan for Daily Transit Mix dated March 2003, and Conditions of Approval. and most recent Financial Assurances. 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.

- 7. <u>Road Improvement Completion.</u> Completion of the road improvement as stated in these conditions shall be completed within twelve (12) months following the Planning Commission approval.
- 8. Operational Time Period. The authorization of the revised Mining Reclamation Plan No. 2001M-05 shall be effective from the date of approval through December 31, 2044 for active mining and for an additional five (5) years for reclamation. Mining operations will proceed as one phase, which consists of mining the southern 10.3-acre portion of the site up to a depth of 50 feet and limited by the approved boundaries. After the mining activities have been completed, the site shall be reclaimed to vacant open space and be managed by the legal owners.
- 9. <u>Operational Changes</u>. 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 may affect the approved Mining CUP and Reclamation Plan.
- 10. Extension. Approval shall become null and void if the conditions applicable to the amended Reclamation Plan have not been complied with following due process and/or operation has not commenced upon completion of all operating requirements 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. This provision does not extend the period for compliance with conditions of approval.
- 11. <u>Additional Permits</u>. The applicant/operator shall ascertain and comply with requirements of all Federal, State, County, and Local agencies as are applicable

Planning Commission Hearing: January 21, 2016

to the project areas. They include, but are not limited to: the San Bernardino Departments of Planning, Environmental Health Transportation/Flood Control, Fire Warden, Building and Safety, Bureau of Land Management, Mojave Desert Air Quality Management District, State Fire Marshall, Lahontan or Colorado Regional Water Quality Control Board, Caltrans District 8, California Department of Fish and Wildlife, 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.

12. Indemnification. In compliance with the SBCC § 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 relinguish 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. 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.

13. Financial Assurances. 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 and the Department of Conservation as the beneficiaries. Any withdrawals made by the County 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 the Department of Conservation, Office of Mine Reclamation 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 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.

- 14. Annual Reporting. The Mining Operational Annual Report to the State Department of Conservation and to the County Land Use Services Department on a date established by the State Department of Conservation, using forms furnished by the State Mining and Geology Board. The County is required to conduct an inspection of the surface mining operation by a qualified person not less than once each calendar year to determine if the operation is in compliance with the approved Conditions of Approval, Reclamation Plan, and both SMARA statutes and regulations. The County is required to notify the State Department of Conservation upon completion of the inspection that the inspection has been conducted and provide a statement regarding the status of compliance of the operation within 30 days completion of the inspection. The operator of the mining operation is responsible for filing an application with the County requesting an inspection and for paying the County's cost of conducting the inspection.
- 15. Project Account. 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 compliance monitoring reports and site inspections. Project Account. The Project Account number is AP20130116. This is an actual cost project with a deposit account to which hourly charges are assessed by various county agency staff (e.g. Land Use Services, Public Work and County Counsel). Upon notice, the "developer" shall deposit additional funds to maintain or return the account to a positive balance. The "developer" is responsible for all expenses charged to this account. Processing of the project shall cease if it is

determined that the account has a negative balance and that an additional deposit has not been made in a timely manner.

- 16. <u>Amendment</u>. If the Mining and Reclamation Plan procedures change from those outlined in the revised Mining and Reclamation Plan No. 2001M-05, the applicant/operator shall file an amendment and secure approval before such changes can be made effective.
- 17. Clean Water Act. The US Army Corp of Engineers (COE) regulates discharge of dredged fill materials into Waters of the United States pursuant to Section 404 of the Clean Water Act. If the COE agrees that the delineated waters on the site are jurisdictional and the project will result in the discharge of materials into waters of the United States, a 404 permit may be require and will need to be obtained from the Los Angeles COE District Office. A pre-construction notification should be submitted to the COE District office early in the environmental process.
- 18. Regional Water Quality Control Board (RWQCB). The RWQCB regulates discharge to surface waters under the Clean Water Act (CLA) and the California Porter-Cologne Water Quality Act; therefore, a Section 401 permit may be required in conjunction with the 404 permit, if the COE concurs that the site supports waters of the United States. Effective July 1, 2010, all dischargers are required to obtain coverage under the Construction General Permit Order 2009-0009-DWQ adopted on September 2, 2009. A Section 401 water quality certification may be required as part of the approval by the COE if a 404 permit is deemed necessary by the COE.
- 19. <u>Fees.</u> Prior to issuance of the approved Permits, all fees due under actual cost Job No. AP20130116 shall be paid in full.

#### LAND USE SERVICES – Code Enforcement (909) 387-8311

20. Enforcement. If any County agency is required to enforce compliance with the conditions of approval, the property owner and "developer" shall be charged for such enforcement activities in accordance with the County Code Schedule of Fees. Failure to comply with these conditions of approval or the approved site plan design required for this project approval shall be enforceable against the property owner and "developer" (by both criminal and civil procedures) as provided by the San Bernardino County Code, Chapter 86.09 - Enforcement.

#### COUNTY FIRE – Community Safety (909) 386-8400

21. <u>Fire Jurisdiction</u>. The above referenced project is under the jurisdiction of the San Bernardino County Fire Department herein ("Fire Department"). Prior to any construction occurring on any parcel, the developer shall contact the Fire Department for verification of current fire protection requirements. All new

Planning Commission Hearing: January 21, 2016

construction shall comply with the current Uniform Fire Code requirements and all applicable statutes, codes, ordinances and standards of the Fire Department.

#### LAND USE SERVICES - Land Development – Drainage (909) 387-8311

22. <u>Tributary Drainage</u>. 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.

#### TIME-SENSITIVE IMPROVEMENT REQUIREMENTS

#### PUBLIC WORKS – Traffic Division (909) 387-8186

- 23. <u>Road Improvements</u>. Within 12 Months following Planning Commission approval, the following road improvement requirements shall be completed:
  - 1. The applicant shall design and construct, at 100% cost to the applicant, the following road improvements on Fort Irwin Road at Paradise View Road per the Caltrans Highway Design Manual and AASHTO's "A Policy on Geometric Design of Highways and Streets".
    - A Northbound right-turn deceleration lane and a northbound acceleration lane.
    - A Southbound left-turn pocket.

#### LAND USE SERVICES—Road Section (909) 387-8178

24. Road Improvements. The developer shall submit for review and obtain approval from the Land Use Services Department the following plans for the listed required improvements, designed by a Registered Civil Engineer (RCE), licensed in the State of California. These shall be submitted to the Land Use Services Department, located at 385 N. Arrowhead Ave, San Bernardino CA 92415-0187. Phone: (909) 387-8178.

#### Fort Irwin Road (Secondary Highway – 88')

- Road Standards and Design. All required street improvements shall comply
  with latest San Bernardino Road Planning and Design Standards and the San
  Bernardino County Standard Plans. Road Sections shall be designed to
  Desert Road Standards of San Bernardino County, and to the policies and
  requirements of the County Department of Public Works and in accordance
  with the General Plan, Circulation Element.
- <u>Street Improvements Plans</u>. The developer shall submit for review and obtain approval of street improvement plans prior to construction. Final plans and profiles shall indicate the location of any existing utility facility or utility pole

which would affect construction, and any such utility shall be relocated as necessary without cost to the County.

- <u>Construction Permits</u>. Prior to installation of road and drainage improvements, a construction permit is required from County Public Works, Transportation Operations Division, Permit Section, (909) 387-8046, as well as other agencies prior to work within their jurisdiction. Submittal shall include a materials report and pavement section design in support of the section shown on the plans. Applicant shall conduct classification counts and compute a Traffic Index (TI) Value in support of the pavement section design.
- Soils Testing. Any grading within the road right-of-way prior to the signing of the improvement plans shall be accomplished under the direction of a soils testing engineer. Compaction tests of embankment construction, trench back fill, and all sub-grades shall be performed at no cost to San Bernardino County and a written report shall be submitted to the Transportation Operations Division, Permits Section of County Public Works, prior to any placement of base materials and/or paving.
- <u>Transitional Improvements</u>. Right-of-Way and improvements (including offsite) to transition traffic and drainage flows from proposed to existing, shall be required as necessary.
- <u>Street Gradients</u>. Road profile grades shall not be less than 0.5% unless the
  engineer at the time of submittal of the improvement plans provides
  justification to the satisfaction of County Public Works confirming the
  adequacy of the grade.
- Road Improvements. All required on-site and off-site improvements shall be completed by the applicant, inspected and approved by County Public Works.
- Open Road/Cash Deposit. Existing County roads, which will require reconstruction, shall remain open for traffic at all times, with adequate detours, during actual construction. A cash deposit shall be made to cover the cost of grading and paving prior to issuance of road encroachment permit. Upon completion of the road and drainage improvement to the satisfaction of the Department of Public Works, the cash deposit may be refunded.
- <u>Structural Section Testing</u>. A thorough evaluation of the structural road section, to include parkway improvements, from a qualified materials engineer, shall be submitted to County Public Works.

#### LAND USE SERVICES - Planning (909) 387-8311

- 25. <u>Mine/Reclamation Plan Text/Maps.</u> Within 120 days following Planning Commission approval the Mine and Reclamation Plan text and maps shall be revised to reflect the project as approved by the Planning Commission.
- 26. Project Boundary Verification. Prior to new ground disturbance for road improvements, a Licensed Land Surveyor shall be employed to determine and permanently monument the property corners and limits of each road right-of-way and project boundaries. For each corner, GPS coordinates (or other similar technology) shall be provided in a format acceptable to the County. A final report shall be provided to Land Use Services.

## ENVIRONMENTAL MITIGATON MEASURES AND COMPLETION STANDARDS

- 27. <u>Fugitive Dust</u>. To control fugitive dust generated during removal of fill-dirt from the deposit, wind-blown dust from storage piles, dust from traffic on haul roads, dust during material dumping from front-end loaders, the roads and mine will be wetted regularly and more frequently as needed during windy conditions by a tank truck(s).
  - A. AQ-1: Pre-watering. 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.
  - B. AQ-2: Watering and Soil Stabilization. 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.
  - C. AQ-3: The project proponent shall ensure that all disturbed areas are treated to prevent erosion.

#### 28. Sensitive Wildlife Species: Burrowing Owl

- A. <u>BIO-1 Burrowing Owl</u>. Utilizing accepted protocols, within 30 days prior to initiating mining activities on the areas not currently being mined, a preconstruction survey shall be conducted for the Burrowing Owl by a qualified biologist and submit a report of finding to the County of San Bernardino Land Use Services Department-Mining Division.
- B. <u>BIO-2 Worker Environmental Awareness Program</u>. Prior to any construction activities on the project site the Applicant will implement a Worker Environmental Awareness Program (WEAP) to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the Applicant's personnel,

Planning Commission Hearing: January 21, 2016

contractors, and all subcontractors, on the first day of work prior to the employee's commencing work on the site. The WEAP will place special emphasis on the protected species that have potential to occur within the site, including the Mojave desert tortoise.

The program will include the following elements:

- A presentation, developed by or in consultation with a qualified biologist, discussing the sensitive biological resources with potential to occur onsite, and explaining the reasons for protecting these resources and penalties for non-compliance;
- Brochures or booklets, containing written descriptions and photographs of protected species as well as a list of site rules pertaining to biological resources, to be provided to all WEAP participants;
- Contact information for the project biological monitor, and instructions to contact the monitor with any questions regarding the WEAP presentation or booklets;
- An acknowledgement form, to be signed by each worker indicating that they received WEAP training and will abide by the site rules protecting biological resources; and,
- A training log, to be signed by all on-site personnel immediately following WEAP training, will be maintained on the project site during construction to document compliance with this measure.
- C. <u>BIO-3 Pre-construction Desert Tortoise Surveys</u>. Within 14 days prior to mining activities on the areas not currently being mined, the Applicant shall retain a qualified biologist to conduct clearance level surveys per USFWS and/or CDFW protocols for signs to ensure that the desert tortoise have not occupied the site since the Focused Desert Tortoise Survey, November 6, 2013 by RCA Associates, LLC. The results of the pre-construction clearance survey shall be submitted to the USFWS, CDFW, and the County of San Bernardino Land Use Services Department-Mining Division within 14 days of completion of the pre-construction surveys to document compliance with applicable federal and state laws pertaining to the protection of desert tortoise.
- D. <u>BIO-4 Mojave Desert Tortoise Exclusion Fencing</u>. Prior to initiation of mining activities along within the areas not currently being mined a desert tortoise exclusion fence shall be installed surrounding the disturbance area. The exclusion fence shall be installed in accordance with the specifications set forth in Chapter 8 of the USFWS' Desert Tortoise Field Manual (USFWS 2009), and installation of the fence shall be overseen by a biologist familiar with the installation of tortoise exclusion fencing. If tortoise exclusion fences

Planning Commission Hearing: January 21, 2016

are left in place for a period exceeding one week at any location, the fences will be inspected weekly for any signs of damage or wear that could potentially compromise the integrity of the exclusion perimeter. If damage or excessive wear is observed, the exclusion fence will be repaired immediately. Results of any necessary fence inspections will be maintained to document compliance with this provision.

- E. <u>BIO-5 Summary Report</u>. Within 30 days of completion of Mitigation Measures BIO-1 through Bio-3 above, the Applicant shall submit a summary report to the County of San Bernardino Land Use Services Department-Mining Division which summarizes compliance with these mitigation measures.
- F. <u>BIO-6 Transplanting of Native Plants</u>. Prior to Project approval, the Revegetation Plan shall demonstrate how the twenty-seven beavertail cactus (Opuntia basilaris) and three silver cholla (O. echinocarpa) plants will be transplanted during growth media salvage to areas which remain undisturbed until they are used in revegetation of the site.

#### 29. Archaeological Resources

- A. <u>CR-1 Archaeological Resource Discovery</u>. The developer/property owner shall submit a letter to County Planning agreeing to adhere to the following requirements:
  - In the event archaeological resources are uncovered during earthmoving activities, all work in that area shall cease immediately the County and the Bureau of Land Management shall be notified. A qualified archeologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded, excavated, and/or recovered as necessary. Earthmoving shall be allowed to proceed on the site when the archaeologist, in consultation with the appropriate Native American Tribe(s) and the County of San Bernardino Museum, determines the resources are recovered to their satisfaction.
- B. <u>CR-2 Paleontological Resource Discovery</u>. The developer/property owner shall submit a letter to County Planning agreeing to adhere to the following requirements:
  - In the event paleontological resources are uncovered during earthmoving activities, all work in that area shall cease immediately the County and the Bureau of Land Management shall be notified. A qualified paleontologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded,

Planning Commission Hearing: January 21, 2016

excavated, and/or recovered as necessary. In consultation with the Project proponent, the County, and the Bureau of Land Management, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

• Native American Remains. In the event that human remains are discovered during project grading or other ground disturbing activities, the project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

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

30. <u>Green House Gas Emissions</u>. The following are the Performance Standards (Conditions of Approval) that are applicable to the Project:

The developer shall implement the following as greenhouse gas (GHG) mitigation during the operation of the approved project:

- A. <u>Waste Stream Reduction</u>. The "developer" shall provide to all project employees County-approved informational materials about methods and need to reduce the solid waste stream and listing available recycling services.
- B. <u>Vehicle Trip Reduction</u>. The "developer" shall provide to all project employees County approved informational materials about the need to reduce vehicle trips and the program elements this project is implementing. Such elements may include: participation in established ride-sharing programs, creating a new ride-share employee vanpool, designating preferred parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles with benches in waiting areas, and/or providing a web site or message board for coordinating rides.

Planning Commission Hearing: January 21, 2016

- C. <u>Emissions</u>. Select construction equipment based on low-emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or CNG equipment.
- D. <u>Equipment</u>. 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.
- E. Stockpiling and Growth Medium. The operator shall stockpile all available growth medium and vegetation from areas to be disturbed and maintain the stockpiled material with temporary erosion control methods. At the time of reclamation, areas being reclaimed shall have the stockpiled growth medium and vegetation spread over them. Re-vegetation areas shall be ripped and decompacted and shall be supplemented by broadcast seeding with native and locally adapted seed per the approved reclamation plan. Stockpiled growth medium 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.
- 31. <a href="NPDES">NPDES</a>. 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 Colorado or Lahontan Regional Water Quality Control Board (RWQCB) and a copy shall be submitted to Planning, or provide evidence from the RWQCB that the NPDES permit is not needed. For information, call RWQCB at (760) 241-7305.
- 32. <u>Streambed Alteration Agreement</u>. Prior to any disturbance that could disturb or alter any drainage course, the applicant/operator shall enter into a California Department of Fish and Wildlife 1603 Streambed Alteration Agreement or provide evidence that one is not required. Streambed alteration and/or discharge of fill material to a surface water may further require a CWA, section 401 water quality certification for impacts to federal waters or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Colorado Regional Water Quality Control Board or State Water Board. Early consultation with the Water Board Staff is encouraged. Information regarding these permits, including application forms can be downloaded from the following website:

http://www.waterboards.ca.gov

33. <u>Storm Water Pollution Prevention Program (SWPPP)</u>. The operator shall prepare a SWPPP outlining how storm water shall be conveyed or directed on and off-site during operations to avoid impacts to groundwater and surface water quality. Within the SWPPP, the operator shall list Best Management Practices (BMPs) to be employee on site to avoid water quality impacts. The SWPPP shall be

Planning Commission Hearing: January 21, 2016

submitted to the Regional Water Quality Control Board and a copy submitted to Planning or provide evidence from RWQCB that the SWPPP is not needed.

- 34. On-Site Lighting and Illumination. 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.
- 35. <u>Permit Maintenance</u>. The applicant/operator shall maintain and annually renew existing permits to operate any applicable equipment from the Mojave Desert Air Quality Management District (MDAQMD) and be in compliance with said permits.
- 36. <u>Exhaust Control Measures</u>. 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.

#### 37. Hazardous Material Spills.

HAZ 1. All spills or leakage of petroleum products during mining or reclamation activities shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste shall be collected and disposed of at an appropriately licensed disposal or treatment facility.

#### 38. Water Well Verification.

UTL-1. Water may be supplied through the use of groundwater. Evidence shall be provided that the existing well was constructed to public water supply standards, will provide the quantity of water projected as required for the project, meets quality standards for domestic and industrial use, and the well is properly

permitted with the County. Evidence shall be submitted to DEHS/Water Section for approval. For information, call DEHS/Water Section at (909) 387-4666.

#### 39. Abandoned Well.

UTL-2 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.

## ON-GOING OPERATIONAL CONDITIONS General Requirements

#### PUBLIC HEALTH - Environmental Health Services (DEHS) (800) 442-2283

- 40. <u>Noise Operations</u>. The Noise level shall be maintained at or below County Standards, Development Code Section 83.01.080.
- 41. Refuse. All refuse 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: 1-800-442-2283.
- 42. <u>Solid Waste Removal</u>. 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: 1-800-442-2283.
- 43. Monumentation. If any activity on this project will disturb any land survey monumentation, including but not limited to vertical control points (benchmarks), said monumentation shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer authorized to practice land surveying prior to commencement of any activity with the potential to disturb said monumentation, and a corner record or record or survey of the references shall be filed with the County Surveyor (Section 8771(b) Business and Professions Code).
- 44. Record of Survey. The following conditions are for the occasion where the monuments of record cannot be located and the boundary must be determined for construction purposes.

Record of Survey/Corner Record shall be filed in the following instances:

- A. Legal descriptions or construction staking based upon a field survey of the boundary setbacks.
- B. Monuments set to mark the property lines.
- C. Pursuant to applicable sections of the Business and Professions Code.

#### COUNTY FIRE – Community Safety (909) 386-8400

45. <u>Access</u>. 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 – Planning (909) 387-8311

- 46. <u>Stockpiling</u>. On-site materials 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 will likely experience.
- 47. <u>Soil Contamination</u>. 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.
- 48. <u>Site Maintenance.</u> The permittee shall maintain the mine site and premises in a reasonably neat and orderly manner at all times. No refuse shall be permanently maintained at any time in the pit excavation, channel ditches or work areas. All rubbish shall be disposed of at an approved legal disposal site. All trash storage shall be maintained in closed containers.
- 49. <u>Raven Control</u>. The attractiveness of the site to ravens will be minimized by preventing access to potential food sources, such as garbage. Mine personnel, including personnel constructing the new facilities and implementing the Reclamation Plan, will be educated about the importance of placing garbage in closed containers and keeping the mine site free from trash.
- 50. <u>Dust Control</u>. The mine operator shall ensure that periodic watering occurs for short-term stabilization of disturbed surface area to minimize fugitive dust emissions. For purposes of this requirement, use of a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes shall be considered sufficient to maintain compliance. The water source shall be non-potable to the extent that such a source is available and approved for use in compliance with water quality standards. Unsurfaced haul and access roads shall be maintained with biodegradable dust suppressants or covered with road base material.

The applicant/operator is responsible for meeting all air quality requirements, including, securing an approved Dust Control Plan through the Mojave Desert Air Quality Management District.

51. <u>Track-out</u>. The mine operator shall take actions sufficient to prevent Project-related track-out onto paved surfaces and cover loaded haul vehicles while operating on publicly maintained paved surfaces.

- 52. <u>Overburden</u>. The removal of vegetation and overburden, if any, in advance of surface mining shall be kept to the minimum. The following practices shall be undertaken during the performance of surface mining operations:
  - A. Water Erosion. Control facilities such as retarding basins, ditches, stream bank stabilization, and diking shall be constructed and maintained where necessary to control water erosion.
  - B. Erosion and Drainage. Grading and revegetation shall be designed to minimize erosion and to convey surface runoff to; natural drainage courses or interior basins designed for water storage.
  - C. Resoiling. When the reclamation plan calls for resoiling, course hard mine waste shall be leveled and covered with a layer of finer material or weathered waste. The use of soil conditioners, mulches, or imported topsoil shall be considered where revegetation is part of the reclamation plan and where such measures are necessary.
- 53. Mining Operation. The mining operation shall be conducted in a manner to facilitate implementing site reclamation. The final site shall be graded and revegetated as per the approved Reclamation Plan Plot Plan No. 2001M-05. Any changes to the approved plans shall require a Revision Application.
- 54. Stockpiling. The operator shall stockpile topsoil and vegetation from areas to be mined and maintain the stockpiled materials with temporary erosion control methods. Stockpiled topsoil shall be stored separately from silt and overburden material stockpiles. At the time of reclamation, areas being reclaimed shall have stockpiled silt and overburden material spread across the surface with stockpiled topsoil and vegetation spread over last.
- 55. <u>Slope Monitoring</u>. Slope monitoring shall be implemented to assure that unnecessary hazards are not created with the active or final reclaimed slopes. The monitoring shall include the following items:
  - A. Slope Stability Analysis: A qualified independent California Certified Professional Civil Engineer OR Engineering Geologist shall complete, on an annual basis or deemed necessary by County inspector, a stability assessment of existing and new quarry development areas. The analysis shall identify and discuss significant structural features or indications of potential instability encountered.
  - B. Review of Slope Stability Considerations: Using the information from the investigation and monitoring, the assumptions and results of the stability analysis shall be evaluated for continued approved design applicability.
- 56. <u>Interim Management Plan</u>. The applicant shall implement measures to stabilize and secure the site during periods of inactivity as per the approved Reclamation Plan. An Interim Management Plan (IMP) as required by SMARA, Section

Planning Commission Hearing: January 21, 2016

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

- 57. <u>Site Maintenance</u>. The applicant/operator shall maintain the premises in a neat and orderly manner at all times. No refuse 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.
- 58. <u>Reclamation</u>. 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.
- 59. Fencing and Signage. Public access to the mine site shall be restricted. Clearly legible signs denoting limits shall be posted along with fencing, berms, or rock barriers, as necessary, to protect against accidental entry to the site. Warning signs with contrasting background lettering shall be installed every 200 feet along the approved surface mine boundary and shall read in English and Spanish "No Trespassing Keep Out; Surface Mining Operation" or similar language. All signs shall be in place prior to continued mining and reclamation activities.
- 60. <u>Sign Maintenance</u>. 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. 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.
- 61. <u>Advertisement</u>. Any advertising or identifying sign shall be constructed in compliance with the designated Official Land Use District for this site, which is RC (Resource Conservation).
- 62. <u>Company Identification</u>. 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 signs 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 to a complaint, and to be responsible for returning

Planning Commission Hearing: January 21, 2016

calls to complainants with results of investigations. The applicant shall keep a log of all calls received and shall include documentation of responses and/or resolution of complaints. The log shall be made available to the County upon request.

- 63. Operation Hours. Normal hours for site operations are 5 am to 5 pm, seven days per week as described in the Mining CUP and Reclamation Plan application. Site operations may be conducted during other times, subject to noise, light, and wind restrictions, as further described herein
- 64. <u>Test Plot</u>. Test plots shall be indicated 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.
- 65. Re-vegetation Monitoring. For each phase, monitoring 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.
- 66. <u>Revegetation Renewal</u>. If, in any phase, re-vegetation is not successful, the applicant/operator shall undertake the following actions:
  - 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 representatives. The applicant/operator will revise the Re-vegetation Plan, secure concurrence from 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 revegetation methods to identify any deficiencies contributing to planting failures. Corrective action shall be incorporated in follow-up testing.

Planning Commission Hearing: January 21, 2016

- 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.
- 67. <u>Topsoil</u>. The upper 6-12 inches of ground surface shall be scraped off and pushed up in wind rows bordering the quarry perimeter for resoiling following final slope/grade preparation. Adequate provisions for the prevention of wind and water erosion shall be provided.
- 68. Recontouring. The mine site shall be recountoured to minimize erosion, and to promote the success efforts and allow use of the site by native wildlife, including desert tortoise. Hazards to wildlife such as pits or holes with sides exceeding a 2:1 slope shall be removed.
- 69. <u>Financial Assurances.</u> Re-vegetation in arid areas is tenuous at best and, therefore, the applicant shall provide in the Financial Assurance Cost Estimate the 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 operation in each phase.

## PRIOR TO FINAL CLOSURE The Following Conditions Shall Be Met

#### LAND USE SERVICES – Planning (909) 387-8311

- 70. <u>Tributary Drainage Flows.</u> Upon final reclamation, 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 and shall be maintained five (5) years following the termination date of operation.
- 71. <u>Equipment</u>. At the time of termination of the operation for any reason, all equipment 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.
- 72. <u>Access Roads</u>. All access roads on site, which will not be retained for post-operation uses, shall be reclaimed at the conclusion of mining/hauling activities.
- 73. <u>Site Re-Contour.</u> The applicant/operator shall re-contour the site at the conclusion of operations. The site should resemble natural landforms where possible.
- 74. Reclamation Verification. Each area reclaimed shall be identified on a final map and labeled for identification. The final map shall be provided to Planning for review and approval.

APN: 0518-181-13
Daily Transit Mix
Project No. AP20130116
R Hove Fort Irwin Pit
Planning Commission Hearing: January 21, 2016

- 75. <u>Reclamation Completion</u>. Following verification of reclamation and release of Financial Assurances pursuant to CCR Section 3805.5, Planning will prepare a "Notice of Completion" on a form to be approved and recorded by the County Recorder's Office. The operator shall pay any and all review and recording fees.
- 76. <u>Well Closure</u>. Any well not needed to serve the site after reclamation shall be property abandoned, according to Department of Environmental Health Services (DEHS) standards.

#### **CONCLUSION OF CONDITIONS**

# **EXHIBIT C**

**Mitigated Negative Declaration/Initial Study** 



# COUNTY OF SAN BERNARDINO NOTICE OF AVAILABILITY (NOA) / NOTICE OF INTENT (NOI) TO ADOPT AN INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR A REVISED MINING AND RECLAMATION PLAN TO INCREASE GRAVEL SURFACE MINING AREA AND EXTEND THE MINING TERMINATION DATE

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 proposed revision to the Fort Irwin Mining and Reclamation Plan.

Project Title: Fort Irwin

Project No.: AP20130116

**Project Location**: APPROXIMATELY TWENTY-TWO (22) MILES NORTH-EAST OF BARSTOW AND IS ACCESSED VIA FORT IRWIN ROAD AND PARADISE VIEW ROAD. ASSESSORS PARCEL NUMBER: 0518-181-13

#### **Project Description:**

1) Revision to the Fort Irwin Mining Conditional Use Permit and Reclamation Plan to increase the acreage for a sand and gravel surface mining operation from 12.2 acres to 14.5 acres on a portion of the 38.43 acre site, to a depth up to 50 feet, and, extend the mining operation's termination date from 2014 to 2044.

**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:

http://cms.sbcounty.gov/lus/Planning/Environmental/Desert.aspx and the following physical location:

Land Use Services Department - Current Planning Division 385 North Arrowhead Avenue, First Floor San Bernardino, CA 92415-0182

If unavailable on the web site, you may obtain the document in electronic format by telephoning the Land Use Services Department at either (760) 995-8152, or by emailing the Planner at <a href="mailto:reuben.arceo@lus.sbcounty.gov">reuben.arceo@lus.sbcounty.gov</a> to request a PDF version of the document from the Land Use Services Department database, please reference the project number above.

The comment period begins on Friday, December 25, 2015. All comments must be received no later than January 15, 2016 at 5:00 PM. Please submit comments to <a href="mailto:reuben.arceo@lus.sbcounty.gov">reuben.arceo@lus.sbcounty.gov</a> or to:

Reuben J. Arceo, Contract Planer County of San Bernardino Land Use Services Department - Planning Division 385 North Arrowhead Avenue, First Floor San Bernardino, CA 92415-0182

#### SAN BERNARDINO COUNTY

#### INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

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

#### PROJECT LABEL:

APN: 0518-181-13

APPLICANT: Daily Transmit Mix LLC

COMMUNITY: Barstow/3<sup>rd</sup> Supervisorial District

LOCATION: Approximately twenty-two (22) miles

north-east of Barstow and is accessed via Fort Irwin Road and Paradise View

Road (Exhibit 1).

PROJECT NO: AP20130116 (R. Hove Fort Irwin Pit)

STAFF: Reuben Arceo, Contract Planner

REP('S): Kjelstrom & Associates, Inc.

PROPOSAL: Revision to Mining & Reclamation Plan by

expanding the operation from 12.2 acres to 14.5 acres and extending the

termination date from 2014 to 2044

USGS Quad: Paradise Range

T, R, Section: T: 12N R:2E Sec: 16
Thomas Bros.: Page 349, Grid: G-4

Planning Area: Barstow

Land Use Zoning: Resource Conservation (RC)

Overlays: Airport Safety Review 4 (AR-4)

#### PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino

Land Use Services Department - Current Planning

385 North Arrowhead Avenue San Bernardino, CA 92415-0182

Contact person: Reuben

Reuben Arceo, Contract Planner

Phone No:

(909) 387-4015 Fax No.: (909) 387-3223

E-mail: reuben.arceo@lus.sbcounty.gov

Project Sponsor:

Daily Transmit Mix LLC

40901 Paradise View Road

Barstow, CA 92311

Phone No: (760) 386-2193

#### **BACKGROUND:**

The R. Hove Fort Irwin Pit ("Site") is located approximately twenty-two (22) miles northeast of Barstow and is accessed via Fort Irwin Road and Paradise View Road. (See Exhibit 2).

The site was formerly known as the Gordon Lint Mine. The historic use of the site has been extracting sand and gravel, aggregate production, batch concrete production, and activities associated with uses and sales of these products, since 2001. Other uses for land in this area have been sand and gravel mining, vacant desert/open space, rural living, and off road vehicles use and recreation. The site is currently operating under County-approved Mining and Reclamation Plan 2001M-05 (California Mine ID# 91-36-0161) on a 38.43 acre parcel.

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 2 of 55

#### PROJECT DESCRIPTION:

The Revised Mining and Reclamation Plan ("Plan") proposes to increase the acreage for a sand and gravel surface mining from 12.2 acres to 14.5 acres on a portion of the 38.43-acre site to a depth up to 50 feet (lowest reclaimed elevation at 2072 AMSL), and to extend the mining termination date from 2014 to 2044.

#### Mining Activities

The project consists of extraction of sand and gravel, a screening and crushing plant, a ready-mix concrete batching plant, a future asphaltic concrete batch plant, and a future recycle plant. The operation will include ancillary uses commonly found in conjunction with the mineral extraction and plant operations, such as equipment service area, fueling station, office and construction materials storage area.

Mining will proceed as one phase, which consists of mining the southern 10.3-acre portion of the site to the full depth of 50 feet and will continue until the pit has been exhausted of its resources (by approximately 2044). The maximum anticipated depth will be 50 feet below (Elev. 2166 ft. AMSL) the northeast corner of the project site.

The northern 4.2-acre portion of the disturbed area will be used for the aggregate processing, ready mix concrete plant, asphalt concrete plant, recycle plant, and for stockpiling material.

The applicant is proposing to continue mining up to 65,000 tons per year of rock, gravel, and sand intended for use on construction projects in San Bernardino County over a total 30-year life span.

Upon receiving approval for operating the mine and processing equipment, the operator will clear off the mine area and prepare the sand and rock processing plant area. Further clearing of the vegetation shall be performed by scraping the existing vegetation and topsoil off the area and stockpiling the remains of the cleared vegetation and topsoil outside the excavation area and outside of potential drainage courses. The scraped material will be used to create a berm along the sides of the excavation and utilized later for final reclamation.

Mining of the pit may be done at 2:1 slopes or may be mined vertically with 20' benches, at 40' horizontal spacings. This will help facilitate reaching the bottom of the pit quickly. As the pit nears the end of mining, the finish slopes will be laid back to 2:1 final slopes (horizontal: vertical). Over-excavation will be avoided and any over-excavation will be backfilled at 2:1 slopes (horizontal: vertical). Any backfill will be engineered to prevent settlement and erosion. Although the operator's overall goal is to mine to finished slope inclinations at 2:1 gradient, it is more efficient to mine with vertical faces within the active extraction area. Therefore, interior mining slopes will be vertical; but finish slopes shall be left at 2:1. A California licensed engineer or geologist shall determine the stability of all slopes following mining to determine whether the slopes require additional slope treatment at that time. Survey markers will be set, to help avoid over-excavation to clearly delineate the excavation limits and take into account the vertical mining method and subsequent final grading of the slopes. The overburden at R. Hove Fort Irwin Pit is primarily in the form of topsoil and will be pushed over into berms on the perimeter of the mine and saved for re-spreading during reclamation.

A 25-foot minimum protective setback shall be maintained along all property lines. The setback is planned for security and safety of the mine site, reclamation of the site, and to provide a

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 3 of 55

significant mitigation from all possible erosion and head cutting concerns.

Bulldozers and front-end loaders will perform the excavation of the quarry and slopes. Conveyors and haul trucks will transfer the aggregate from the mine to the sand and gravel processing plant.

The unpaved roads shall be maintained with loaders and motor graders.

Water trucks will be utilized to control dust within the mine and on the haul roads. Crusher-fed conveyors will be equipped with spray racks and water reservoirs to lower dust emissions from the materials conveyed by these belts.

Blasting is not proposed for this operation.

The applicant is proposing to continue mining and other operations typically six days a week, Monday to Saturday, from 5:00 am to 5:00 pm, with maintenance occurring in the evening hours, prior to 10:00 pm. Occasionally, construction projects demand night-time operations, especially in the hot summer months and with the military as one of our primary customers. During these demand periods, the operator will continue processing and batching operations through the night.

#### **Reclamation**

After mining activities cease, the ready-mix concrete plant, asphaltic concrete batch plant, recycle plant, mobile equipment (dozers, loaders, etc.), and support equipment and structures (office, trailers) will be removed.

Reclamation shall follow mining in areas no longer subject to further disturbance. As the mining limits are reached and slopes are contoured to their final inclination, revegetation will begin immediately. Reclamation is expected to conclude within 3 year of final mining, or 2047.

As the surface mining operation progresses and ultimate slope grades are achieved along with installation of appropriate erosion protection (slope walking-stabilizing, seeding etc.), revegetation of the slopes and the mine floor shall commence on an incremental basis. An effort will be made not to re-disturb reclaimed area of the mine, which has been reseeded during any prior reclamation periods.

Final reclamation shall be ongoing with respect to grading and shaping the mine area. Reseeding the disturbed areas and spreading any remaining sand all of the salvaged growth media over the site, and applying the saved vegetative matter from prior clearing processes, will commence at the conclusion of mining.

Test plot areas for revegetation will be located within an area of previous disturbance as shown on the reclamation plan. Test plots will allow observation of the revegetation program's effectiveness, whereby modifications can be made if necessary. After Reclamation, the reclaimed mine site will become vacant open space.

#### **ENVIRONMENTAL/EXISTING SITE CONDITIONS:**

Table 1. Existing Land Use/Zoning

AREA	EXISTING LAND USE	LAND USE/OVERLAY DISTRICT
Site	Sand & Gravel Mine/Vacant	RC (Resource Conservation)
North	Vacant	RC (Resource Conservation)
South	Single-Family Residence/Vacant	RC (Resource Conservation)
East	Vacant	RC (Resource Conservation)
West	Scattered Single-Family Residences/Vacant	RC (Resource Conservation)

As noted under the Project Description, the total site area consists of 38.43-acres. Only the eastern portion (approximately 14.2 acres) will be disturbed during Mining and Reclamation. The northeast 4.2–acre portion of the site is currently being used for the aggregate processing, ready mix concrete plant, asphalt concrete plant, recycle plant, and for stockpiling material. The central-eastern portion of the site contains the excavation area, and the remainder of the site consists of primarily vacant land that has experienced past disturbance. Within portions of the area subject to the Mining and Reclamation Plan there are several structures such as a mobile home, ancillary structures, and some outdoor storage. Soil type consists primarily of sandy loam. According to the operator, there are no water courses or sensitive habitat for wildlife on the site. (See Exhibit 3, Aerial Photo)

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

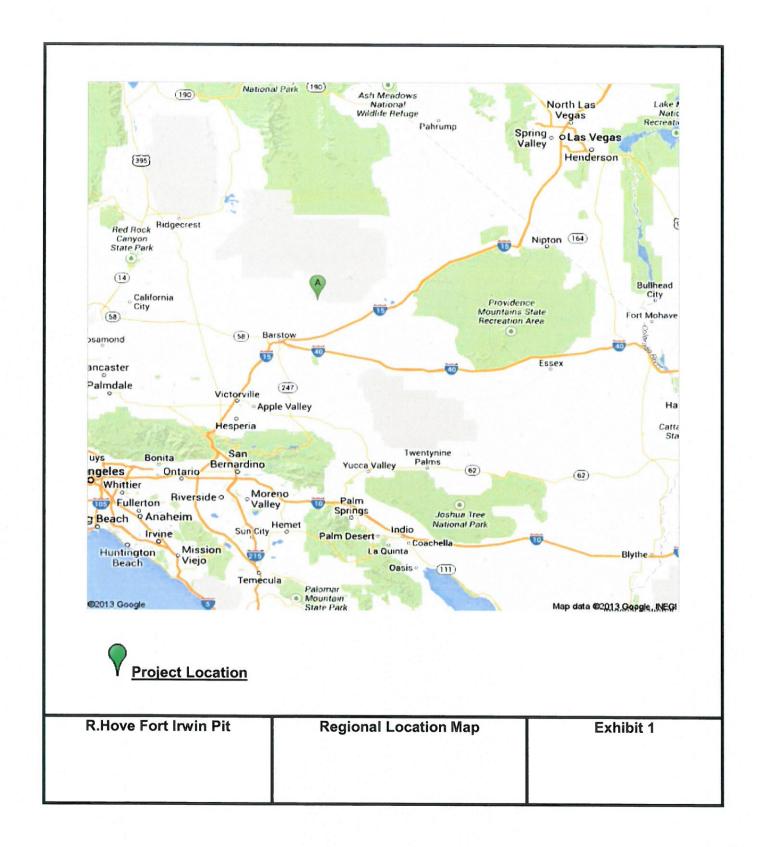
Federal: None.

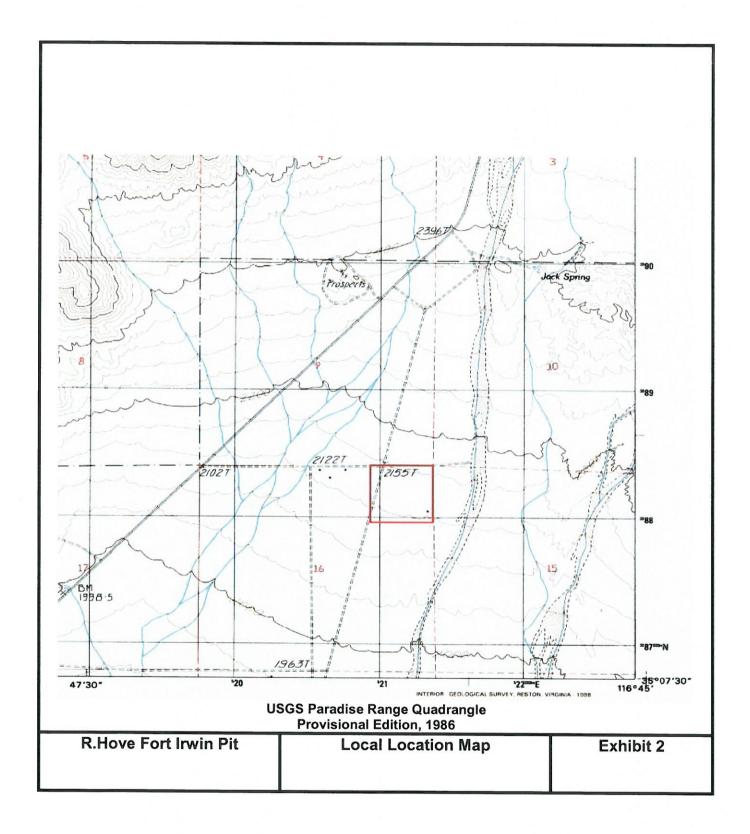
State of California: None.

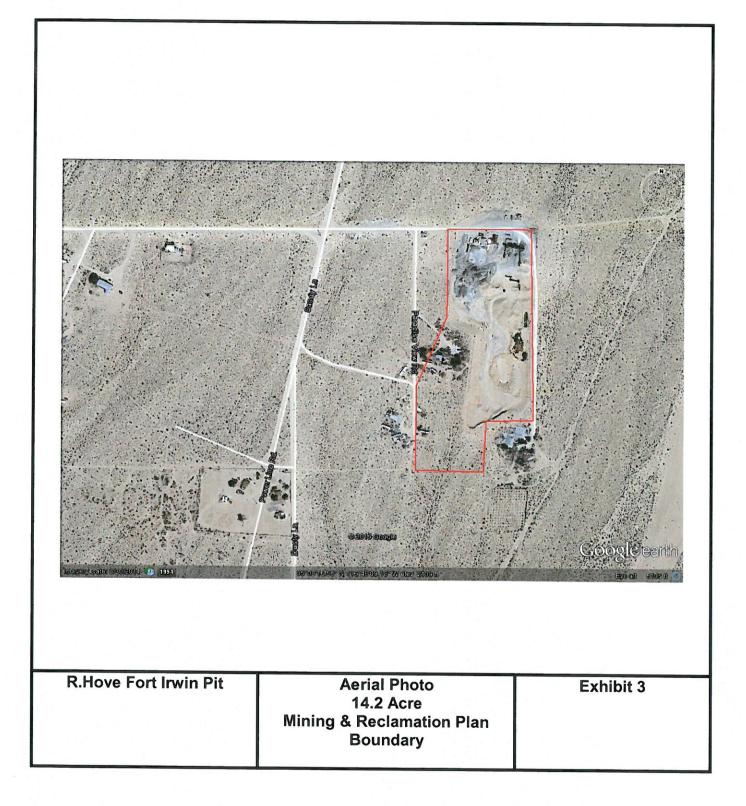
County of San Bernardino: Land Use Services Department-Planning,

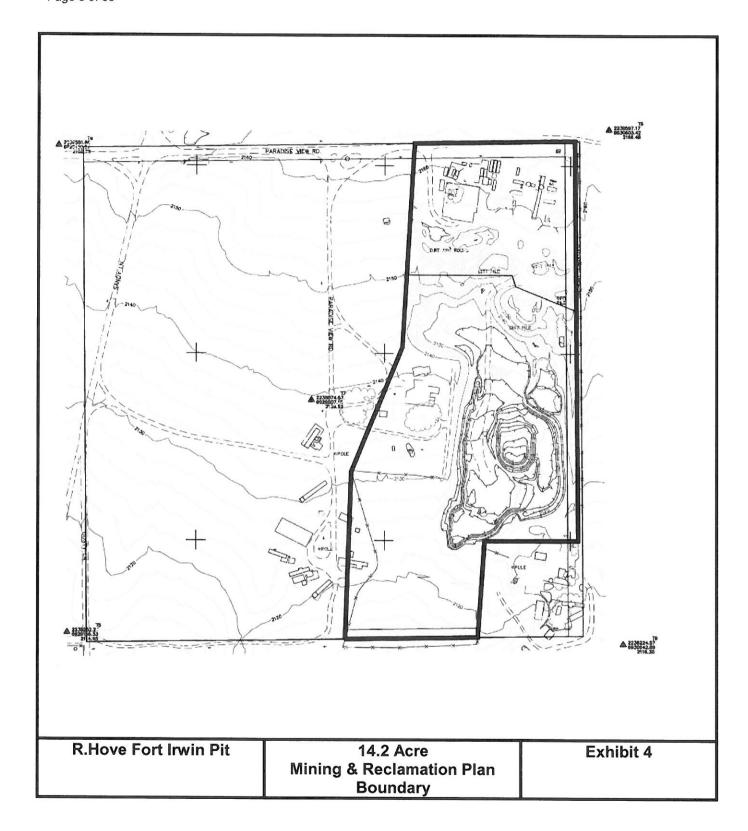
Regional: Mojave Desert Air Quality Management District (MDAQMD).

Local: None









R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 9 of 55

#### **EVALUATION FORMAT**

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

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

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

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

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 10 of 55

## **ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

			would be potentially affected by this act" as indicated by the checklist on				
	Aesthetics		Agriculture and Forestry Resources		Air Quality		
	Biological Resources		Cultural Resources		Geology / Soils		
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality		
	☐ Land Use/ Planning		Mineral Resources		Noise		
	☐ Population / Housing		Public Services		Recreation		
	Transportation / Traffic		Utilities / Service Systems		Mandatory Findings of Significance		
Oi	etermination: (To be completed in the basis of this initial evaluation	, the	following finding is made:				
	DECLARATION shall be prepare	d.	have a significant effect on the				
	significant effect in this case be project proponent. A MITIGATED	cause NE	have a significant effect on the er e revisions in the project have bee GATIVE DECLARATION shall be p	n mad repare	e by or agreed to by the d.		
	IMPACT REPORT is required.		significant effect on the environme	700			
	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						
	pursuant to applicable standards	s, and cludii	lyzed adequately in an earlier EIR d (b) have been avoided or mitigateng revisions or mitigation measurequired.	d purs	uant to that earlier EIR or		
Prepa	red by Ernest Perea, Contract Pla	nner					
(H				_	12/22/15		
Reube	en Ardeo, Contract Planner)  We / My	,L		_	12/22/2015		
Dave	Prusch, Planning Supervisor				Date		

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 11 of 55

## Appendices: (On Compact Disk)

- A. Habitat Assessment and Focused Burrowing Owl Survey, RCA Associates LLC
- B. Focused Desert Tortoise Survey, RCA Associates LLC
- C. Amended Mining & Reclamation Plan, Kjelstrom & Associates, Inc.

	Issues	Significant Impact	Significant with Mitigation Incorp.	Less than Significant	No Impact
1.	AESTHETICS - Would the project				
a)	Have a substantial adverse effect on a scenic vista?				$\boxtimes$
b)	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				$\boxtimes$
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?				
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				
SUBST	SUBSTANTIATION (Check if project is located within the view-shed of any Scenic Route listed in the General Plan):				

Source: County General Plan Open Space Element

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

The site is being actively mined. The overall project site does not meet the criterion for a scenic vista pursuant to County General Plan Open Space Element Policy OS 5.1 above. Therefore, the project will have no impact on a scenic vista.

- Ib) **No Impact.** According to The San Bernardino County General Plan the project site is not within a scenic route (Ref. General Plan Pg. IV-16). Therefore, no impact is anticipated.
- Less than Significant. The visual character of the site and surroundings is that of an existing mining operation surrounded by vacant desert land with some single-family residences nearby and adjacent to the site. The proposed use is an allowable use within the Resources Conservation Land Use Zoning District. The continued operation and expansion of mining activities will not significantly impact the existing visual character of the area. Therefore, a less than significant impact is anticipated.
- Id) Less Than Significant Impact. The Proposed Project would not create a new source of

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 13 of 55

substantial light or glare which would adversely affect day or nighttime views in the area. In addition, Section 83.07.040(a) (2) of the County Development Code requires that outdoor lighting be shielded in order to preclude light pollution or light trespass.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
II.	AGRICULTURE and FORESTRY RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				$\boxtimes$
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\boxtimes$
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				$\boxtimes$
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				$\boxtimes$
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?				

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

Source: California Department of Conservation, Farmland Mapping and Monitoring Program.

II a) No Impact. The site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. As such, the Project has no potential to convert such lands to a non-agricultural use and no impact would occur.

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 15 of 55

No Impact. Generally, a conflict with existing zoning for agriculture use would occur if a project would intrude into agricultural areas and create conflicts between agriculture uses and non-agriculture uses. The project site is zoned RC (Resource Conservation). The RC land use zoning district allows mining as a conditional use. There are no agricultural uses on the project site or in the vicinity of the project site.

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

- II c) **No Impact.** The project site is zoned RC (Resource Conservation), The project site does not contain any forest lands, timberland, or timberland zoned as Timberland Production, nor are any forest lands or timberlands located on or nearby the project site. Because no lands on the project site are zoned for forestland or timberland, the project has no potential to impact such zoning.
- II d) **No Impact.** The project site and surrounding properties do not contain forest lands, are not zoned for forest lands, nor are they identified as containing forest resources by the General Plan. Because forest land is not present on the project site or in the immediate vicinity of the project site, the proposed project has no potential to result in the loss of forest land or the conversion of forest land to non-forest use.
- II e) No Impact. The project site is approximately 14.2 gross acres in size and is located in an area largely characterized by vacant land, mining activities, and sparsely developed residential land. No land is being used for agricultural purposes in the vicinity of the project site. As such, the project would not result in conversion of Farmland to non-agricultural use and no impacts would occur.

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

SUBSTANTIATION (Discuss conformity with the Mojave Desert 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 prepared the California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, August 2011. The air and dust emissions from the operational use of the project were evaluated and compared to the MDAQMD standards and evaluated against the most recent applicable thresholds.

Ill a) Less than Significant. 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. A project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast.

The project is consistent with the zoning and land use classifications that were used to prepare the Mojave Desert AQMP (Resource Conservation/RC). In addition, based on Table 2, Project-generated emissions will not exceed emission thresholds. Therefore, the project's emissions are in compliance with the thresholds established by the Mojave Desert Air Quality Management 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.

III b) Less than Significant With Mitigation Incorporated. Mining activities consists of bulldozers and front-end loader performing the excavation of the quarry and slopes. Conveyors and haul trucks will transfer the aggregate from the mine to the on-site sand and gravel processing plant area.

To control fugitive dust generated during removal of fill-dirt from the deposit, wind-blown dust from storage piles, dust from traffic on haul roads, dust during material dumping from frontend loaders, the roads and mine will be wetted regularly and more frequently as needed during windy conditions by a tank truck(s).

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

Operational emissions are based on the following equipment assumptions as shown in Table 2 below.

Table 2. Estimated Typical Equipment List

Equipment Type	Number of Units	Hours/D ay	Horse Power
Rubber Tired Dozer	2	6	255
Crawler Tractor	1	8	361
Crushing/Proc. Equipment	1	8	97
Hauling Trucks	20	8	

- (1) Equipment estimates based on project description (Fort Irwin Mining & Reclamation Plan). Water truck emissions are included in off-road equipment emissions as a default for grading operations by CalEEMod, hauling truck emissions are included in export calculations by CalEEMod.
- (2) Estimated output of material 65,000 tons (48,000 cubic yards), Worker trips 4/day per Fort Irwin Mining & Reclamation Plan.

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 18 of 55

A project is considered to have significant impacts if it generates total emissions (direct and indirect) in excess of the thresholds established by the District. The project is evaluated in comparison to the District's daily thresholds as shown in Table 3.

Table 3.
Fort Irwin Mine Operations
(Mitigated Pounds per Day)

Source	ROG	NOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Mining Operations (Loaders, Dozer, & Water Truck)	2.61	29.19	15.69	26.53	3.68
Hauling Trucks	0.089	0.035	0.424	24.76	2.48
Worker Trips	0.005	0.013	0.017	0.470	0.047
Totals (lbs/day)	2.704	29.24	16.13	51.76	6.207
MDAQMD Threshold (lbs/day)	137	137	548	82	82
Significant	No	No	No	No	No

As shown in Table 3, Project emissions would not exceed District thresholds. However, in order to ensure that impacts are reduced to the maximum extent feasible, the following mitigation measures are required:

**AQ-1: Pre-watering.** 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.

<u>AQ-2: Watering and Soil Stabilization.</u> 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.

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

As shown in Table 3, the thresholds for the above referenced criteria pollutants would not be exceeded by the project. Therefore, impacts from the project are not cumulatively considerable when included with other past, present, and future probable projects.

III d) Less Than Significant Impact. According to the Mojave Desert Air Quality Management District CEQA and Federal Conformity Guidelines, February 2009, residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 19 of 55

uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated against the District's significance threshold criteria:

- Any industrial project within 1000 feet;
- · A distribution center (40 or more trucks per day) within 1000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- · A gasoline dispensing facility within 300 feet.

The project is considered an "industrial project" and is located within 1,000 feet of several residential homes. As shown on Table 3 above, the project will not exceed the significance thresholds of the District. Therefore, impacts are less than significant.

III e) **No Impact.** The generation of objectionable odors is typically not associated with surface mining operations. Therefore, no impact is anticipated.

	ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
IV.	BIOLOGICAL RESOURCES - Would the project:		illoorpi		
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 Wildlife or U.S. Fish and Wildlife Service?		$\boxtimes$		
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc) through direct removal, filling, hydrological interruption, or other means?				$\boxtimes$
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				$\boxtimes$
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		$\boxtimes$		
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?		$\boxtimes$		
	(Check if project is located in the habitat for any species listed in	the Californ	ia Natural Di	versity Data	abase)
he follow Iovembe	ring analysis is based in part on the <i>Habitat Assess</i> r 5, 2013 by RCA Associates, LLC, <i>Focused Desert</i> 7	ment and Fo ortoise Surv	ocused Burro ey, Novembe	owing Owl S er 6, 2013 b	Survey by RC/

Associates, LLC, and Amended Mining and Reclamation Plan for R. Hove Fort Irwin Pit Supplemental Data: Revegetation and Monitoring for the R. Hove Fort Irwin Pit #2015-3 by RCA Associates LLC.

#### IV a) Less Than Significant with Mitigation Incorporated.

#### Sensitive Plant Species

Perennials observed during the field March 5, 2015 investigations included burrow bush (Ambrosia dumosa), creosote bush (Larrea tridentata), ephedra (Ephedra nevadensis), cheesebush (Hymencolea salsola), senna (Senna armata), and lycium (Lycium cooperi). These perennials were observed along each of the 15 step-point transects and the data for each species is provided in the table below.

Table 4. Plant Data for the R. Hove Fort Irwin Pit Project Site.

SPECIES	COVER (%)	DENSITY (Number per sq. meter)	SPECIES COMPOSITION	FREQUENCY
Burrow Bush ( <i>Ambosia dumosa</i> )	39.8	1.2	44	44.9
Creosote Bush (Larrea tridentata)	22.8	1.3	7.9	8.1
Cheesebush (Hymenoclera salsola)	14.2	2.6	11.9	12.2
Senna (Senna armata)	5.9	2.9	11.7	11.8
Lycium ( <i>Lycium cooperi</i> )	1.8	0.9	4.5	4.6
Ephedra (Ephedra nevadensis)	16.7	1.1	20	20.4

Source: Data from field investigations conducted on March 5, 2015.

Twenty-seven beavertail cactus (*Opuntia basilaris*) and three silver cholla (*O. echinocarpa*) plants were identified on the project site. The *Amended Mining and Reclamation Plan for R. Hove Fort Irwin Pit Supplemental Data: Revegetation and Monitoring for the R. Hove Fort Irwin Pit #2015-3* by RCA Associates LLC identified these plants as being eligible for protection by the County. Each plant was flagged and the GPS coordinates were recorded. These plants will be relocated in the manner outlined in the Revegetation and Monitoring Plan. The cactus plants will be collected in such a manner as to minimize stress to the plant, and will be transplanted to an area of the project site where the cactus will be protected from any disturbance. Once mining activities have been completed, the cacti will be transplanted back to their original locations per Mitigation Measure BIO-5 below.

#### Sensitive Wildlife Species

The site has been disturbed by past activities and on-going mining activities. Only a few wildlife species were observed during the field investigations. Birds observed were limited to mourning doves (Zenaida macrouura), ravens (Corvus corax), and song sparrows (Melospiza melodia). A

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 22 of 55

few side-blotched lizards (*Uta stansburniana*), were observed and western whiptail lizards (*Cnemidophourus tigris*) are relatively common in the area and may occur on the property. In addition, Jackrabbits (Lepus californicus) were seen on the project site and other mammals known to occur in the area include desert cottontail rabbits (*Sylvilagus auduboni*), Merriam's kangaroo rats (*Dipodomys merriami*), and antelope ground squirrels (*Ammospermophilus leucurus*).

The Biological Reports prepared for the project did not identify any of the above wildlife species as "sensitive species" (i.e. species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

#### Burrowing Owl

The Burrowing Owl is a *Bird Species of Special Concern*. The site supports marginal habitat for burrowing owls based on the results of the *Habitat Assessment and Focused Burrowing Owl Survey*. However, the survey did not identify any owls or occupiable burrows within the boundaries of the proposed mine expansion area and no additional surveys were recommended.

However, the following mitigation measure is required to reduce impacts to the maximum extent feasible:

<u>BIO-1-Burrowing Owl.</u> Utilizing accepted protocols, within 30 days prior to initiating mining activities on the areas not currently being mined, a pre-construction survey shall be conducted for the Burrowing Owl by a qualified biologist and submit a report of finding to the County of San Bernardino Land Use Services Department-Mining Division.

#### Desert Tortoise

The site does not support prime suitable habitat for the desert tortoise based on past human activities. In addition, the *Focused Desert Tortoise Survey*, November 6, 2013 by RCA Associates, LLC, found no tortoises or tortoise sign (burrows, scats, carcasses, etc.) on the project site or within the zone of influence. There is a low probability that the species will move onto the site. In order to reduce impacts to the desert tortoise to the maximum extent feasible, the following mitigation measures are required:

<u>BIO-2 Worker Environmental Awareness Program</u>. Prior to any construction activities on the project site the Applicant will implement a Worker Environmental Awareness Program (WEAP) to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the Applicant's personnel, contractors, and all subcontractors, on the first day of work prior to the employee's commencing work on the site. The WEAP will place special emphasis on the protected species that have potential to occur within the site, including the Mojave desert tortoise.

The program will include the following elements:

 A presentation, developed by or in consultation with a qualified biologist, discussing the sensitive biological resources with potential to occur on-site, and explaining the reasons R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 23 of 55

for protecting these resources and penalties for non-compliance;

- Brochures or booklets, containing written descriptions and photographs of protected species as well as a list of site rules pertaining to biological resources, to be provided to all WEAP participants;
- Contact information for the project biological monitor, and instructions to contact the monitor with any questions regarding the WEAP presentation or booklets;
- An acknowledgement form, to be signed by each worker indicating that they received WEAP training and will abide by the site rules protecting biological resources; and,
- A training log, to be signed by all on-site personnel immediately following WEAP training, will be maintained on the project site during construction to document compliance with this measure.

<u>BIO-3 Pre-construction Desert Tortoise Surveys.</u> Within 14 days prior to mining activities on the areas not currently being mined, the Applicant shall retain a qualified biologist to conduct clearance level surveys per USFWS and/or CDFW protocols for signs to ensure that the desert tortoise have not occupied the site since the Focused Desert Tortoise Survey, November 6, 2013 by RCA Associates, LLC. The results of the pre-construction clearance survey shall be submitted to the USFWS, CDFW, and the County of San Bernardino Land Use Services Department-Mining Division within 14 days of completion of the pre-construction surveys to document compliance with applicable federal and state laws pertaining to the protection of desert tortoise.

<u>BIO-4 Mojave Desert Tortoise Exclusion Fencing</u>. Prior to initiation of mining activities along within the areas not currently being mined a desert tortoise exclusion fence shall be installed surrounding the disturbance area. The exclusion fence shall be installed in accordance with the specifications set forth in Chapter 8 of the USFWS' Desert Tortoise Field Manual (USFWS 2009), and installation of the fence shall be overseen by a biologist familiar with the installation of tortoise exclusion fencing. If tortoise exclusion fences are left in place for a period exceeding one week at any location, the fences will be inspected weekly for any signs of damage or wear that could potentially compromise the integrity of the exclusion perimeter. If damage or excessive wear is observed, the exclusion fence will be repaired immediately. Results of any necessary fence inspections will be maintained to document compliance with this provision.

**BIO-5 Summary Report.** Within 30 days of completion of Mitigation Measures BIO-1 through Bio-3 above, the Applicant shall submit a summary report to the County of San Bernardino Land Use Services Department-Mining Division which summarizes compliance with these mitigation measures.

- IV b) **No Impact.** Based on the *Habitat Assessment*, no riparian habitat or other sensitive natural community was identified on the Project site.
- IV c) No Impact. Based on the Habitat Assessment, no wetlands were identified on the Project site.
- IV d) **No Impact.** Based on the *Habitat Assessment*, the project will not interfere with the movement

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 24 of 55

of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites as none exist on the site.

IV e) Less Than Significant Impact with Mitigation Incorporated: Twenty-seven beavertail cactus (Opuntia basilaris) and three silver cholla (O. echinocarpa) plants were identified on the project site. Each plant was flagged and the GPS coordinates were recorded. These plants will be relocated in the manner outlined in the Revegetation and Monitoring Plan. The cactus plants will be collected in such a manner as to minimize stress to the plant, and will be transplanted to an area of the project site where the cactus will be protected from any disturbance. Once mining activities have been completed, the cacti will be transplanted back to their original locations.

Mitigation Measure BIO-5 is required:

- <u>BIO-5. Transplanting of Native Plants.</u> Prior to Project approval, the Revegetation Plan shall demonstrate how the twenty-seven beavertail cactus (Opuntia basilaris) and three silver cholla (O. echinocarpa) plants will be transplanted during growth media salvage to areas which remain undisturbed until they are used in revegetation of the site.
- IV f) Less Than Significant Impact with Mitigation Incorporated. The project area is located in the Northern and Eastern Mojave planning area of the California Desert Conservation Area (CDCA). Compliance with Mitigation Measures BIO-1 through BIO-4 ensures that the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

		ISSUES		Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
V.		<b>CULTURAL RESOUR</b>	RCES - Would the project				
	a)		al adverse change in the torical resource as defined in				
	b)	Cause a substanti significance of an arc to §15064.5?	al adverse change in the chaeological resource pursuant		$\boxtimes$		
	c)		estroy a unique paleontological que geologic feature?		$\boxtimes$		
	d)	Disturb any human re outside of formal cem	emains, including those interred eteries?			$\boxtimes$	
SUB	STA	ANTIATION	(Check if the project is locate Resources overlays or cite resu	d in the Cultur	ultural 🔲 d al resource	or Paleonto review):	logic 🗌

Va) Less Than Significant Impact. Historic resources generally consist of buildings, structures, improvements, and remnants associated with a significant historic event or person(s) and/or have a historically significant style, design, or achievement. Damaging or demolition of historic resources is typically considered to be a significant impact. Impacts to historic resources can occur through direct impacts, such as destruction or removal, and indirect impacts, such as a change in the setting of a historic resource.

CEQA Guidelines §15064.5(a) clarifies that historical resources include the following:

- 1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- 2. A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements [of] section 5024.1(g) of the Public Resources Code.
- 3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

A portion of the site is actively been mined. Given the overall disturbed nature of the site it is not likely that above historic resources are located on the site.

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 26 of 55

V b) Less Than Significant Impact with Mitigation Incorporated. Archaeological sites are locations that contain resources associated with former human activities, and may contain such resources as human skeletal remains, waste from tool manufacture, tool concentrations, and/or discoloration or accumulation of soil or food remains.

A portion of the site is actively being mined and is highly disturbed by mining activities. Subsurface archaeological resources are not likely to be encountered in this area, However, there is a potential that archaeological resources not previously identified may be uncovered during earth moving activities in the undisturbed areas of the site planned for future mining activities. The following Mitigation Measure is required:

<u>CR-1: Archaeological Resource Discovery.</u> The developer/property owner shall submit a letter to County Planning agreeing to adhere to the following requirements:

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

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

A portion of the site is actively being mined and is highly disturbed by mining activities. Paleontological resources are not likely to be encountered in this area, However, there is a potential that paleontological resources not previously identified may be uncovered during earth moving activities in the undisturbed areas of the site planned for future mining activities. The following Mitigation Measure is required:

**CR-2**: <u>Paleontological Resource Discovery.</u> The developer/property owner shall submit a letter to County Planning agreeing to adhere to the following requirements:

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

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 27 of 55

the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

V d) Less Than Significant Impact. The project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. In the event that human remains are discovered during project grading or other ground disturbing activities, the project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

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

	ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
VI.	GEOLOGY AND SOILS - Would the project:				
VIa)	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				$\boxtimes$
	ii. Strong seismic ground shaking?			$\boxtimes$	
	iii. Seismic-related ground failure, including liquefaction?			$\boxtimes$	
	iv. Landslides?			$\boxtimes$	
VIb)	Result in substantial soil erosion or the loss of topsoil?				
VIc)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?			$\boxtimes$	
VId)	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?				$\boxtimes$
VIe)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				$\boxtimes$
SUBST	ANTIATION (Check ☐ if project is located in	the Geolog	gic Hazards	Overlay Di	strict):
	The following analysis is based in part on the <i>Amende</i> Associates, Inc., April 2015	d Mining &	Reclamation	on Plan, Kje	Istrom &

Associates, Inc., April 2015

(I a) No Impact. The site is located within the Mojave Desert Geomorphic Province. The

VI a) ai) **No Impact.** The site is located within the Mojave Desert Geomorphic Province. The Mojave Desert is bounded on the southwest by the San Andreas Fault and the Transverse Ranges, and on the northeast by the Garlock faults. The Mojave Desert is an ancient feature

in response to movements related to the San Andreas and Garlock faults. The region is characterized by broad alleviated basins receiving non-marine continental deposits from ancient uplands that are burying the old topography, which was previously more mountainous (Norris and Webb, 1990).

The site is situated on alluvial fans. The site is not situated on an Alquist-Priolo Earthquake Fault. The nearest major fault is the Coyote Lake Fault located within 1 mile of the project site to the north and to the west (California Geological Survey, Geologic Atlas of California Map No. 023, 1962).

Fault rupture can be a potential hazard to structures and infrastructure but are not generally considered to be hazardous to open-pit aggregate mines.

- aii) Less Than Significant Impact. Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. Although the Coyote Lake Fault is located within 1 mile of the project site to the north and to the, the project site is to be used for a mining operation and seismic ground shaking is not generally considered to be hazardous to open-pit aggregate mines.
- aiii) Less Than Significant Impact. According to the County General Plan Hazards Overlay Map the site is not located in an area susceptible to liquefaction. As noted, the proposed project would not build permanent structures or construct facilities with foundations that could fail as a result of liquefaction during an earthquake. Therefore, this impact is considered less than significant.
- aiv) Less Than Significant Impact. According to the County General Plan Hazards Overlay Map the site is not located in an area susceptible to landslides. The project would involve excavation to depths no greater than 50 feet below the existing ground elevation. In addition, the side slopes of the excavated area would not be steeper than 2:1 (H:V). Therefore, the project site would not be exposed to landslide hazard, and this impact would be less than significant.
- VI b)

  Less Than Significant Impact. The climatic conditions (specifically the lack of rainfall, 2" to 5" annually), the mine design, the existing sloping topography, and the chosen mine location within the 38.43-acre subject property holdings, all combine to reduce erosion and the sediment erosion from the site. All storm water discharge is regulated by the Lahontan Regional Water Quality Control Board pursuant to site specific Storm Water Pollution Prevention Plans to manage soil erosion.

Specifically, the following design criteria were implemented for erosion control and for drainage control.

- Set back from property lines of 25' and greater.
- Finished slopes designed at 2:1.
- Install energy dissipation devices if deemed necessary.
- Implementation of erosion control measures in accordance with the SWPPP.

- Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.
- Slopes are to be stabilized, if needed, by walking the unstabilized area with a dozer "cat-walk" to create compaction, and at the same time creating seed traps or "pockets" to hold seed and help promote plant re-establishment.

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

- VI c) Less Than Significant Impact. The site is situated on alluvial fans and the primary soil type is sandy loam. Loamy soils are usually a very stable soil that shows little change with the increase or decrease of moisture temperature. The project is an open-pit mining operation. There are no structures on the site nor are any proposed. The project would involve excavation to depths no greater than 50 feet below the existing ground elevation. All quarry slopes shall be designed such that they do not exceed a 50-feet vertical height. All finished quarry slopes shall have no less than a 2:1 slope ratio, horizontal to vertical. Existing slopes where re-vegetation is established will be left at 2:1 or gentler in conformance with SMARA stipulations. Therefore, impacts related to landslide, lateral spreading, subsidence, liquefaction or collapse are considered less than significant.
- VI d) **No Impact**. The site is not located in an area which has been identified by the County as having the potential for expansive soils. The sandy loam soil materials are expected to have a very low to non-existent potential for collapse or hydroconsolidation. They are considered to be non-expansive. No impact is anticipated.
- VI 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.

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

#### SUBSTANTIATION

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

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

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

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

A GHG emissions inventory was conducted for the project utilizing the California Emissions Estimator Model (CalEEMod) based on the equipment mix and number of haul trips associated with mining activities. GHG emissions will be released by equipment used for loading, grading, and compacting activities. CalEEMod estimates that the estimated annual emissions from mining activities would be 850.30 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E) per as shown on Table 5.

Table 5. Project Greenhouse Gas (GHG) Emissions

		GHG Emissions MT/yr			
Source	N2O	CO2	CH4	CO2e	
Mining Operations	0.00025	447.10	0.144	450.22	
TOTAL				450.22	
MDAQMD Threshold		3,000			
Exceed Threshold?				NO	

As shown on Table 5, the project's GHG emissions are 450.22 MTCO<sub>2</sub>E per year which is less than the initial screening threshold of 3,000 MTCO<sub>2</sub>E per year Projects that do not exceed this threshold require no further climate change analysis.

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

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

- 1. The developer shall implement the following as greenhouse gas (GHG) mitigation during the operation of the approved project:
  - a) Waste Stream Reduction. The "developer" shall provide to all project employees County-approved informational materials about methods and need to reduce the solid waste stream and listing available recycling services.
  - b) Vehicle Trip Reduction. The "developer" shall provide to all project employees County approved informational materials about the need to reduce vehicle trips and the program elements this project is implementing. Such elements may include: participation in established ride-sharing programs, creating a new ride-share employee vanpool, designating preferred parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles with benches in waiting areas, and/or providing a web site or message board for coordinating rides.
  - c) Select construction equipment based on low-emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or CNG equipment.
  - d) 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.

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 33 of 55

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

	ISSUES	Potentially Significant Impact	Less than Significan t with Mitigation Incorp.	Less than Significant	No Impact
VIII.	HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a)	Create a significant hazard to the public or the Environment through the routine transport, use, or disposal of hazardous materials?		$\boxtimes$		
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			$\boxtimes$	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				$\boxtimes$
d)	Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			$\boxtimes$	
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				$\boxtimes$
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				$\boxtimes$
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				$\boxtimes$
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				$\boxtimes$

#### **SUBSTANTIATION**

VII a-b) Less Than Significant Impact with Mitigation Incorporated. Mining and reclamation activities for the proposed project would involve the use of heavy equipment and vehicles containing fuel,

oil, and grease. These fluids could leak from construction vehicles or be inadvertently released in the event of an accident, potentially releasing petroleum compounds and metals. Unless properly managed, such releases could result in adverse health effects, present an increased risk of fire or explosion or contaminate exposed soil. This analysis assumes the routine use, storage, and disposal of hazardous materials during mining and reclamation would be in compliance with applicable regulations and codes.

Additional site-specific controls are recommended to ensure hazardous materials are not inadvertently released to the environment. This impact is considered less than significant with mitigation incorporated. Implementation of the following mitigation measure would reduce reclamation-related hazardous materials impacts to a less-than significant level:

- HAZ 1. Hazardous Materials Spills. All spills or leakage of petroleum products during mining or reclamation activities shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste shall be collected and disposed of at an appropriately licensed disposal or treatment facility.
- VIII c) **No Impact.** The project involves the use of materials common to the mining industry and includes the transport, storage and use of fuels, and lubricants. The operator would continue to comply with all applicable federal and state safety rules and regulations regarding hazardous materials. During operation, diesel exhaust would be generated by heavy construction equipment; however, no school facilities or proposed school facilities are located within one-quarter mile radius of the project Site. Therefore, no impact is anticipated.
- VIII 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. Therefore, a less than significant impact is anticipated.
- VIII e/f) **No Impact.** As shown on *San Bernardino County General Plan, Hazards Overlay Map* the project Site is located within Airport Safety Review Area 4 (AR4). AR4 includes the low-altitude/high speed corridors designated for military aircraft use. Because the site is proposed for surface mining and will not contain structures in excess of FAA requirements, the project would not result in safety hazard impacts to or from aircraft-related uses. No impact is anticipated.
- VIII g) **No Impact.** Activities associated with the project would not impede existing emergency response plans for the project Site and/or other land uses in the project vicinity. All vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Therefore, implementation of the project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. No impact is anticipated.
- VIII h) **No Impact.** As shown on *San Bernardino County General Plan, Hazards Overlay Map*, the Project site is not located within Fire Safety Overlay District. Because the site is proposed for surface mining and will not contain permanent habitable structures, it would not result in any safety hazard impacts from wild fires. No impact is anticipated.

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

R. Hove Fort Irwin Pit Initial	Study
AP20130116	
August 31, 2015	
Page 37 of 55	

flooding as a result of the failure of a levee or dam?		$\boxtimes$
j) Inundation by seiche, tsunami, or mudflow?		$\boxtimes$

The following analysis is based in part on the *Amended Mining & Reclamation Plan*, Kjelstrom & Associates, Inc., April 2015

- IX a) Less Than Significant Impact. Mining waste discharges are regulated under Article 7 of Chapter 15 (Cal. Code of Regs.). Further regulations for mines are contained in the California Water Code, Section 13260. All mining operations are subject to the Surface Mining and Reclamation Act (SMARA, CA Public Resources Code, Title 14, Division 2, Chapter 9). The Project's Mining and Reclamation Plan contains the following measures and design features to meet waste discharge requirements:
  - Set back from property lines of 25' and greater.
  - Finished slopes designed at 2:1.
  - Install energy dissipation devices if deemed necessary.
  - Implementation of erosion control measures in accordance with the SWPPP.
  - Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.
  - Slopes are to be stabilized, if needed, by walking the unstabilized area with a dozer "cat-walk" to create compaction, and at the same time creating seed traps or "pockets" to hold seed and help promote plant re-establishment.
- Less Than Significant Impact. Groundwater in this area is adjudicated and managed by the Mojave Basin Area Watermaster. Water consumption could be estimated as high as 8,000 gallons per day. Using an average calendar year having approximately 300 working days, the annual water consumption can be estimated at 2,400,000 gal per year (= 7.37 acre feet per year. Water will be pumped to the processing site through pipes from an on-site well. As an alternative, the mine operator can haul the water to the processing site by way of a 20,000 gallon water truck. Based on the above, the project is not forecast to substantially deplete groundwater supplies. (See Section XVIIId for further details).
- Less Than Significant Impact. The climatic conditions (specifically the lack of rainfall, 2" to 5" annually), the mine design, the existing sloping topography, and the chosen mine location within the 38.43-acre subject property holdings, all combine to reduce surface runoff. All storm water discharge is regulated by the Lahontan Regional Water Quality Control Board pursuant to site specific Storm Water Pollution Prevention Plans to manage soil erosion.

Specifically, the following design criteria was implemented for drainage control.

Set back from property lines of 25' and greater

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 38 of 55

- Finished slopes designed at 2:1
- Install energy dissipation devices if deemed necessary
- Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.

Therefore, a less than significant impact is anticipated.

- IX g/h) No Impact. The project site is not located within a 100-year flood plain, nor does it include the construction of housing or would place housing within a flood plain. No impacts are anticipated.
- No Impact. The project site and surrounding area is located outside of any designated dam inundation area. The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, as no levee or dam is proposed as part of the this project. Therefore, no impacts are anticipated.
- No Impact. A seiche is an oscillating surface wave in a restricted or enclosed body of water generated by ground motion, usually during an earthquake. Inundation from a seiche can occur if the wave overflows a containment wall or the banks of a water body. Because the project site is not located adjacent to any body of water that has the potential of seiche or tsunami, no impacts are anticipated.

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

X a) **No Impact.** The project site is primarily surrounded by vacant desert land and sparsely developed residences. The project is consistent with the County's Resource Conservation (RC) land use district and would not physically divide an established community. No impact is anticipated.

- X b) Less Than Significant Impact with Mitigation Incorporated. The analysis contained in this Initial Study Checklist addressed the potential conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Based on this analysis, it was determined that the project could potentially have significant impacts on the California Desert Conservation Area described as follows:
  - Biological Resources: (Desert tortoise, burrowing owl, native plants). Mitigation Measures BIO-1 through BIO-5 are required to ensure that the project impacts to these resources are less than significant and consistent with the California Desert Conservation Area.

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

X c) Less Than Significant Impact with Mitigation Incorporated. The project area is located in the Northern and Eastern Mojave planning area of the California Desert Conservation Area (CDCA). Compliance with Mitigation Measures BIO-1 through BIO-5, ensures that the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

		ISSUES	Potenti Signific Impa	cant Signific	cant Significa I ion	
XI.		MINERAL RESOURCES - Would the project:				
	a)	Result in the loss of availability of a knownineral resource that would be of value to region and the residents of the state?				
	b)	Result in the loss of availability of a loc important mineral resource recovery delineated on a local general plan, specific p or other land use plan?	site	] [	j 🗆	$\boxtimes$
SUB	STA	ANTIATION (Check 🔀 if project Overlay):	is located	within the	Mineral Res	source Zone

XI a-b) **No Impact.** The project would supply sand and gravel aggregate materials to the region. Therefore, the project would not result in the loss of availability of a mineral resource that would be of value to the region and the residents of the State. Therefore, no impacts are anticipated.

Once mined, a measurement of this resource will be depleted; however, the project is consistent with the County's policy that protects the current and future availability of mineral resources. The primary goal in evaluating a land use that does not include mineral extraction activities is to ensure that the mineral potential of land is recognized and that decision-makers do not preclude the conservation, potential for development and use of the valuable mineral resources including water. Regulation and reclamation of the proposed project site as required by the Surface Mining and Reclamation Act of 1975 (SMARA) will permit the continued availability of the mineral resources and provide for the protection and subsequent beneficial use of those mineral resources while minimizing impacts on the public and the environment.

	ISSUES	Impact	with Mitigation Incorp.	Significant	mpact		
XII.	NOISE - Would the project:						
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?			$\boxtimes$			
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			$\boxtimes$			
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			$\boxtimes$			
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			$\boxtimes$			
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				$\boxtimes$		
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?						
SUBST	ANTIATION (Check if the project is located is subject to severe noise lev Element □):	in the Nois	se Hazard ( ling to the	Overlay Dist General Pla	rict ☐ or an Noise		
XIIa,c,d)	Less Than Significant Impact. The project is required to conform to all applicable noise control regulations. Therefore, impacts are anticipated to be less than significant.						
XII b)	Less Than Significant Impact. The project does primary source of ground-borne noise and vibration than significant impact is anticipated.	Less Than Significant Impact. The project does not employ any rock blasting which is a primary source of ground-borne noise and vibration during mining activities. Therefore, a less than significant impact is anticipated.					
XI e/f)	No Impact. The project site is not located within an airport land use plan nor within two miles						

Less than

Less than

Potentially

No

related noise are not anticipated.

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-

	ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Signific ant	No Impact
XIII.	POPULATION AND HOUSING - Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				$\boxtimes$
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				$\boxtimes$
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				$\boxtimes$

#### SUBSTANTIATION

- No Impact. The project would not induce substantial population growth in the area either directly or indirectly because the project consists of a mining operation that will operate with a minimal number of employees. In addition, the duration of the operation is approximately 30 years after which time the site will be reclaimed and returned to open space use. No impacts are anticipated.
- XIII b) **No Impact.** The project would not displace substantial numbers of existing housing units, or require the construction of replacement housing, as no housing units will be removed as a result of the mining activities.
- XIII c) **No Impact.** Implementation of the project would not displace substantial numbers of people necessitating the construction of replacement housing elsewhere, as no housing exists on the project Site.

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 43 of 55

	ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
XIV.	PUBLIC SERVICES				
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Fire Protection?				$\boxtimes$
	Police Protection?				$\boxtimes$
	Schools?				$\boxtimes$
	Parks?				$\boxtimes$
CURCT	Other Public Facilities?				$\boxtimes$
30031	ANTIATION				

XIV a) No Impact. The project would not result substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, or hinder acceptable service ratios, response times or other performance objectives for any of the public services, including fire and police protection, schools, parks or other public facilities because the project consists of a mining operation with no permanent improvements proposed. After mining operations, the site would consist of vacant land. Therefore, no impacts are anticipated. R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 44 of 55

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

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

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

#### SUBSTANTIATION

XVI a-b) Less Than Significant Impact. The Aggregate Screening and Crushing Plant requires at least 2 individuals to operate the plant and maintain the equipment. In the event none of these employees carpool together, 2 one-way trips to the site each operating day (4 trips per day with return trips) will result. Anticipated truck trips the site at the highest production period for the facility is estimated at 20 trips daily (entering and leaving).

This amount of truck traffic on a daily basis is not 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 roads, or congestion at intersections), or exceed, either individually or cumulatively, a level of service standard. Impacts would be less

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 46 of 55

than significant.

- XVI c) No Impact. Mining activities would not affect air traffic patterns at any airport or airstrip. No impacts are anticipated. (See Section VIII e/f for further details.
- XVI d) **No Impact**. The project does not involve any road improvements or design features that could substantially increase hazards on public roads. Primary access will remain off Fort Irwin Road, therefore, less than significant impact is anticipated.
- XVI e) No Impact. Activities associated with the project would not impede existing emergency response plans for the project site and/or other land uses in the project vicinity. All vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. In addition, no road closures would be required. The project would not involve any long-term increase in traffic that would conflict with adopted policies, plans, or programs supporting alternative transportation. No impacts would result.

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

#### SUBSTANTIATION

The following analysis is based in part on the *Amended Mining & Reclamation Plan*, Kjelstrom & Associates, Inc, April 2015

XVII a) Less Than Significant Impact. Mining waste discharges are regulated under Article 7 of Chapter 15 (Cal. Code of Regs.). Further regulations for mines are contained in the California Water Code, Section 13260. All mining operations are subject to the Surface Mining and Reclamation Act (SMARA, CA Public Resources Code, Title 14, Division 2, Chapter 9).

In addition, SMARA contains a number of provisions addressing drainage diversion structures, waterways (14 California Code of Regulations (CCR) (14 CCR Section 3706) and stream protection, including surface water and groundwater (14 CCR Section 3710). SMARA also requires that erosion control methods be designed for the 20-year/1-hour intensity storm event (14 CCR Section 3706(d)) and control erosion and sedimentation (14 CCR Section 3706(c)). The SMARA regulations also require reclamation plans to include performance standards for drainage and erosion to protect water quality, including streams, surface water, and groundwater. These performance standards must ensure compliance with the Clean Water Act, the Porter-Cologne Act, and other legal requirements (14 CCR Sections 3706, 3710(a)).

The project's *Mining and Reclamation Plan* contains the following measures and design features to meet waste discharge requirements:

- Implementation of erosion control measures in accordance with the SWPPP.
- Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.
- Construction of protective berms (topsoil stockpile) on the outside of the excavation area.

Therefore, less than significant impacts are anticipated.

- XVII b **No Impact**. Water will be used for dust suppression, aggregate washing, and the concrete batch plant. Water will be continued to be acquired from the on-site well. Therefore, no impacts related to expanding a water treatment or distribution system would occur.
- Less Than Significant Impact. The climatic conditions (specifically the lack of rainfall, 2" to 5" annually), the mine design, the existing sloping topography, and the chosen mine location within the 38.43-acre subject property holdings, all combine to reduce surface runoff. The following design criteria were implemented for drainage control.
  - Set back from property lines of 25' and greater
  - Finished slopes designed at 2:1
  - Install energy dissipation devices if deemed necessary
  - Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 49 of 55

The drainage system will not cause significant environmental effects as shown in the analysis in this Initial Study Checklist.

Less Than Significant Impact with Mitigation Incorporated. The project site is located within the boundaries of the Mojave Water Agency (MWA) and managed within the adjudicated Baja Subarea. MWA is a State Water Project contractor, a regional groundwater management agency, and serves as Watermaster for the adjudicated Mojave Basin. The MWA has four sources of water supply – natural surface water flows, wastewater imports from outside the MWA service area, SWP imports, and return flow from pumped groundwater not consumptively used.

The project site is not located within an area serviced by a public water system and the project is not explicitly defined in the Water Code by project definitions, however the project is best described as an existing industrial/manufacturing activity with a proposed land use that will expand its existing 12.2 acres of disturbance to 14.5 acres. The applicant has indicated the surface mining operation will obtain its principal source of water from an existing on-site well.

The project is estimated to consume up to 8,000 gallons per day with an annual yield of 2,400,000 gallons per year or 7.37 acre feet per year. Bottled water will be provided for employee consumption. Water Code Section 10910(f)(5) does not mandate a detailed "basin-wide" analysis to compare all existing and projected future groundwater pumping against the safe yield of the entire groundwater basin nor specify a particular methodology for a sufficiency analysis. In that respect, this affords the County substantial discretion in determining how to measure groundwater sufficiency. For groundwater basins that have not been adjudicated, information as to whether the California Department of Water Resources (DWR) has identified basins as overdrafted or has projected that the basin will become overdrafted if poor management conditions continue shall be required. A detailed description by the nearest public water system or County is required to comply in part pursuant to Water Code Section 10910(b), and describe efforts being undertaken in the basin or basins to eliminate the potential for a long-term overdraft impacts.

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

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

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 50 of 55

existing water supplies as between the individual hydrologic Subareas within the Basin Area and as among the water users within each Subarea to proceed with orderly water resource planning and development.

As noted above, the applicant has indicated a water demand of 8,000 gallons per day with an annual yield of 2,400,000 gallons per year or 7.37 acre feet per year for dust control and operations, which can be supplied by an on-site well for the proposed life of the operation. In addition, the applicant indicated as an alternative, they can haul the water to the processing site by way of a 20,000-gallon water truck.

At maximum production of operations, up to 8,000 gallons of water daily may be utilized for dust suppression and aggregates washing. According to the MWA, (*Final 2010 Urban Water Management Plan*, Kennedy/Jenks Consultants, June 2011), current supplies are sufficient to meet demands through 2044, assuming SWP supplies remain constant at the 2035 availability.

In order to ensure that adequate water supplies are met and that the well is managed properly, the following mitigation measures are required.

<u>UTL-1. Water Well Verification.</u> Water may be supplied through the use of groundwater. Evidence shall be provided that the existing well was constructed to public water supply standards, will provide the quantity of water projected as required for the project, meets quality standards for domestic and industrial use, and the well is properly permitted with the County. Evidence shall be submitted to DEHS/Water Section for approval. For information, call DEHS/Water Section at (909) 387-4666.

<u>UTL-2. Abandoned Well.</u> Any well, exploratory hole or test hole which is abandoned, out of service, or otherwise left unattended shall have a temporary cover over the well or opening which prevents the introduction of undesirable material into the well or hole, and ensures public and wildlife safety pursuant to Section 115700 of the California Health & Safety Code. 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.

XVII f,g) Less Than Significant Impact. Mining activities would result in waste generation of waste materials. These materials will be used to reconstruct slopes. Any waste material not used will be re-contoured and/or spread over the site as part of the reclamation process. Equipment maintenance will be done onsite. Waste oil, lubricants and solvents will be removed from the site and disposed of at permitted facilities. All solid refuse will be kept in closed containers and removed from the site to permitted facilities as needed. The amount of solid waste is minimal and is not forecast to impact nearby landfills.

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

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

In instances where potentially significant impacts have been identified, Mitigation Measures included in this Initial Study Checklist listed are required to reduce impacts to less than significant levels. Therefore, project would not substantially degrade the quality of the environment and no habitat, wildlife populations, plant and animal communities, or examples of the major periods of California history or prehistory shall be eliminated.

b) Less Than Significant Impact with Mitigation Incorporated. In all instances where potentially significant cumulative impacts have been identified, Mitigation Measures included in this initial Study Checklist are required to reduce impacts to less than significant levels. The analysis in this Initial Study Checklist also 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

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 52 of 55

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 considerable.

c) Less Than Significant Impact With Mitigation Incorporated. As discussed in this Initial Study Checklist, the project would not expose persons to adverse impacts related to Air Quality, Greenhouse Gas Emissions, Land Use and Planning, Population and Housing, or Transportation/Traffic hazards. These impacts were identified to have no impact or a less than significant impact.

The results of the Initial Study Checklist show that there are potentially significant impacts related to Hazards and Hazardous Materials. These impacts will be reduced to less than significant after incorporation of mitigation measures.

The implementation of the Mitigation Measures identified in this Initial Study Checklist would result in a less than significant impact and there would be no substantial adverse effects on human beings, either directly or indirectly

### XVIII MITGATION MEASURES. Include mitigation measures here.

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

<u>AQ-1: Pre-watering.</u> 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.

<u>AQ-2: Watering and Soil Stabilization.</u> 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.

<u>BIO-1-Burrowing Owl</u>. Utilizing accepted protocols, within 30 days prior to initiating mining activities on the areas not currently being mined, a pre-construction survey shall be conducted for the Burrowing Owl by a qualified biologist and submit a report of finding to the County of San Bernardino Land Use Services Department-Mining Division.

<u>BIO-2 Worker Environmental Awareness Program</u>. Prior to any construction activities on the project site the Applicant will implement a Worker Environmental Awareness Program (WEAP) to educate onsite workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the Applicant's personnel, contractors, and all subcontractors, on the first day of work prior to the employee's commencing work on the site. The WEAP will place special emphasis on the protected species that have potential to occur within the site, including the Mojave desert tortoise.

The program will include the following elements:

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 53 of 55

- A presentation, developed by or in consultation with a qualified biologist, discussing the sensitive biological resources with potential to occur on-site, and explaining the reasons for protecting these resources and penalties for non-compliance;
- Brochures or booklets, containing written descriptions and photographs of protected species as well as a list of site rules pertaining to biological resources, to be provided to all WEAP participants;
- Contact information for the project biological monitor, and instructions to contact the monitor with any questions regarding the WEAP presentation or booklets;
- An acknowledgement form, to be signed by each worker indicating that they received WEAP training and will abide by the site rules protecting biological resources; and,
- A training log, to be signed by all on-site personnel immediately following WEAP training, will be maintained on the project site during construction to document compliance with this measure.

<u>BIO-3 Pre-construction Desert Tortoise Surveys.</u> Within 14 days prior to mining activities on the areas not currently being mined, the Applicant shall retain a qualified biologist to conduct clearance level surveys per USFWS and/or CDFW protocols for signs to ensure that the desert tortoise have not occupied the site since the Focused Desert Tortoise Survey, November 6, 2013 by RCA Associates, LLC. The results of the pre-construction clearance survey shall be submitted to the USFWS, CDFW, and the County of San Bernardino Land Use Services Department-Mining Division within 14 days of completion of the pre-construction surveys to document compliance with applicable federal and state laws pertaining to the protection of desert tortoise.

BIO-4 Mojave Desert Tortoise Exclusion Fencing. Prior to initiation of mining activities along within the areas not currently being mined a desert tortoise exclusion fence shall be installed surrounding the disturbance area. The exclusion fence shall be installed in accordance with the specifications set forth in Chapter 8 of the USFWS' Desert Tortoise Field Manual (USFWS 2009), and installation of the fence shall be overseen by a biologist familiar with the installation of tortoise exclusion fencing. If tortoise exclusion fences are left in place for a period exceeding one week at any location, the fences will be inspected weekly for any signs of damage or wear that could potentially compromise the integrity of the exclusion perimeter. If damage or excessive wear is observed, the exclusion fence will be repaired immediately. Results of any necessary fence inspections will be maintained to document compliance with this provision.

<u>BIO-5 Summary Report</u>. Within 30 days of completion of Mitigation Measures BIO-1 through Bio-3 above, the Applicant shall submit a summary report to the County of San Bernardino Land Use Services Department-Mining Division which summarizes compliance with these mitigation measures.

<u>CR-1: Archaeological Resource Discovery.</u> The developer/property owner shall submit a letter to County Planning agreeing to adhere to the following requirements:

In the event archaeological resources are uncovered during earthmoving activities, all work in that
area shall cease immediately the County and the Bureau of Land Management shall be notified. A
qualified archeologist shall be retained to access the findings, and if necessary provide appropriate
disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they
have been evaluated, recorded, excavated, and/or recovered as necessary. Earthmoving shall be

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 54 of 55

allowed to proceed on the site when the archaeologist, in consultation with the appropriate Native American Tribe(s) and the County of San Bernardino Museum, determines the resources are recovered to their satisfaction.

**CR-2**: <u>Paleontological Resource Discovery.</u> The developer/property owner shall submit a letter to County Planning agreeing to adhere to the following requirements:

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

- <u>HAZ 1. Hazardous Materials Spills</u>. All spills or leakage of petroleum products during mining or reclamation activities shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste shall be collected and disposed of at an appropriately licensed disposal or treatment facility.
- <u>UTL-1. Water Well Verification.</u> Water may be supplied through the use of groundwater. Evidence shall be provided that the well is constructed to public water supply standards, will provide the quantity of water projected as required for the project, meets quality standards for domestic and industrial use, and the well is properly permitted with the County. Evidence shall be submitted to DEHS/Water Section for approval. For information, call DEHS/Water Section at (909) 387-4666.
- <u>UTL-2. Abandoned Well.</u> Any well, exploratory hole or test hole which is abandoned, out of service, or otherwise left unattended shall have a temporary cover over the well or opening which prevents the introduction of undesirable material into the well or hole, and ensures public and wildlife safety pursuant to Section 115700 of the California Health & Safety Code. 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.

#### **GENERAL REFERENCES**

CEQA Guidelines, Appendix G.

County of San Bernardino General Plan, 2007

County of san Bernardino Development Code, 2007

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

Mojave Desert Air Quality Management District <u>California Environmental Quality Act (CEQA)</u> and Federal Conformity Guidelines, August 2011.

R. Hove Fort Irwin Pit Initial Study AP20130116 August 31, 2015 Page 55 of 55

## **PROJECT SPECIFIC REFERENCES**

Habitat Assessment and Focused Burrowing Owl Survey, RCA Associates LLC

Focused Desert Tortoise Survey, RCA Associates LLC

Amended Mining & Reclamation Plan, Kjelstrom & Associates, Inc.

# **EXHIBIT D**

R. Hove Fort Irwin Pit Reclamation Plan

# AMENDED MINING AND RECLAMATION PLAN

**FOR THE** 

R. HOVE FORT IRWIN PIT MINE ID# 91-36-0161

OF

**DAILY TRANSIT MIX, LLC** 

April 2015

Submitted to:
County of San Bernardino
Planning Department
385 North Arrowhead, 3rd Floor
San Bernardino, California 92415-0182

Report Prepared by: Kjelstrom & Associates, Inc. 31593 Pleasant Drive PO Box 2833 Running Springs, CA 92382 (909) 867-9435 (909) 867-9435 FAX

# **Contents**

	IN	ITRODUCTION	1
I.	SI	TE AND AREA CHARACTERISTICS	7
1		Location	7
2		Access	7
3		Site History and Land Use	7
	Α.	Historical Source Information	7
	В.	Owner and Operator Information	7
	C.	Land Use Information	7
	D.	. Surrounding Properties/Uses	8
4		Project Description	8
5		Visibility	8
6		Geology	9
	Α.	Geology of the Site	9
	В.	Special Geologic Conditions, Faults, etc.	9
	C.	Mitigation	9
7		Hydrology	9
	Α.	Surface Water	9
	В.	Groundwater	9
II.		MINING	11
1		Mining Operation Introduction	11
	Α.	Mineral Commodity	11
	В.	Project Life	11
	C.	Project Size	11
	D.	. Annual Production	11
	Ε.	Hours of Operation	11
2		Operation	11
	A.	. Overview	11
	В.	Move-on, Site Preparation and Initial Operation	11
	C.	Mine Excavation Scheduling	12
3		Excavation	12
4		Wind-Down of Operations, Clean up & Equipment Removal	12
5		Mine Overburden, Fines and Waste	13
6		Ore Processing Methods and Equipment	13

Α	. Sand and Gravel Processing Plant	13
В	. Ready Mixed Concrete Plant	14
С	. Asphalt Concrete Plant	15
D	Recycle Plant	15
E	. Dozers and Loaders:	16
F.	. Loaders	16
G	i. Water Trucks	16
7.	Annual Water Usage and Water Source	16
А	. Overview	16
В	. Fresh Water	16
С	. Wastewater	16
8.	Power Usage and Power Source	16
9.	Drainage, Erosion and Sedimentation Control	16
10.	Trucking and Traffic Routes	17
А	General Trucking	17
В	. Employees and Supervision	17
11.	Interim Management Plan	17
12.	Public Safety	18
IV.	RECLAMATION	19
1.	Current Land Use	19
2.	Visibility	19
3.	Vegetation	19
4.	Wildlife	20
5.	Reclamation and Reclamation Schedule	21
А	Reclamation	21
В	. Reclamation Schedule	21
6.	Revegetation	22
7.	Success Criteria	22
8.	Cleanup, Wind-Down of Operations & Equipment Removal	23
9.	Post-Reclamation and Future Mining	23
10.	Slope and Slope Treatments	23
11.	Ponds, Reservoirs, Tailings, and Waste	24
12.	Soils and Fine Textured Waste	24
13.	Drainage and Erosion Controls	24
1/1	Public Safety	2/

15.	Monitoring and Maintenance	25
16.	Reclamation Assurance	25
List o	of Figures	
	<u> </u>	_
Figure 1	1 – General Location Map	
Figure 2	2 - Vicinity Map	4
Figure 3	3 - Extent of Holdings Map (USGS – Paradise Range)	5
Figure 4	4 - Location Map	ε
Figure 5	5 - Typical Processing Plant	14
Figure 6	6 - Typical Ready Mix Concrete Plant	14
Figure 7	7 - Typical Asphalt Concrete Plant	15

#### I. <u>INTRODUCTION</u>

Daily Transit Mix, LLC ("DTM", "applicant", "operator") is proposing to increase the acreage of an existing permit for a sand and gravel surface mine from 12.2 acres to 14.5 acres on a portion of a 38.43-acre piece of property near Barstow, CA, to mine to a nominal depth of 50 feet (lowest reclaimed elevation at 2072 AMSL), and to extend the mining termination date from 2014 to 2044. The R. Hove Fort Irwin Pit site is located in Section 16, Township 12 North, Range 2 East, SBBM; Assessor Parcel Number 0518-181-13. The site is situated approximately thirty-five (35) miles north of Barstow and is accessed via Fort Irwin Road and Paradise View Road.

The R. Hove Fort Irwin Pit site ("Site") was formerly known as the Gordon Lint Mine. The historic use of the site has been sand and gravel mining, aggregate production, concrete production, and activities associated with uses and sales of these products, since 2001. Other uses for land in this area have been sand and gravel mining, vacant desert/open space, rural living, and off road vehicles use and recreation.

In the south east corner of the 38.43-acre parcel is an existing residence. While this residence is on the property; it is not within the proposed permit boundaries. The residence is owned by CJR, the owner of the property.

The applicant is proposing to continue mining an estimate of 65,000 tons per year of rock, gravel, and sand as shown on the mining plan, intended for use on construction projects in San Bernardino County over a 30-year life span. This site has been mined for the last thirteen (13) years under County permit # 745/DSN/00010890/SAMR/01 and File Index # SMA1/DN431-489/518-181-13. This renewal of the permit will extend the termination date to May 10, 2044.

The applicant (and operator) proposes to utilize this aggregate product in their Ready-Mix Concrete (RMC) operations. Their RMC operations are on site and are primarily used to service the U. S. Army installation, Fort Irwin. The operator intends to build a future Asphalt Concrete (AC) plant and a Recycle plant at this site, which will also utilize the aggregate product. The operator also proposes to sell the aggregate product to other operators and customers.

The mine will be a surface mining operation. Topsoil, generated by scraping the top 6"-8" of vegetation and overburden, will be used as a berm along the property for storm water drainage control. Finished slopes are designed to not be steeper than 2:1 (horizontal: vertical). At the time of reclamation, the topsoil will be spread over the slopes and pit floor to promote vegetation and reclamation of the mine site.

The process of the mining operation will include extraction of the raw material from the pit area, feeding the material into a screening plant for sorting and sizing, crushing any over-sized rock, stockpiling the finished materials by size (sand, crushed sand, 3/8" gravel, ½" gravel, ¾" gravel, etc.) and product (i.e. Class 2 Aggregate Base, etc.). The rock and sand can be trucked to a given construction site, trucked to a RMC operation, trucked to an AC operation, or used in the on-site RMC plant or possible future on-site AC plant. The necessary equipment for mining will be dozers, loaders, haul trucks, conveyors, and a processing plant. This site will be SMARA (and AB 3098) approved to insure marketability.

In the event a continuous mining operation is not maintained during the entire mine permit time frame, the applicant/operator proposes an idle period management plan that will be implemented during those periods when the mine is not operational. The idle period management plan is also referred to as the "Interim Management Plan" (see page 15).

The site will be fully reclaimed within three years of the end of mining operation (2044) or sooner. The mine is expected to be utilized continuously, but may be left in an idle state in conformance with Public Resources Cose Section 2770(h)(1). An Interim Management Plan will be submitted upon changes in operational status.

All mining operations shall comply with the Mining and Reclamation Plans provided herein, as well as comply with the Conditions of Approval prepared for this project by the County of San Bernardino Agencies and Departments.

The Reclamation Objectives of the R. Hove Fort Irwin Pit site are:

- To revegetate the site.
- To mitigate and reduce the visual impacts as a result of the changes of landform and revegetation.
- To mitigate runoff impacts and restoration of flows of runoff storm waters to natural/ existing conditions.

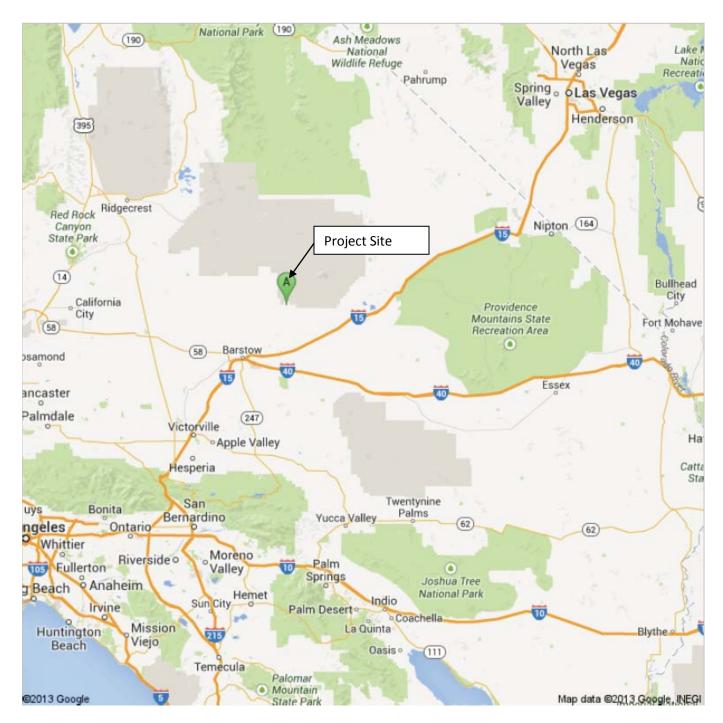


Figure 1 – General Location Map

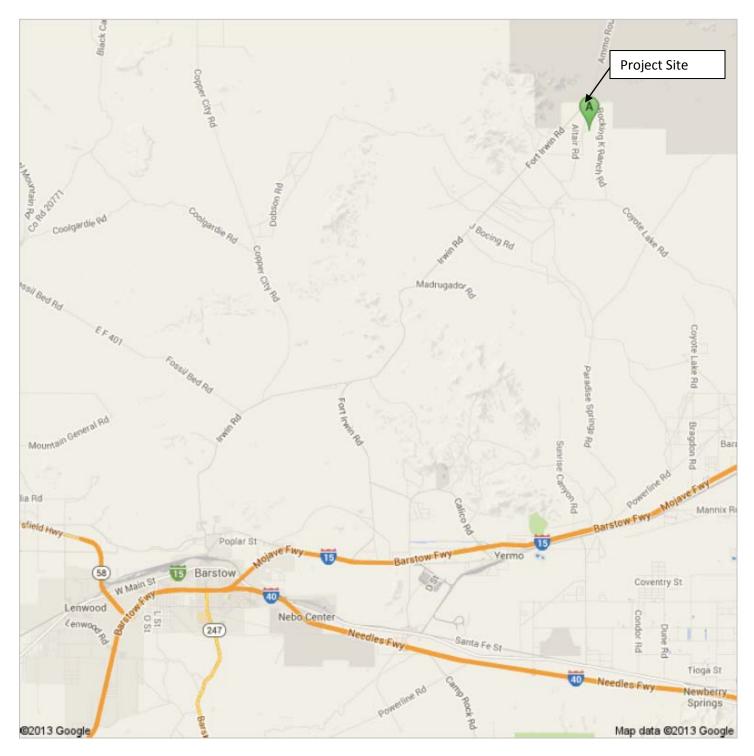


Figure 2 - Vicinity Map

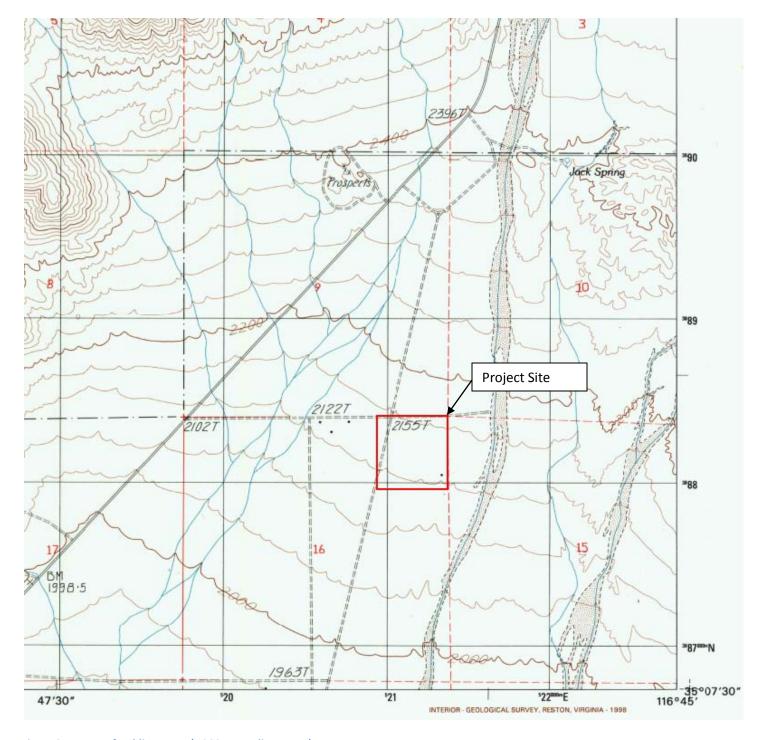


Figure 3 - Extent of Holdings Map (USGS – Paradise Range)

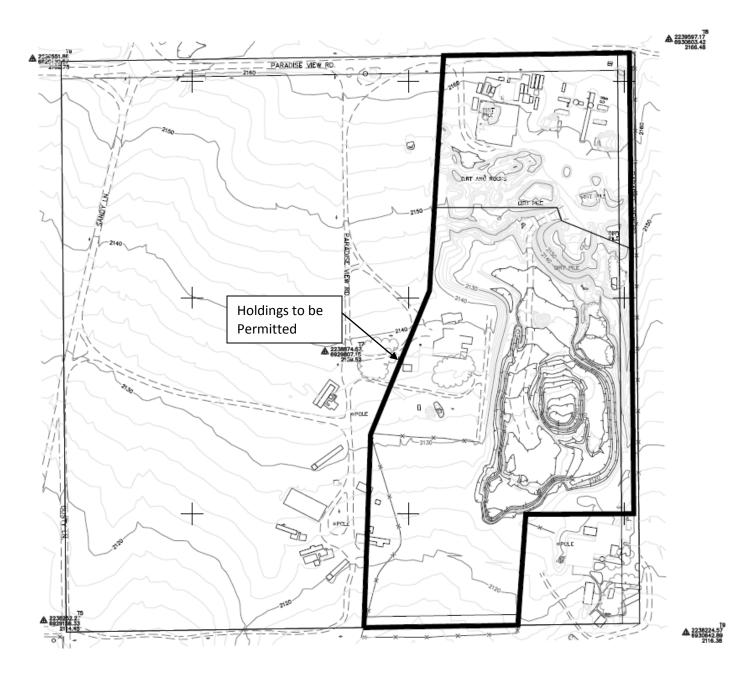


Figure 4 - Location Map

#### II. SITE AND AREA CHARACTERISTICS

#### 1. Location

The R. Hove Fort Irwin Pit site is located approximately thirty-five (35) miles north of the Barstow and is accessed via Fort Irwin Road and Paradise View Road (see Vicinity Map). The mine currently occupies approximately 12.2 acres. Under this proposal, it would occupy approximately 14.5 acres of a 38.43-acre property.

The R. Hove Fort Irwin Pit site is located in Section 16, Township 12 North, Range 2 East, SBBM; Assessor Parcel Number 0518-181-13. Copies of the parcel maps, assessor's parcel maps and legal descriptions for the site are included within the application package.

#### 2. Access

Access to the mine site is provided by Fort Irwin Road and Paradise View Road. Paradise View Road intersects Fort Irwin Road approximately twenty-one (21) miles north of Interstate 15. Paradise View Road is a dirt road which provides direct access to the site.

Fort Irwin Road provides access to Fort Irwin and Barstow, and San Bernardino Valley via Interstate 15 (see Figure 2).

#### 3. Site History and Land Use

#### A. Historical Source Information

DTM has operated the sand and gravel mine since 2001 under County permit #745/DSN/00010890/SAMR/01.

An existing well is located within the 38.43-acre site, just west of the 14.5-acre mining area. During reclamation, the well shall be abandoned pursuant to applicable regulations.

#### B. Owner and Operator Information

The owner of the land is CJR, which is an affiliate of Daily Transit Mix, LLC. The operator and applicant are Daily Transit Mix, LLC. DTM has been a major producer of aggregates and ready mixed concrete used on highway, road construction projects and other construction projects from this site since 2001.

#### C. Land Use Information

The property is approximately 38.43 total acres. 14.5 acres of the 38.43-acre property is or will be disturbed. 10.3 acres of the disturbed area will be mined under Phase I. The additional 4.2 acres will be used for various facilities or utilities to process the sand and gravel products.

One easement runs through the property. The easement is for power lines from Cal. Elec. Corp., which runs along Powerline Road. A 40-foot roadway easement has been dedicated to the County of San Bernardino along the north and east sides of the property.

No other easements for utilities are present on the property. An existing well west of the disturbed area supplies water to the rock plant and to future processing plants. Drinking water is delivered in bottles. Sewer service for the maintenance/office building is by septic tank and portable toilets.

#### D. Surrounding Properties/Uses

Adjacent properties are predominantly undisturbed desert land. Specifically, the surrounding properties and uses are:

To the north is vacant open space, BLM lands. Further north is Fort Irwin.

To the east is vacant open space, BLM lands.

To the south is single family residence and vacant open space.

To the west are scattered single family residences and vacant open space.

The surrounding areas to the site are open space/vacant desert area with few residential homes (rural living). Also, there are existing commercial and industrial uses along Ft. Irwin Road.

#### 4. Project Description

The project consists of an excavation for the extraction of sand and gravels, a screening and crushing plant, a concrete batching plant, a future asphaltic concrete batch plant, and a future recycle plant. Ancillary uses commonly found in conjunction with the mine excavation and plant site, such as equipment service area, fueling stations, office and construction materials storage area are included with this proposal with the submittal of an approved plot plan with the Lead Agency.

Mining operations will proceed as one phase, which consists of mining the southern 10.3-acre portion of the site to the full depth of 50 feet and will continue until the pit has been mined completely (approximately 2044). Maximum Anticipated Depth shall be 92 feet below (Elev. 2072 ft AMSL) the project benchmark elevation of 2164 feet AMSL, located at the northeast corner of the project site.

The northern 4.2-acre portion of the disturbed area will be used for the aggregate processing, RMC plant, AC plant, Recycle plant, and for stockpiling material.

Reclamation will commence after all mining operations have completed. Completion of reclamation will occur within 3 years of completion of mining operation (approximately 2047).

Mining of the pit may be done at 2:1 slopes or may be mined vertically with 20' benches, at 40' horizontal spacings. This will help facilitate reaching the bottom of the pit quickly. As the pit nears the end of mining, the finish slopes will be mined at 2:1 slopes (horizontal: vertical). Over-excavation will be avoided and any over-excavation will be backfilled at 2:1 slopes (horizontal: vertical). Any backfill will be un-engineered.

A 25-foot minimum setback shall be maintained along any and all property lines. The setback is planned for security and safety of the mine site, reclamation of the site, and to provide a significant mitigation from all possible erosion and head cutting concerns.

The 38.43-acre lot will be surrounded with tortoise fencing and the perimeter of the site will be posted with "No Trespassing" signs at 400' spacing.

#### 5. Visibility

The mine site is currently permitted under County permit # 745/DSN/00010890/SAMR/01 and File Index # SMA1/DN431-489/518-181-13. The renewal of the existing permits presented in this report will not significantly change the viewshed of the mine site.

#### 6. Geology

#### A. Geology of the Site

The site is located within the Mojave Desert Geomorphic Province. The Mojave Desert is bounded on the southwest by the San Andreas Fault and the Transverse Ranges, and on the northeast by the Garlock faults. The Mojave Desert is an ancient feature in response to movements related to the San Andreas and Garlock faults. The region is characterized by broad alleviated basins receiving non-marine continental deposits from ancient uplands that are burying the old topography, which was previously more mountainous (Norris and Webb, 1990).

#### B. Special Geologic Conditions, Faults, etc.

The site is situated on alluvial fans. The nearest major fault is the Coyote Lake Fault located within 1 mile of the project site to the north and to the west (California Geological Survey, Geologic Atlas of California Map No. 023, 1962).

#### C. <u>Mitigation</u>

Mitigation of possible earthquake concerns shall be an element of the Emergency Business Plan. Ground Shaking, earthquake concerns, landslides, etc. are not conditions considered at risk for the site, mine, plant equipment or safety of the work force due to the stability of the site, type of geologic formation and the equipment planned for operation on the site.

Mudflows, liquefaction, hydro consolidation, collapsible or expansive soils are not factors of concern at this location.

#### 7. <u>Hydrology</u>

Annual rainfall is estimated at 2"-5", with average rainfall at an estimated 2". The site is not within a recognized floodway, 100-year-old flood plain, nor considered subject to flash flooding. The annual temperature extremes range between an average low of 35°F in December and an average high of 104°F in July.

#### A. Surface Water

Drainage Patterns within the project will not be shifted as mining progresses. Storm water runoff will be accepted onto the site at the northern portion of the excavation. Storm water that is accepted onto the site will be allowed to percolate into the groundwater. Overburden or topsoil will be used to divert water from entering the site from the east.

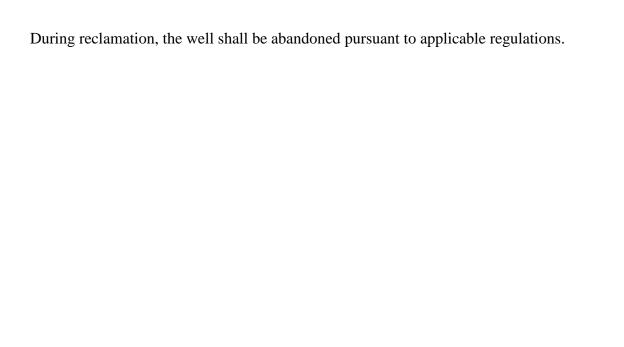
Implementation of an Industrial Stormwater Pollution Prevention Plan, as required by the Regional Water Control Board and the Federal (NPDES) National Pollution Discharge Elimination System, will provide additional instructions to the site maintenance plan, as well as added protection from possible spills and contamination from fuel, oils or other substances that may occur during normal operating and maintenance periods.

The tributary area immediately affecting the mine area, in sheet flow conditions, is considered unlikely to generate a concentrated flow which would cause erosion to the designated mine area.

The proposed mine project will not affect groundwater recharging.

#### B. Groundwater

An existing well west of the disturbed area supplies water to the rock plant and to future processing plants. The operations will not introduce any toxic substances, contaminate, or otherwise degrade the quality of stream runoff or groundwater from the site.



# III. MINING

# 1. Mining Operation Introduction

Please refer to the project introduction and site characteristics section of this report for the site history and overview.

#### A. Mineral Commodity

Sand, Gravel and Rock

#### B. Project Life

DTM is proposing to extend the life of the mine site until 2044. This would extend the life of the mine site to a total of 30 years. The extension is to allow DTM adequate time to mine the property.

# C. Project Size

The project is a 14.5-acre surface mine on a 38.43-acre property.

#### D. Annual Production

The applicant is proposing to continue mining an estimate of 65,000 tons per year of rock, gravel, and sand as shown on the mining plan, intended for use on construction projects in San Bernardino County over a total 30-year life span.

# E. Hours of Operation

The applicant is proposing to continue mining and other operations typically six days a week, Monday to Saturday, from 5:00 am to 5:00 pm, with maintenance occurring in the evening hours, prior to 10:00 pm. Occasionally, construction projects demand night-time operations, especially in the hot summer months and with the military as one of our primary customers. During these demand periods, the operator will continue processing and batching operations through the night.

# 2. Operation

#### A. Overview

The site shall be permitted for mining and the operation of onsite crushing, screening and processing plants necessary to accommodate public works and private construction projects in the area. The site shall also be permitted for the installation and operation of a RMC plant, and a recycle plant. The materials are to be trucked to the jobsite(s) from this location.

#### B. Move-on, Site Preparation and Initial Operation

Upon receiving approvals for the mine and processing equipment, the operator cleared off the mine area and prepared the sand and rock processing plant area.

Further clearing of the vegetation shall be performed by scraping the existing vegetation and topsoil off the area and stockpiling the remains of the cleared vegetation and topsoil outside the excavation area and outside of potential drainage courses. The scraped material will be used to create a berm along the sides of the excavation area. At the conclusion of mining operation, the operator shall spread the vegetative materials back over the reclaimed area per direction of the project biologist.

The operator shall scrape the top 6" to 8" of topsoil off the surface area(s) to be mined and the material is to be stockpiled (saved) until the mine area is prepared for reclamation when topsoil shall be spread over the disturbed areas in compliance with the report and the reclamation plan.

#### C. Mine Excavation Scheduling

The applicant (and operator), DTM, proposes to market this aggregate product to/for use on construction projects, to be used in their RMC operations, and to be used in their AC operations.

Mining operations will proceed as one phase, which consists of mining the southern 10.3-acre portion of the site to the full depth of 50 feet and will continue until the pit has been mined completely (approximately 2044).

The northern 4.2-acre portion of the disturbed area will be used for the aggregate processing, RMC plant, AC plant, Recycle plant, and for stockpiling material.

Reclamation will commence after all mining operations have completed. Completion of reclamation will occur within 3 years of completion of mining operation (approximately 2047).

Mining of the pit may be done at 2:1 slopes or may be mined vertically with 20' benches, at 40' horizontal spacings. This will help facilitate reaching the bottom of the pit quickly. As the pit nears the end of mining, the finish slopes will be mined at 2:1 slopes (horizontal: vertical). Over-excavation will be avoided and any over-excavation will be backfill at 2:1 slopes (horizontal: vertical). Any backfill will be un-engineered.

A 25-foot minimum setback shall be maintained along any and all property lines. The setback is planned for security and safety of the mine site, reclamation of the site, and to provide a significant mitigation from all possible erosion and head cutting concerns.

# 3. Excavation

Blasting is not proposed for this operation. Blasting will not occur at this site.

Bulldozers and front-end loaders shall perform the excavation of the quarry and slopes. Conveyors and haul trucks will transfer the aggregate from the mine to the sand and gravel processing plant.

Although the operator's overall goal is to mine finished slopes with 2:1 gradient, it is more efficient to mine with vertical faces. Therefore, interior mining slopes will be vertical; but finish slopes shall be mined at 2:1 and over excavation of these finished slopes will be avoided. Should finished slopes accidentally be over-excavated, the operator shall backfill such over-excavation to the desired 2:1 slopes. Un-engineered backfilling with by-product sand shall occur with 2:1 slopes. A California licensed engineer or geologist shall determine the stability of the slopes following mining to determine whether the slopes require additional slope treatment at that time. Survey markers will be set, to help avoid over-excavation, that clearly delineate the excavation limits and that take into account the vertical mining method and subsequent final grading of the slope.

Overburden is that material that normally lies above the raw product and is usually considered a waste byproduct. The overburden at R. Hove Fort Irwin Pit is primarily in the form of topsoil and will be pushed over into berms on the perimeter of the mine and saved for re-spreading in reclamation

The unpaved roads shall be maintained with loaders and with motorgraders ("blades") grading the roads.

Water trucks shall control dust in the mine and on the haul roads. Crusher fed conveyors shall be equipped with spray racks and water reservoirs to lower dust emissions from the materials conveyed by these belts.

# 4. Wind-Down of Operations, Clean up & Equipment Removal

Upon completion of mining, aggregate screening, and crushing the operator will dismantle the sand and gravel processing plant and demobilize the equipment to another location for security, safety or for use on another

project. When the plant is dismantled and shipped offsite, the entire crushing plant area is cleaned; all non-native materials are picked up and removed from the site.

The RMC plant, AC plant, recycle plant, mobile equipment (dozers, loaders, etc), and support equipment and structures (office, trailers) will follow a similar process for winding down, unless a CUP is applied for and approved prior to final reclamation.

Domestic garbage, scrap materials, construction debris, chemicals, oils, grease, etc. are collected and removed from the site on a periodic basis and when needed.

Domestic garbage is disposed by a contracted waste hauler or by the operator's forces at the County dump.

Scrap metals is removed by steel or metal salvagers.

Chemicals, oil, greases, etc. are a contracted waste and will be collected for disposal by a licensed hauler.

# 5. Mine Overburden, Fines and Waste

The types of waste to be produced are by-product sand, domestic garbage, oil, and grease. The domestic garbage, oil, and grease will be stored and removed per local, state, and federal regulations. The by-product sand will be backfilled into the pits until surface grade is reached.

Topsoil and, separately, overburden will be used as a berm along the perimeter of the mine site for storm water drainage control. The operator shall take appropriate measures to protect the topsoil berms from erosion by promoting plant life. Once finish slopes are obtained, the overburden berms, and then topsoil, will be spread over the slopes and pit floor to promote vegetation and reclamation.

# 6. Ore Processing Methods and Equipment

The equipment required for mining this site and processing the raw material is as follows: the sand and gravel processing plant, the RMC plant, the future AC plant, the future recycle plant, bulldozer(s), water truck(s), front-end loader(s), motorgrader (to grade haul roads and finish grade following each move-out), haul truck(s), supervisory pick-up trucks and cars, street legal trucks (either double bottom dump type or end-dump types). Other equipment to be used onsite includes maintenance/office building and fuel storage tank(s).

Power lines provide power to the mine site. Other public utilities are not available to the plant site; therefore, drinking water will be delivered to the site, portable toilets are located at or near the office, and two-way radios and cellular telephones are used.

An existing well is located on the 38.43-acre lot. A pipeline delivers water to storage tanks then to the processing plant. This water will be used for material processing, dust control, and other non-potable uses.

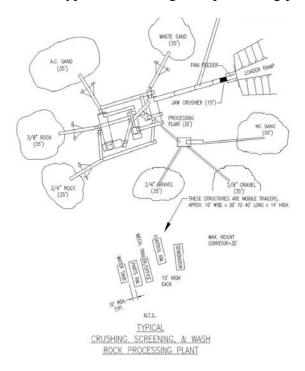
#### A. Sand and Gravel Processing Plant

The sand and gravel processing plant consists of conveyors, a feeder, screening decks, and crushers (also referred to as cones). Raw material is fed into the feeder by front-end loader. The feeder evenly loads a conveyor belt with raw material, which then conveys that material to a screening deck (which is a large shaker box with several graduated steel screens inside).

As material passes through the graduated screens it is sorted and conveyed to predetermined stockpiles. Raw material, which is too large to pass through the first screen, is collected and conveyed to a crusher cone, which crushes the large rock into smaller pieces. The smaller pieces are again conveyed to a screen deck for sorting.

This process is repeated until the material has cycled through enough times to finally find its way to a stockpile. The repetitive crushing of rock produces a product called crusher dust, which is collected and, along with sand, rock and emulsion, is used in the production of asphalt.

Refer to Figure 5 for an illustration of a typical sand and gravel processing plant.

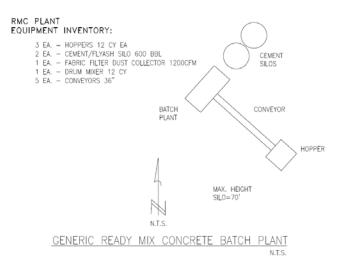


**Figure 5 - Typical Processing Plant** 

All materials are used in the production of marketable materials. There will be some material which will not be clean enough or of too large a quantity to be used. This material is by-product sand and will be placed back in the mine as fill material.

#### B. Ready Mixed Concrete Plant

The RMC plant will be used to combine sand, gravel, cement and water, and possibly some additives to produce concrete which will be used in paving and structures. A typical RMC plant include conveyors, aggregate storage hoppers, cement silo(s), water tanks and a batching mechanism. Please refer to Figure 6.



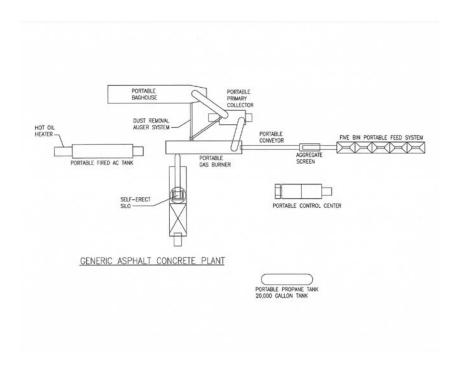
**Figure 6 - Typical Ready Mix Concrete Plant** 

# C. Asphalt Concrete Plant

An AC plant consists of the following components: a feeder bin, conveyor, drum dryer, stacker conveyor, storage silo for finished material, dust control devices ("bag house"), asphalt oil storage tanks, maintenance and control trailers, fuel storage tank(s), scale and scale controller shack.

Refer to Figure 7 for a schematic layout of the AC plant layout.

Rock products are loaded into the pre-determined feeder compartments within the feeder bin. A fixed amount of each rock product from the feeder bin (3/4", 1/2", 3/8", sand or crusher dust) is measured and dropped into a conveyor, which conveys the aggregate mix to the dryer drum. The dryer drum is equipped with a large burner at one end. The burning removes nearly all moisture from the rock and sand mixture as the mixture is conveyed towards the flame. Pre-heated asphalt oil is injected into the drum and mixed with the rock and sand, which is then elevated by the slat conveyor into a storage silo located directly above the truck scale. The weigh master in control of the scale and silo can fill each truck to street legal limits as they pass beneath the silo. The trucks then leave the plant for the jobsite.



**Figure 7 - Typical Asphalt Concrete Plant** 

#### D. Recycle Plant

DTM will accept inert material and recycle it to be used as construction quality materials. A recycle typically included a "breaker", a magnet, and a processing plant. The "breaker" will break the material so that metal can be easily extracted from the material. The magnet will separate the metal from the inert material. Then the processing plant will crush and separate the material by size and product.

#### E. Dozers and Loaders:

These are used in the excavation area. The dozer will also be used to push raw material from the compacted slope towards a waiting loader, which then scoops up the loosened material and transport the material to the crusher feeder.

# F. Loaders

An extra loader is often used to clean up around the crusher site and re-stockpile material which, at times, encroaches on another stockpile nearby. The added loader also serves to load trucks in the event a jobsite requires base material or other products straight from the stockpile. In addition, it serves as a back up in the event there is an equipment breakdown or malfunction with the other loader. High aggregate production may also require a second loader to feed raw material into the processing plant.

Finally, in the event the project is large, it is often possible for the raw material source to eventually be so far away from the feeder that the feeder must be moved closer to the raw material by adding another conveyor extension or adding another loader to the operation.

# G. Water Trucks

Water trucks are used for the following: dust control, watering the haul road and slopes.

# 7. Annual Water Usage and Water Source

#### A. Overview

Groundwater in this area is adjudicated and managed by the Mojave Basin Area Watermaster.

Water consumption could be estimated as high as 8,000 gallons per day. Using an average calendar year having approximately 300 working days, the annual water consumption can be estimated at 2,400,000 gal per year (= 7.37 ac-ft. per year).

Water will be pumped to the processing site through pipes. As an alternative, DTM can haul the water to the processing site by way of a 20,000-gallon water truck.

# B. Fresh Water

Drinking water shall be imported to the site. Bottle water shall be the source for fresh, potable water. All drinking, and hand washing water source will be this fresh water supply.

#### C. Wastewater

There is no waste water generated in this operation.

# 8. Power Usage and Power Source

Power lines provide power to the mine site. Fuel will be used in the burner of the future AC plant. Fuel type is controlled by the Mojave Desert Air Quality Management District and by equipment availability.

#### 9. Drainage, Erosion and Sedimentation Control

The climatic conditions (specifically the lack of rainfall, 2" to 5" annually), the mine design, the existing sloping topography, and the chosen mine location within the 38.43-acre subject property holdings, all combine to reduce erosion and the sediment erosion from the site.

Because product and by-product stockpiles tend to rise above the natural terrain, they have added exposure to wind. Water-spraying the stockpiles in times of heavy winds will control erosion and fugitive dust.

Reclamation and reseeding of the disturbed areas will also assist possible wind erosion affects within the limits of this project.

In addition to the above, excavation, stockpiles, and erosion control follow the mining plans enclosed within the Mining and Reclamation information package and shall be subject to the site's Storm Water Pollution Prevention Plan (SWPPP) required by Regional Water Quality Control Board.

Specifically, the following design criteria was implemented for erosion control and for drainage control.

- Set back from property lines of 25' and greater
- Finished slopes designed at 2:1
- Implementation of erosion control measures in accordance with the SWPPP.
- Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.
- Construction of protective berms (topsoil stockpile) on the outside of the excavation area.

# 10. Trucking and Traffic Routes

Anticipated truck trips the site at the highest production period for the facility is estimated at 20 trips daily (entering and leaving).

Routing of the trucking portion of the mine activity for the haul is both north or south on Fort Irwin Road. Trucks will deliver the product, then return to the mine. Fuel deliveries or emulsion deliveries are routed by the distributors of the products.

#### A. General Trucking

Class-2 Aggregate Base product, crushed rock and sand, fill materials and asphalt are hauled with material haul trucks, either legal doubles or single trailers pulled by tractors.

# B. <u>Employees and Supervision</u>

The Aggregate Screening and Crushing Plant requires at least 2 individuals to operate the plant and maintain the equipment. In the event none of these employees carpool together, 2 one-way trips to the site each operating day (4 trips per day with return trips) will result.

# 11. Interim Management Plan

Per the State of California Surface Mine and Reclamation Act (SMARA) Section 2770(h) an Interim Management Plan (IMP) is required for idle periods. An IMP will be submitted and approved by the County at a specific future date when and if idle status is triggered.

Simply stated, the interim plan will be in place during those periods when mining is not in operation, and is intended to maintain the site security by maintaining tortoise fences and "No Trespassing" signs and by maintenance of site drainage devices.

The intent of a Surface Mining Permit is for the production and availability of rock, sand, and gravel for the use and sale by DTM, and / or its successor(s). DTM requires varying quantities of rock products for the numerous construction projects in the desert region. DTM has a long-term vested interest in San Bernardino County, the subject site, and the proper management and reclamation of the property.

The Interim Management Plan will include the following:

- Notification will be sent to the Lead Agency of the start and ending of all idle periods.
- Annual inspections of the site will occur during idle periods.
- Dust Control will be maintained during the idle periods, which may include approved dust palliative applications over specific exposed areas within the mine area.
- Financial Assurance will be maintained.
- Mobile equipment will be removed from the site, except that which is required to maintain the site during idle periods.
- Product stockpiles will be removed or will be seeded to help control erosion and fugitive dust.

# 12. Public Safety

Throughout mining and reclamation processes of this mine, including idle periods in which the IMP applies, safety for the onsite work force and for the public will be an ongoing concern and process. The following measures have been planned for the protection of the public regarding this project:

- Tortoise fencing surrounds the property and "No Trespassing" signs along the property line at 400' o/c to minimize the off-road traffic and vehicles from entering the site.
- The tortoise fencing and signs shall also serve to keep trespassers and vehicles from entering the immediate mining and plant areas.
- Any materials considered hazardous or a danger to trespassers or the public shall be removed during "idle" mining/operation periods.

# IV. <u>RECLAMATION</u>

#### 1. <u>Current Land Use</u>

Currently the site is an operating mine under County Permit # 745/DSN/00010890/SAMR/01. Adjacent properties are predominantly undisturbed desert land. Specifically, the surrounding properties and uses are:

To the north is vacant open space, BLM lands. Further north is Fort Irwin.

To the east is vacant open space, BLM lands.

To the south is single family residence and vacant open space.

To the west are scattered single family residences and vacant open space.

The surrounding areas to the site are open space/vacant desert area with few residential homes (rural living).

# 2. Visibility

The mine site is currently permitted under County permit # 745/DSN/00010890/SAMR/01 and File Index # SMA1/DN431-489/518-181-13. The renewal of the existing permits presented in this report will not significantly change the viewshed of the mine site.

#### 3. Vegetation

Botanical surveys were conducted on May 6, 2001 and December 19, 2002 by Circle Mountain Biological Consultants for the R. Hove Fort Irwin Pit, formerly known as Gordon Lint Mine. Plant communities on the site were evaluated and quantitative baseline sampling were conducted for the 38.43-acre project area.

The native vegetation of the R. Hove Fort Irwin Pit can best be described as creosote bush-white bursage series, according to Sawyer's and Keeler-Wolfs (1995) classification system, or Mojave creosote bush scrub based on Holland's (1986) system. Dominant perennials include burro bush (*Ambrosia dumosa*), creosote bush (*Larrea tridentata*), senna (*Cassia armata*), and Mormon tea (*Ephedra californica*).

The site slopes moderately from north to south. Evidence of concentrated sheet flow in the form of several shallow gullies pass through the R. Hove Fort Irwin Pit, from north to south, but these do not support a separate plant community. A total of 18 perennial plant species and 40 annuals were found during surveys, indicating a relatively high level of diversity on the site. Of these, only seven were not native species.

Landscape plants were not included in this total. Although several California desert natives (Joshua tree, paloverde, mesquite) have been used in landscaping near the residences, athel (*Tamarix aphylla*), an exotic species of tamarisk (fortunately not an invasive type) is also present.

A supplemental baseline study was conducted on March 5, 2015 by RCA Associates, LLC. for the R. Hove Fort Irwin Pit to meet current requirements. Plant communities on the site were evaluated and quantitative baseline sampling were conducted for the 38.43-acre project area.

Perennials observed during the field March 5, 2015 investigations included burrow bush (*Ambrosia dumosa*), creosote bush (*Larrea tridentata*), ephedra (*Ephedra nevadensis*), cheesebush (*Hymencolea salsola*), senna (*Senna armata*), and lycium (*Lycium cooperi*). These perennials were observed along each of the 15 step-point transects and the data for each species is provided in the table below.

SPECIES	COVER (%)	DENSITY (Number per sq. meter)	SPECIES COMPOSITION	FREQUENCY
Burrow Bush (Ambosia dumosa)	39.8	1.2	44	44.9
Creosote Bush (Larrea tridentata)	22.8	1.3	7.9	8.1
Cheesebush (Hymenoclera salsola)	14.2	2.6	11.9	12.2
Senna (Senna armata)	5.9	2.9	11.7	11.8
Lycium (Lycium cooperi)	1.8	0.9	4.5	4.6
Ephedra (Ephedra nevadensis)	16.7	1.1	20	20.4

Source: Data from field investigations conducted on March 5, 2015.

Twenty-seven beavertail cactus (*Opuntia basilaris*) and three silver cholla (*O. echinocarpa*) plants were identified on the project site. Each plant was flagged and the GPS coordinates were recorded. These plants will be relocated in the manner outlined in the Revegetation and Monitoring Plan (Circle Mountain Biological Consultants, March 2003). The cactus plants will be collected in such a manner as to minimize stress to the plant, and will be transplanted to an area of the project site where the cactus will be protected from any disturbance. Once mining activities have been completed, the cacti will be transplanted back to their original locations.

# 4. Wildlife

Wildlife surveys were conducted on May 6, 2001 and December 19, 2002 by Circle Mountain Biological Consultants for the R. Hove Fort Irwin Pit, formerly known as Gordon Lint Mine. RCA Associates, LLC also performed focused surveys on October 17, 2013 for desert tortoise and burrowing owl.

A total of nine bird species, five reptiles, and five mammals was detected on the R. Hove Fort Irwin Pit and on zone-of-influence transects. A majority of the bird species is typically associated with human habitation or disturbance, including natives such as northern mockingbird, common raven, house finch, and mourning dove, and two non-native species, the house sparrow and European starling. Of the two remaining species, the verdin is a desert species usually associated with wash habitats and in this case utilizing the paloverde and mesquite in the landscaping, and the turkey vulture is a spring migrant. Reptiles found in the area are common Mojave species, including western whiptail, desert iguana, leopard lizard, and side-blotched lizards. Mammals detected were also common species of the California desert: coyote, black-tailed hares, Audubon cottontail, bobcat, and kangaroo rat species.

The site does support suitable habitat for the burrowing owl based on the field investigations conducted on October 17, 2013; however, no owls, owl sign or suitable burrows were observed. The species has been documented in the region and the nearest observation is about 6-miles west of the site (CNDDB, 2013). There is a low probability that the species will move on to the site in the future based on the absence of any suitable burrows within the area proposed for the mine expansion.

The site does not support prime suitable habitat for the desert tortoise based on past human activities; furthermore, no tortoises or tortoise sign (burrows, scats, carcasses, etc.) were observed on the site or in the zone of influence. The species has been documented in the region and tortoises were observed near the site in

2001 (Circle Mountain Biological Consultants, May 2001). Additional populations have been documented about one mile southwest of the site (CNDDB, 2013). There is a low probability that the species will move on to the site in the future; however, various measures specified in the Mining and Reclamation Plan (dated 2001 and amended August 17, 2012) will be implemented which will prevent tortoises from moving onto the site.

# 5. Reclamation and Reclamation Schedule

#### A. Reclamation

Reclamation shall follow mining once areas of the mine that are of substantial size are not subject to further disturbance. As mining limits are reached and slopes contoured to their final repose, revegetation will begin immediately. Reclamation is expected to conclude within 3 year of final mining, or 2047.

As the surface mining operation progresses and ultimate slope grades are achieved along with installation of appropriate erosion protection (slope walking-stabilizing, seeding etc.), revegetation of the slopes and the mine floor shall commence on an incremental basis. An effort will be made not to re-disturb reclaimed area of the mine, which has been reseeded during any prior reclamation periods.

Final reclamation shall be ongoing with respect to grading and shaping the mine area. Reseeding the area and spreading any remaining sand over the site, and applying the remaining vegetation from earlier clearing processes, shall be completed at the time of conclusion of the last mining operation (or within 12 months of the termination of the mining period, at the election of the operator).

Test plot areas for the reseeding program shall be located within the area of previous disturbance as shown on the reclamation plan. Test plots will allow observation of the revegetation program's effectiveness, whereby modifications can be made if necessary.

The Reclamation Objectives of the R. Hove Fort Irwin Pit are:

- To revegetated the site.
- To mitigate and reduce the visual impacts as a result of the changes of land form and revegetation.
- To mitigate runoff impacts and restore the flows of runoff storm waters to natural/existing conditions.

#### B. Reclamation Schedule

Mining operations will proceed as one phase, which consists of mining the southern 10.3-acre portion of the site to the full depth of 50 feet and will continue until the pit has been mined completely (approximately 2044).

The northern 4.2-acre portion of the disturbed area will be used for the aggregate processing, RMC plant, AC plant, Recycle plant, and for stockpiling material.

Reclamation will commence after all mining operations have completed. Completion of reclamation will occur within 3 years of completion of mining operation (approximately 2047).

Mining of the pit may be done at 2:1 slopes or may be mined vertically with 20' benches, at 40' horizontal spacings. This will help facilitate reaching the bottom of the pit quickly. As the pit nears the end of mining, the finish slopes will be mined at 2:1 slopes (horizontal: vertical). Over-excavation will be avoided and any over-excavation will be backfill at 2:1 slopes (horizontal: vertical). Any backfill will be un-engineered.

A 25-foot minimum setback shall be maintained along any and all property lines. The setback is planned for security and safety of the mine site, reclamation of the site, and to provide a significant mitigation from all possible erosion and head cutting concerns.

Berms composed of topsoil and overburden will be spread over the backfilled surface grade, slopes, and pit floors. This will facilitate in reclamation and vegetation. Seed mixes, recommended by the project biologist, will be spread to help the vegetation of the reclaimed land.

# 6. Revegetation

The following plant species seed palate will be used to revegetate the disturbed mine area.

#### Perennials

Ambosia dumosa (burro bush):	2.5 lbs./acre
Ephedra californica (desert tea):	2.0 lbs./acre
Larrea tridentata (creosote bush):	2.5 lbs./acre
Lycium cooperi (peach thorn):	2.0 lbs./acre
Senna armata (senna):	2.0 lbs./acre

# Annuals & Early Successsional Species

Hymenoclea salsola (cheesebush):	2.5 lbs./acre
Desert plantain (plantago ovata):	2.5 lbs./acre
Baileya multiradiata (desert marigold):	2.0 lbs./acre
Phacelia tanacetifolia (phacelia):	2.0 lbs./acre
Salvia columbariae (chia):	1.0 lbs./acre
Vulpia octoflora (fescue):	4.0 lbs./acre

TOTAL = 25 lbs./acre

Four test plots of 100 by 100 feet will be established in the winter months following completion of mining activities in the northern part of the site. Two plots will be established on sloped areas and two will be established on flat areas. One plot in each area will be planted using mining and construction equipment and one plot will be planted using a specialized imprinter. All of the plots will be monitored for seed germination success at 6 and 9 months intervals following seeding to determine which seeding technique will be used for the reclamation activities throughout the rest of the site.

Revegetation criteria prior to completion of a specific area of the mine, will be a field check of the slope area to determine stability to wind and storm water erosion. If determined that the area in question is not stable, or an event is witnessed which confirms that the area is not stable, "cat-walking" the slope with a dozer, or seeding the area, or both, may be implemented.

Following the mining of an area where slopes are deemed complete, reclamation efforts described herein will commence.

#### 7. Success Criteria

Success Criteria to be reviewed and revised by approved project biologist in accordance with San Bernardino County approved Conditions of Approval.

Cover	35% cover of native perennials per 50 meter x	
	1 meter transect.	
Density	6 native perennials per 50 meter x 1 meter	
	transect.	
Species Richness 3 species native perennials per 5 meters		
	meter transects.	
Fotal Cactus Plants (30)  Minimum 70 % survival rate (21 cacti plants)		

Once all restoration activities have been completed, monitoring will be carried out annually until the success criteria summarized above has been achieved regardless of the number of years required. Reclamation will be initiated and completed in 2044 and monitoring will begin in 2045.

# 8. <u>Cleanup, Wind-Down of Operations & Equipment Removal</u>

Upon completion of mining, aggregate screening, and crushing the operator will dismantle the sand and gravel processing plant and demobilize the equipment to another location for security, safety or for use on another project. When the plant is dismantled and shipped offsite, the entire crushing plant area is cleaned; all non-native materials are picked up and removed from the site.

The RMC plant, AC plant, recycle plant, mobile equipment (dozers, loaders, etc), and support equipment and structures (office, trailers) will follow a similar process for winding down, unless a CUP is applied for and approved prior to final reclamation.

Domestic garbage, scrap materials, construction debris, chemicals, oils, grease, etc. are collected and removed from the site on a periodic basis and when needed.

Domestic garbage is disposed by a contracted waste hauler or by the operator's forces at the County dump.

Scrap metals is removed by steel or metal salvagers.

Chemicals, oil, greases, etc. are a contracted waste and will be collected for disposal by a licensed hauler.

During reclamation, the well shall be abandoned pursuant to applicable regulations.

#### 9. Post-Reclamation and Future Mining

The reclaimed mine site will become Vacant Open Space.

The RMC plant, AC plant, recycle plant, mobile equipment (dozers, loaders, etc), and support equipment and structures (office, trailers) will be removed, unless a CUP is applied for and approved prior to final reclamation.

The projected completion of surface mining of the subject property is 30 years hence (2044).

After Reclamation, the entire site will not be completely mined out and the site will have the potential for future mining. A revised Mining Plan and Reclamation Plan will be submitted and approved by the County if future mining is desired.

#### 10. Slope and Slope Treatments

The primary erosion protection will consist of slope seeding and supplemental wattles, bails, and sand bagging.

# 11. Ponds, Reservoirs, Tailings, and Waste

During reclamation, and after sand and gravel processing, any settling ponds will be filled and covered with by-product sand and seeded.

# 12. Soils and Fine Textured Waste

Overburden and topsoil will be cleared and used to create berms along the property boundary to control storm water drainage. Once mining has completed, the overburden and topsoil will be spread on the slopes and pit floor to promote revegetation.

# 13. Drainage and Erosion Controls

The climatic conditions (specifically the lack of rainfall, 2" to 5" annually), the mine design, the existing sloping topography, and the chosen mine location within the 38.43-acre subject property holdings, all combine to reduce erosion and the sediment erosion from the site.

Reclamation and reseeding of the disturbed areas will assist possible wind erosion affects within the limits of this project.

In addition to the above, erosion control follow the mining plans enclosed within the Mining and Reclamation information package and shall be subject to the site's Storm Water Pollution Prevention Plan (SWPPP) required by Regional Water Quality Control Board.

Specifically, the following design criteria was implemented for erosion control and for drainage control.

- Set back from property lines of 25' and greater
- Finished slopes designed at 2:1
- Install energy dissipation devices if deemed necessary
- Implementation of erosion control measures in accordance with the SWPPP.
- Excavation (mining) area is outside of wash and area(s) determined to be subject to high storm water drainage patterns.
- Slopes are to be stabilized, if needed, by walking the unstabilized area with a dozer "cat-walk" to create
  compaction, and at the same time creating seed traps or "pockets" to hold seed and help promote plant
  re-establishment.

# 14. Public Safety

Throughout mining and reclamation processes of this mine, including idle periods in which the IMP applies, safety for the onsite work force and for the public will be an ongoing concern and process. The following measures have been planned for the protection of the public regarding this project:

- Tortoise fencing surrounds the property and "No Trespassing" signs along the property line at 400' o/c to minimize the off-road traffic and vehicles from entering the site.
- The tortoise fencing and signs shall also serve to keep trespassers and vehicles from entering the immediate mining and plant areas.

• Any materials considered hazardous or a danger to trespassers or the public shall be removed.

# 15. Monitoring and Maintenance

The operator will provide onsite review, during the years the site is in operation, of the following:

- Storm Water Pollution Prevention Plan per the NPDES plan required by State and Federal rules. Erosion control will be reviewed and addressed within the NPDES (SWPPP) permit and plans.
- Dust and Air Pollution.
- Noise.
- Trucking Operations.
- Test plot areas, to determine the success rate of the planned seed mix for reclamation.
- Revegetation of the mine area following operations. The mine floor and slopes which are scheduled for the initial seeding treatment shall be monitored for success rate per the goals established for the seed mix versus the natural vegetation and density of the area.
- During "idle" periods when the mine has temporarily stopped operations, the site shall be monitored in conformance with the "Interim Management Plan" (see page 15).
- Following the Reclamation of the site for the next five years, the site shall be monitored by the operator for success of reclamation and revegetation as well as for its maintenance. This monitoring shall be conducted by the operator, and also, by the independent monitoring (inspection) of the Lead Agency.

# 16. Reclamation Assurance

Per SMARA and as approved by the County Planning Department, a Reclamation Bond shall be posted and the original bond, for an approved amount, shall be held by the County of San Bernardino. The State of California shall also be named on the financial assurance instrument.

To estimate the reclamation costs, please note the enclosed cost breakdown summary located within the appendix.

The cost estimates for reclamation are the respective cost to reclaim the existing site, as it presently exists. Upon the commencement of mining operations, the reclamation assurances estimate shall be revised to account for expanded limits and area.

# **EXHIBIT E**

Habitat Assessment & Focused Burrowing Owl Survey, November 6, 2013

# HABITAT ASSESSMENT & FOCUSED BURROWING OWL SURVEY

# R. HOVE FT. IRWIN PIT P201100278 MINING CUP AP20120011

# SAN BERNARDINO COUNTY, CALIFORNIA

(USGS Lane Mountain, CA Quad., Township 12 North, Range 2 East, Section 16)

Owner/Applicant

Daily Transit Mix, LLC 1771 Bear Valley Road Hesperia, CA 92345 (760) 244-9325

# Prepared by:

RCA Associates, LLC
15555 Main Street, #D4-235
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Project No: RCA#2013-66B

November 6, 2013

# **Table of Contents**

Secti	ion	Page
Exec	cutive Summary	1
1.0	Project and Property Description	2
2.0	Literature/Record Review - Burrowing Owl	7
3.0	Methodology	8
4.0	General Biological Survey Results	9
5.0	Results – Burrowing Owl	11
6.0	Impacts and Recommendations	12
7.0	Proposed Mitigation Measures	13
8.0	References	14
List	of Tables	
	Burrowing Owl Occurrences	
List	of Figures	
	Vicinity Map	
Site 2	Photographs	
Appe	endix A – Flora and Fauna Compendia	
Certi	fication	

#### EXECUTIVE SUMMARY

The project proponent is proposing to expand an existing mine located about 0.9-miles east of Ft. Irwin Road and Paradise Road intersection in Section 16, Township 12 North, Range 2 East in San Bernardino County. An existing mine is currently located in the northeastern portion of the site as shown on Figure 1. The total area surveyed for burrowing owls encompasses an area of about 28-acres plus the ZOI (Figures 1 and 2). Vegetation within the 28-acre area has been disturbed by various past activities (Figure 3). Vegetation consisted of a desert scrub community dominated by creosote bush (*Larrea tridentata*), ephedra (*Ephedra nevadensis*), and burrobush (*Franseria dumosa*).

The property is located within the known distribution of the burrowing owl; therefore, focused surveys were performed for the species on October 17, 2013 from approximately 0730 to 1430 hours in conjunction with the tortoise surveys. Surveys were also conducted in the zone of influence, where possible, as per survey protocol. The burrowing owl survey was performed by Randall Arnold (Senior Biologist) and Ryan Mann (Senior Biologist) using the standard survey protocol for the species (i.e., 30-meter belt transects) as required by California Department of Fish and Wildlife (CDFW).

The site does support suitable habitat for the burrowing owl based on the field investigations conducted on October 17, 2013; however, no owls, owl sign or suitable burrows were observed. The species has been documented in the region and the nearest observation is about 6-miles west of the site (CNDDB, 2013). There is a low probability that the species will move on to the site in the future based on the absence of any suitable burrows within the area proposed for the mine expansion.

Note: If burrowing owls are observed on the site in the future, the owls should not be removed, harassed, or in any way disturbed regardless of the results of this survey. To do so may constitute a violation of State and County regulations. If owls are encountered during future development activities, all activities should cease and California Department of Fish and Wildlife (CDFW) and San Bernardino County should be notified.

#### 1.0 PROJECT AND PROPERTY DESCRIPTION

The property is about 40-acres in size and an existing mine is located in the northeast portion of the site; however, the proposed mine expansion will cover an area of approximately 28-acres south and west of the existing pit (Figures 1 and 2). Much of the 28-acre area shows some signs of past disturbance associated with installation of water lines, placement of existing mobile homes, and other activities (Figures 3 and 4). Various structures and buildings are located adjacent to the existing mine and various mobile homes, and other outbuildings are also located within the 28-acre area (Figure 4).

The parcel is located about 0.9-miles east of the intersection of Ft. Irwin Road and Paradise View Road in San Bernardino County (Township 12 North, Range 2 East, Section 16). Elevations of the site range from 2,120 and 2,160 feet (MSL). Soils have been disturbed in the past; however, they appear to be primarily sandy loam. No water resources were observed on the site and the USGS Paradise Range Quadrangle (1986) does not show any blueline channels on the site. No sensitive wildlife habitats, sensitive wildlife species, or wildlife corridors were associated with the site. Weather conditions during the October 17, 2013 survey consisted of winds of 0 to 5 mph, temperatures in the low 50's (AM) to low 80's (PM, °F) with clear skies.

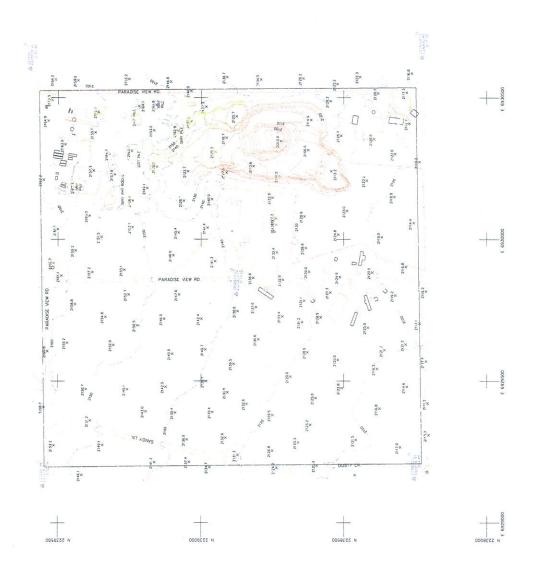
The site is bordered on the north and east by lands managed by the U.S. Bureau of Land Management (BLM) and by vacant lands to the south and west (Figures 4). Single-family dwellings are also located at the southeast and southwest corners of the property (Figure 4). The site supports a desert scrub community typical of the area dominated by creosote bush (Larrea tridentata), ephedra (Ephedra nevadensis), and burrobush (Franseria dumosa). Annuals consisted of erodium (Erodium texanum), schismus (Schismus barbatus), buckwheat (Eriogonum fasciculatum) and brome grass (Bromus sp.). Section 4.0 provides a more detailed discussion of the biological resources. The site map is provided below (Figure 1), and the USGS quadrangle map is provided in Figure 2. Figure 3 provides photographs of the site.

N 2239500

N 2239500

N 2239500

N 2239500



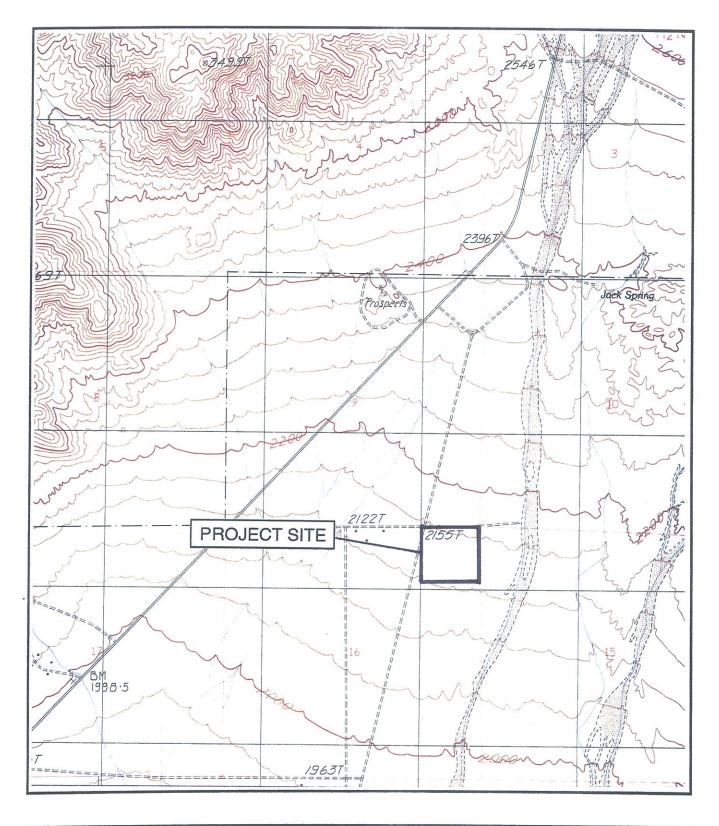
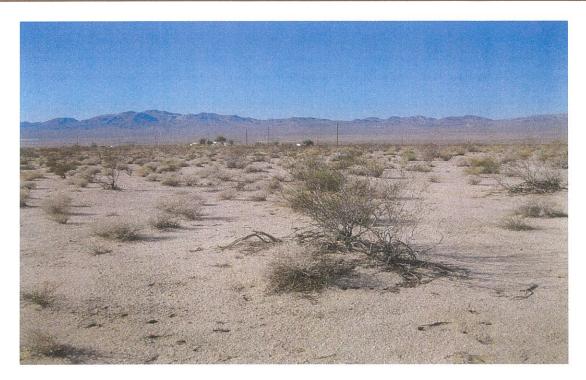
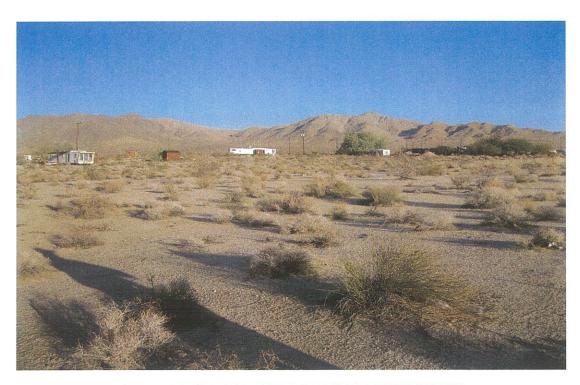


FIGURE 2
PROPERTY LOCATION
R. HOVE FT. IRWIN PIT
(Source: USGS Paradise Range, CA Quad., 1986)





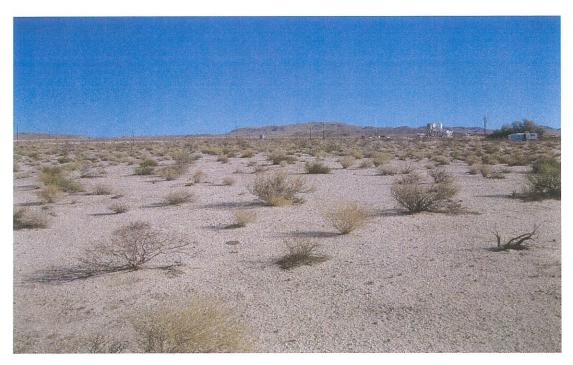
NORTHEAST CORNER LOOKING SOUTHWEST



SOUTHEAST CORNER LOOKING NORTHWEST

FIGURE 3 SITE PHOTOGRAPHS (R. HOVE FT. IRWIN PIT)

5



SOUTHWEST CORNER LOOKING NORTHEAST



NORTHWEST CORNER LOOKING SOUTHEAST

FIGURE 3, cont. SITE PHOTOGRAPHS (R. HOVE FT. IRWIN PIT)

6

#### 2.0 LITERATURE/RECORD REVIEW - BURROWING OWL

As part of the environmental process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed prior to initiation of field surveys to determine if burrowing owls have been documented on the site or in the area surrounding the property. Based on the literature review and evaluation of the CNDDB database for the area, it was determined that the site is located within the general distribution of the burrowing owl. However, populations of owls have not been identified in the immediate surrounding area according to CNDDB (2013). The nearest documented owl populations (in 1989) are about six miles west of the site (Occurrence #25) according to CNDDB (2013).

The burrowing owl is a year-long resident of open, dry grassland and desert habitats. The species was formerly common throughout central and southern California; however, the species has seen a significant reduction over the last few decades due to development activities; farming activities, predation by dogs and cats, and habitat destruction (Zeiner 1990). Conversions of grassland and desert habitats to agricultural fields and residential developments have contributed to the greatest amount of habitat destruction in recent decades. The reduction in population levels was noted as early as the 1940s. Burrowing owls primarily prey upon insects; although, small mammals, lizards, birds, and carrion make up a portion of the owl's diet (Zeiner 1990). Burrowing owls typically utilize abandoned rodent burrows for roosting and nesting.

#### 3.0 METHODOLOGY

A Phase I survey was conducted for burrowing owls by Randall Arnold on October 17, 2013 to determine if suitable habitat was present on the site. Burrowing owls are typically found in a wide variety of habitats including desert scrub communities, disturbed grasslands, and agricultural areas. Therefore, a Phase II survey was conducted to determine if any owls or occupiable burrows were present on the site. As required by survey protocol, 30 meter, parallel belt transects were walked in a north-south direction until the property had been checked for owls and/or owl sign (burrows, tracks, scats, etc.). The survey protocol also requires that zone of influence (ZOI) surveys be conducted in the surrounding area out to a distance of 500-feet; therefore, ZOI surveys were performed to the east, west, south, and north where possible. All transects were walked at a pace that allowed careful observations along the transect routes and in the immediate vicinity. Field notes were recorded regarding native plant assemblages, wildlife sign, and human affects in order to determine the presence or absence of suitable owl habitat. Owl surveys were performed on the site from about 0730 to about 1430 hours in conjunction with the focused surveys performed for the desert tortoise.

Phase I and Phase II surveys combined with identification of the habitat on the site and in the surrounding area will provide data on the potential presence or absence of burrowing owls. Temperatures during the October survey were in the low 50's (AM) to low 80's (PM) (°F), wind speeds of about 0 to 5 mph, and clear skies. No precipitation was recorded during the survey.

#### Limitations:

The results of this report do not constitute authorization for the "take" of burrowing owls or any other listed or sensitive wildlife species. The authorization to impact the burrowing owl can only be granted by CDFW. If owls are observed during future project activities, project activities should cease immediately and CDFW and San Bernardino County should be contacted to discuss mitigation measures which may be required for the species.

#### 4.0 GENERAL BIOLOGICAL SURVEY RESULTS

The property has been disturbed by past activities, and currently supports a disturbed desert scrub community (Figure 4). Native shrubs noted during the field investigations included crossote bush (*Larrea tridentata*), ephedra (*Ephedra nevadensis*), and burobush (*Franseria dumosa*) (Figure 3). Other perennials observed included yellow-green matchweed shrubs (*Gutierrezia sarothrae*), Russian thistle (*Salsola tragus*), and buckwheat (*Eriogionum fasciculatum*). Annuals were composed primarily of erodium (*Erodium texanum*), schismus (*Schismus barbatus*), and bromus grass (*Bromus sp.*). Table 1 provides a compendium of plants observed on the property (Appendix A).

Only a few wildlife species were identified during the field investigations conducted on October 17, 20123 from 0730 to 1430 hours. Birds observed were limited to mourning doves (Zenaida macroura), ravens (Corvus corax), and song sparrows (Melospiza melodia). A few side-blotched lizards (Uta stansburiana) were observed and western whiptail lizards (Cnemidophorus tigris) are relatively common in the area and may occur on the property. Jackrabbits (Lepus californicus) were seen during the surveys and other mammals known to occur in the area include antelope ground squirrels (Ammospermophilus leucurus), desert cottontail rabbits (Sylvilagus auduboni), and Merriam's kangaroo rats (Dipodomys merriami). No wildlife corridors were identified on the site or in the immediate surrounding area, and no breeding activities were observed among any of the wildlife species identified. Table 2 (Appendix A) provides a compendium of wildlife species observed on the site and other species known to occur in the region.



FIGURE 4 BIOLOGICAL RESOURCES MAP (R. HOVE FT. IRWIN PIT)

# 5.0 RESULTS – BURROWING OWL

The site supports marginal habitat for burrowing owls based on the results of the Phase I surveys. However, the Phase II survey did not identify any owls or occupiable burrows within the boundaries of the proposed mine expansion area. Therefore, no Phase III surveys (i.e., owl surveys, census, and mapping) were conducted as per the survey protocol outlined in the "Burrowing Owl Survey Protocol and Mitigation Guidelines" (Staff Report on Burrowing Owl Mitigation, March 7, 2012) based on the results of the owl surveys conducted on October 17, 2013.

# 6.0 IMPACTS AND RECOMMENDATIONS

Expansion of the existing mine into the 28-acre area is not expected to have any direct or indirect impacts on burrowing owls or occupied habitat based on the results of the Phase I and Phase II surveys conducted on October 17, 2013. No additional investigations are recommended at this time; however, CDFW and the County will require the proponent to conduct a 30-day pre-construction survey immediately prior to the start of excavation activities. This survey will be required to determine if any owls have moved onto the site since the October 2013 surveys.

# 7.0 PROPOSED MITIGATION MEASURES

The site does not support any burrowing owls at the present time. However, if owls or any other sensitive species are observed on the site during future construction activities, CDFW and the County should be contacted to discuss mitigations which may be required. CDFW is the only agency which can grant authorization for the "take" of any sensitive species, including the burrowing owl.

#### 8.0 REFERENCES

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# **TABLES**

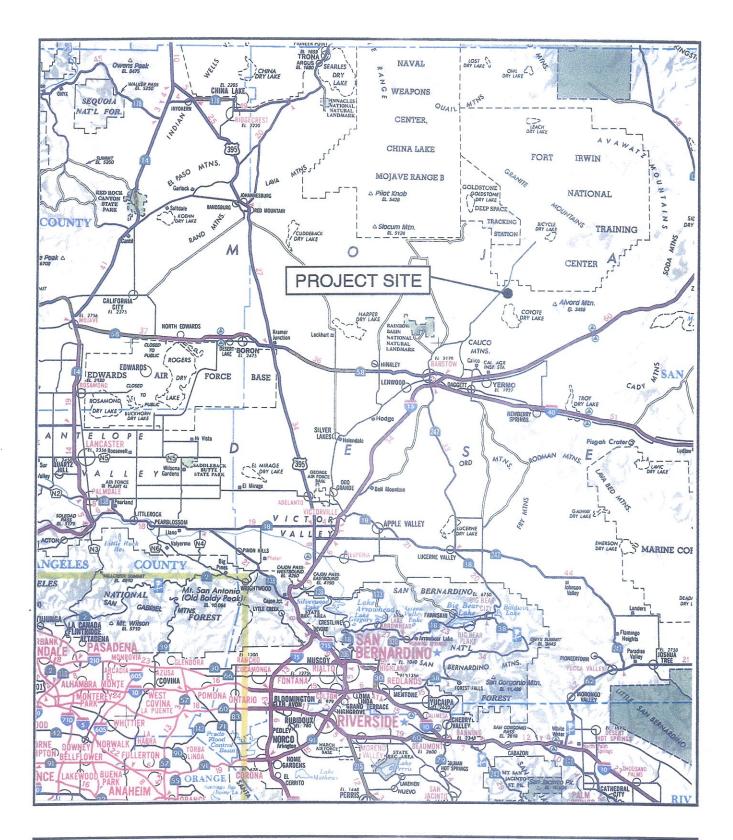
**Burrowing Owl Occurrences** 

# Burrowing Owl occurrences within about 6-miles of the site based on California Diversity Data Base (2013). (SC = Species of special concern)

Name	Listing Status	Habitat	Presence/Absence	Comments
		Requirements		
Burrowing owl (Athene cuniculuria)	CDFW: SC	Various: desert scrub, agricultural lands, disturbed areas	Site support very marginal habitat.	Occurrence #25 (1989), six miles west of project site.

**FIGURES** 

Vicinity Map

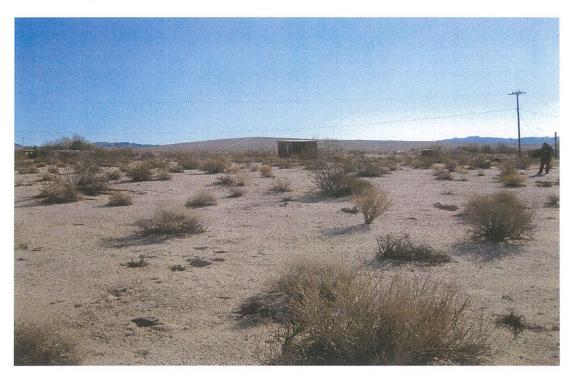


#### **VICINITY MAP**

R. HOVE FT. IRWIN PIT (Source: USGS Paradise Range, CA Quad., 1986)



SITE PHOTOGRAPHS

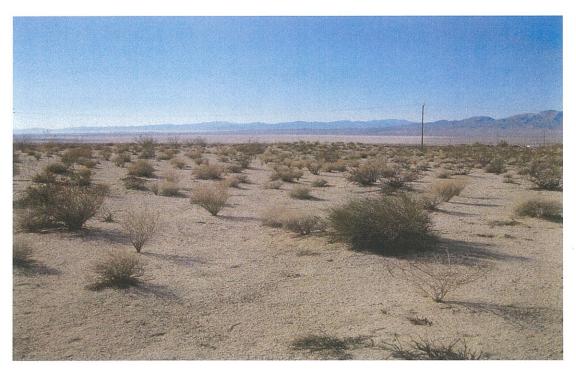


CENTER OF SITE LOOKING EAST

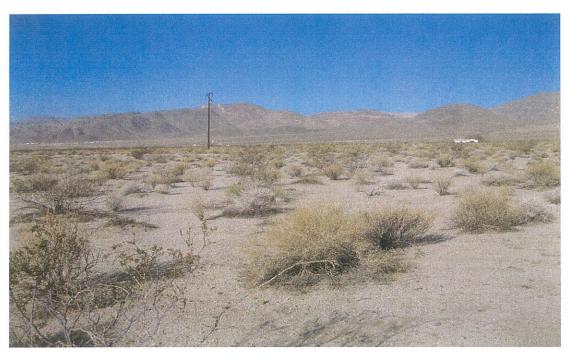


CENTER OF SITE LOOKING NORTH

SITE PHOTOGRAPHS (R. HOVE FT. IRWIN PIT)



CENTER OF SITE LOOKING SOUTH



CENTER OF SITE LOOKING WEST

SITE PHOTOGRAPHS (R. HOVE FT. IRWIN PIT)

### APPENDIX A

Flora and Fauna Compendia

Table 1 - Plants observed on the site and in zone of influence (ZOI).

Common Name	Scientific Name	Location	
Erodium	Erodium texanum	On-site & ZOI.	
Schismus	Schismus barbatus		
Buckwheat	E. fasciculatum	<b>د</b> د	
Brome grass	Bromus sp.	66	
Fiddleneck	Amsinckia tessellate	<b>دد</b>	
Rabbitbrush	Chrysothamnus depressus	44	
Saltbush	Atriplex canescens	66	
Creosote bush	Larrea tridentate	44	
Yellow-matchweed	Gutierrezia sarothrae	<u>دد</u>	
Russian thistle	Salsola tragus	cc	
Ephedra	Ephedra nevadensis	44	
Burrobush	Franseria dumosa	cc	
Deciduous trees & shrubs	?	Near mobile home	
		dwellings.	

Table 2 - Wildlife observed on the site and those species expected to occur in ZOI.

Common Name	Scientific Name	Location
Common raven	Corvus corax	Observed on-site
Song sparrow	Melospiza melodia	cc
Morning dove	Zenaida macroura	26
Western kingbird	Tyrannus verticalis	Observed in ZOI
Western whiptail lizard	Cnemidophorus tigris	May occur on site
Side-blotched lizard	Uta stansburiana	Observed on-site and ZOI.
Antelope ground squirrel	Ammospermophilus	Known to occur in ZOI.
	leucurus	
Desert spiny lizard	Sceloporus magister	cc
California ground squirrel	Spermophilus beecheyi	C¢.
Coyote	Canis latrans	٠,
Merriam's kangaroo rat	Dipodomys mohavensis	cc

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, LLC, or which are common species in the region.

#### **CERTIFICATION**

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by me and/or other biologists under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: /	1/-	6-2013	Signed: and M. And	
			Report Author	

Field Work Performed By:	Randall Arnold	
	Senior Biologist	

Field Work Performed By: _	Ryan Mann	
	Senior Biologist	

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Focused Desert Tortoise Survey, November 5, 2013

# FOCUSED DESERT TORTOISE SURVEY

# R. HOVE FT. IRWIN PIT

# CONDITIONAL USE PERMIT P201100278 MINING CUP AP20120011

## SAN BERNARDINO COUNTY, CALIFORNIA

(USGS Lane Mountain, CA Quad. Township 12 North, Range 2 East, Section 16)

Owner/Applicant

Daily Transit Mix, LLC 1771 Bear Valley Road Hesperia, CA 92345 (760) 244-9325

RCA Associates, LLC 15555 Main Street, #D4-235 Hesperia, California 92345 Principal Investigators Randall C. Arnold, Jr. Ryan Mann (760) 956-9212

Report prepared by: Randall Arnold (760) 956-9212

Project No: RCA#2013-66A

November 5, 2013

#### **Table of Contents**

Section	Page	
Execut	tive Summary	1
1.0	Project and Property Description	2
2.0	Literature and Records Review – Desert tortoise	7
3.0	Methodology	8
4.0	General Biological Survey Results	9
5.0	Results – Desert Tortoise	11
6.0	Impacts and Recommendations	12
7.0	Proposed Mitigation Measures	13
8.0	References	14

Tables: Desert Tortoise Populations in Surrounding Region (CNDDB, 2013)

Figures: Vicinity Map

Site Photographs
Appendix A – Flora and Fauna Compendia
Certification for Desert Tortoise

#### **EXECUTIVE SUMMARY**

The project proponent is proposing to expand an existing mine located about 0.9-miles east of Ft. Irwin Road and Paradise Road intersection in Section 16, Township 12 North, Range 2 East in San Bernardino County. An existing mine is currently located in the northeastern portion of the site as shown on Figure 1. The total area surveyed for desert tortoises encompasses an area of about 28-acres (Figures 1 and 2). Vegetation within the 28-acre area has been disturbed by various past activities (Figure 3). Vegetation consisted of a desert scrub community dominated by creosote bush (*Larrea tridentata*), ephedra (*Ephedra nevadensis*), and burrobush (*Franseria dumosa*).

The property is located within the known distribution of the desert tortoise; therefore, focused surveys were performed for the species on October 17, 2013 from approximately 0730 to 1430 hours. Surveys were also conducted in the zone of influence, where possible, as per survey protocol. The tortoise survey was performed by Randall Arnold (Senior Biologist) and Ryan Mann (Senior Biologist) using the standard survey protocol for the species (i.e., 10-meter belt transects) as required by California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS).

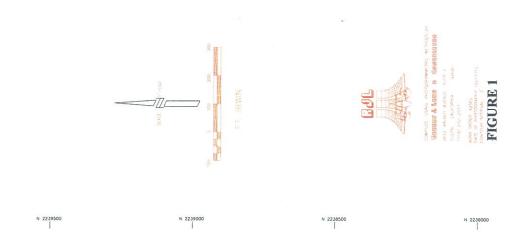
The site does not support prime suitable habitat for the desert tortoise based on past human activities; furthermore, no tortoises or tortoise sign (burrows, scats, carcasses, etc.) were observed on the site or in the zone of influence. The species has been documented in the region and tortoises were observed near the site in 2001 (Circle Mountain Biological Consultants, May 2001). Additional populations have been documented about one mile southwest of the site (CNDDB, 2013). There is a low probability that the species will move on to the site in the future; however, various measures specified in the Mining and Reclamation Plan (August 17, 2012) will be implemented which will prevent tortoises from moving onto the site.

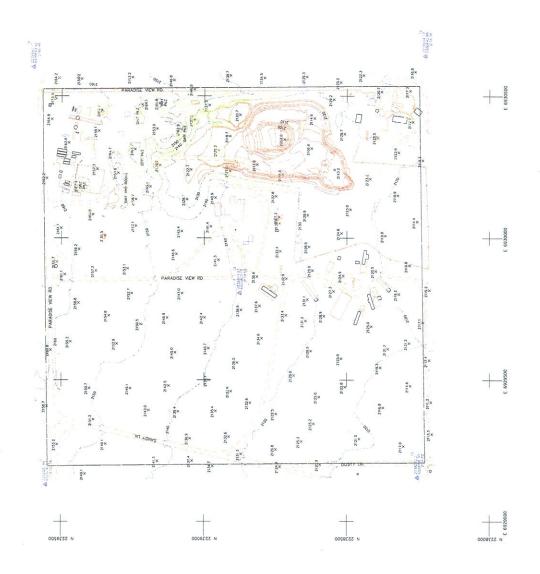
#### 1.0 PROJECT AND PROPERTY DESCRIPTION

The property is about 40-acres in size and an existing mine is located in the northeast portion of the site; however, the proposed mine expansion will cover an area of approximately 28-acres south and west of the existing pit (Figures 1 and 2). Much of the 28-acre area shows some signs of past disturbance associated with installation of water lines, placement of existing mobile homes, and other activities (Figures 3 and 4). Various structures and buildings are located adjacent to the existing mine and various mobile homes, and other outbuildings are also located within the 28-acre area (Figure 4).

The parcel is located about 0.9-miles east of the intersection of Ft. Irwin Road and Paradise View Road in San Bernardino County (Township 12 North, Range 2 East, Section 16). Elevations of the site range from 2,120 and 2,160 feet (MSL). Soils have been disturbed in the past; however, they appear to be primarily sandy loam. No water resources were observed on the site and the USGS Paradise Range Quadrangle (1986) does not show any blueline channels on the site. No sensitive wildlife habitats, sensitive wildlife species, or wildlife corridors were associated with the site. Weather conditions during the October 17, 2013 survey consisted of winds of 0 to 5 mph, temperatures in the low 50's (AM) to low 80's (PM, °F) with clear skies.

The site is bordered on the north and east by lands managed by the U.S. Bureau of Land Management (BLM) and by vacant lands to the south and west (Figures 4). Single-family dwellings are also located at the southeast and southwest corners of the property (Figure 4). The site supports a desert scrub community typical of the area dominated by creosote bush (Larrea tridentata), ephedra (Ephedra nevadensis), and burrobush (Franseria dumosa). Annuals consisted of erodium (Erodium texanum), schismus (Schismus barbatus), buckwheat (Eriogonum fasciculatum) and brome grass (Bromus sp.). Section 4.0 provides a more detailed discussion of the biological resources. The site map is provided below (Figure 1), and the USGS quadrangle map is provided in Figure 2. Figure 3 provides photographs of the site.





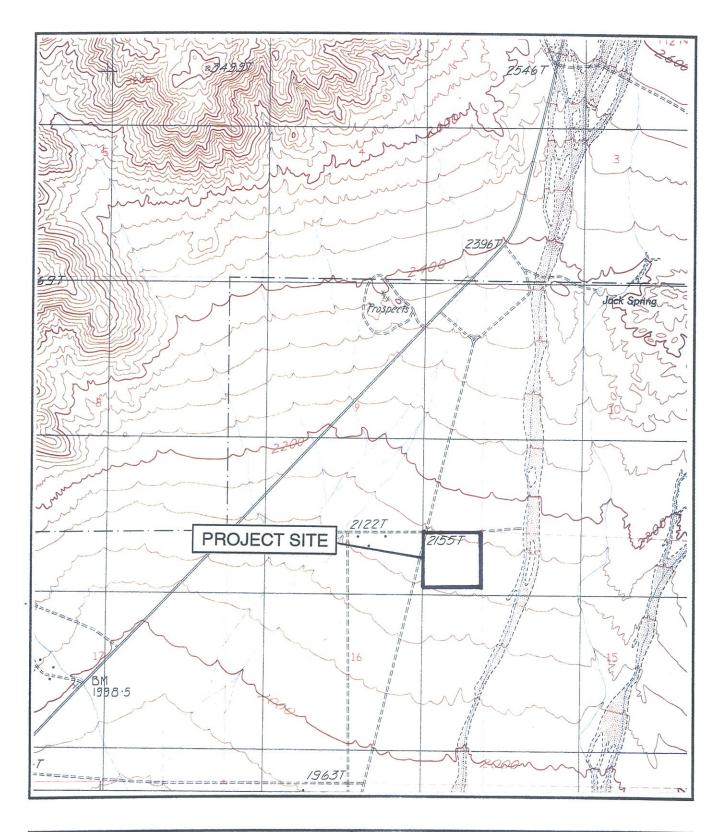
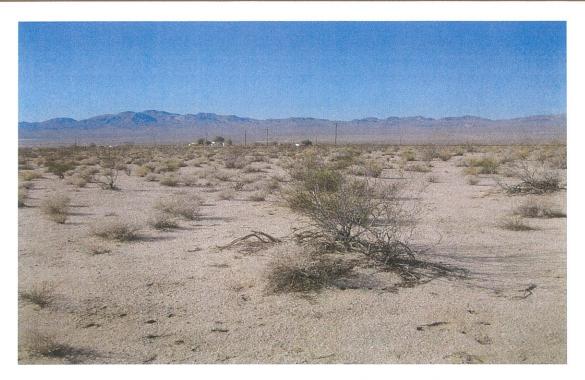
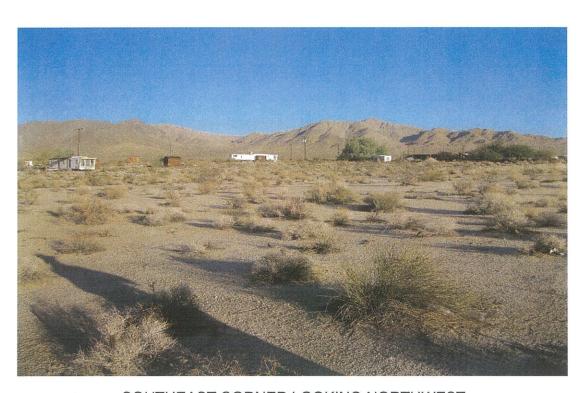


FIGURE 2
PROPERTY LOCATION
R. HOVE FT. IRWIN PIT
(Source: USGS Paradise Range, CA Quad., 1986)





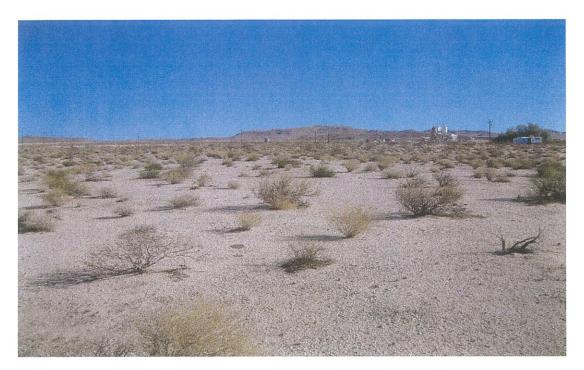
NORTHEAST CORNER LOOKING SOUTHWEST



SOUTHEAST CORNER LOOKING NORTHWEST

FIGURE 3 SITE PHOTOGRAPHS (R. HOVE FT. IRWIN PIT)

5



SOUTHWEST CORNER LOOKING NORTHEAST



NORTHWEST CORNER LOOKING SOUTHEAST

FIGURE 3, cont. SITE PHOTOGRAPHS (R. HOVE FT. IRWIN PIT)

6

#### 2.0 LITERATURE AND RECORDS REVIEW - DESERT TORTOISE

As part of the environmental process, California Department of Fish and Wild (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed prior to initiation of field surveys to determine if the tortoises have been documented on the site or in the area surrounding the property. Based on the literature review and evaluation of the CNDDB database for the Paradise Range quadrangle, it was determined that the site is located within the general distribution of the desert tortoise. Populations of desert tortoises have been identified within about one mile of the site according to CNDDB 2013). Other populations have been documented in several other locations within about six miles of the property CNDDB (2013). Tortoise population levels in the immediate area surrounding the site are low to moderate (BLM, 1990).

There are no USFWS designated critical habitats for the tortoise in the immediate area nor is there any proposed critical habitat in the area. The protocol survey results outlined in this report are valid for one year as per CDFW and USFWS requirements, and an additional survey may be required if the 12-month time limit is exceeded before mitigation measures are implemented as per the Mining and Reclamation Plan (August 17, 2012). No tortoises or tortoise sign (e.g., scats, burrows, etc.) were indentified during the October 17, 2013 surveys; however, regardless of the results of the tortoise survey, desert tortoises cannot be taken under State and Federal law. The survey report and any mitigation measures included do not constitute authorization for incidental take of the desert tortoise. If tortoises are observed during future site activities, all on-site activities should cease immediately and CDFW and USFWS should be contacted.

The desert tortoise is the largest reptile in the arid southwest United States, and it historically occupied a range that included a variety of desert communities in southeastern California, southern Nevada, western and southern Arizona, southwestern Utah, and through Sonora and northern Sinoloa, Mexico (Luckenbach, 1982). Today populations are largely fragmented and studies indicate a steady and dramatic decline over most of its former range (BLM, 1988). A highly contagious respiratory disease has infected tortoise populations over the last 20+ years, primarily in the western Mojave Desert region, which has had a very detrimental impact on population levels. Given the continued habitat loss and the rapid decline in numbers of tortoises brought about by the disease, the U.S. Fish and Wildlife Service exercised its emergency authority and determined tortoise populations north and west of the Colorado River to be an endangered species under the Endangered Species Act of 1973, as amended (USFES, 1989). The emergency rule was published in the Federal Register on August 4, 1989, and remained in effect until April 1, 1990. On April 2, 1990, the U.S. Fish and Wildlife Service officially listed the desert tortoise as a threatened species under the Endangered Species Act of 1973, as amended.

#### 3.0 METHODOLOGY

The site was surveyed for desert tortoises by Randall Arnold and Ryan Mann on October 17, 2013 and as required by the CDFW and USFWS survey protocol, 10 meter, parallel belt transects were walked in a north-south direction until the property had been checked for tortoises and/or tortoise sign (burrows, tracks, scats, etc.). Surveys in the zone of influence (ZOI) were also conducted in the surrounding area, where possible, as per survey protocol. All transects were walked at a pace that allowed careful observations along the transect routes and in the immediate vicinity. Field notes were recorded regarding native plant assemblages, wildlife sign, and human affects in order to determine the presence or absence of suitable tortoise foraging habitat. Surveys were performed on the site and in the surrounding area from about 0730 to about 1430 hours.

USFWS and CDFW specify when surveys for tortoises can be conducted (i.e., April through May and September through October); therefore, surveys were performed on October 17, 2013. Comprehensive surveys combined with identification of the habitat on the site and in the surrounding area will provide data on the potential presence or absence of tortoises. Temperatures during the October survey were in the low 50's (AM) to low 80's (AM, °F) with wind speeds of about 0 to 5 mph (mainly from the north). Skies were clear during the survey and no precipitation was recorded during the survey.

#### Limitations:

- (1) This report is valid for 12 months from the date of the survey as per CDFW and USFWS requirements. An updated report will be required if project activities do not occur within the next 12-month period as per CDFW and USFWS requirements.
- (2) The results of this report do not constitute authorization for the "take" of the desert tortoise or any other listed or sensitive wildlife species. The authorization to impact the tortoise can only be granted by CDFW and USFWS. If desert tortoises are observed during future project activities, project activities should cease immediately and CDFW and USFWS should be contacted to discuss mitigation measures which may be required for the desert tortoise.

#### 4.0 GENERAL BIOLOGICAL SURVEY RESULTS

The property has been disturbed by past activities, and currently supports a disturbed desert scrub community (Figure 4). Native shrubs noted during the field investigations included creosote bush (*Larrea tridentata*), ephedra (*Ephedra nevadensis*), and burobush (*Franseria dumosa*) (Figure 3). Other perennials observed included yellow-green matchweed shrubs (*Gutierrezia sarothrae*), Russian thistle (*Salsola tragus*), and buckwheat (*Eriogionum fasciculatum*). Annuals were composed primarily of erodium (*Erodium texanum*), schismus (*Schismus barbatus*), and bromus grass (*Bromus* sp.). Table 1 provides a compendium of plants observed on the property (Appendix A).

Only a few wildlife species were identified during the field investigations conducted on October 17, 20123 from 0730 to 1430 hours. Birds observed were limited to mourning doves (Zenaida macroura), ravens (Corvus corax), and song sparrow (Melospiza melodia). A few side-blotched lizards (Uta stansburiana) were observed and western whiptail lizards (Cnemidophorus tigris) are relatively common in the area and may occur on the property. Jackrabbits (Lepus californicus) were seen during the surveys and other mammals known to occur in the area include antelope ground squirrels (Ammospermophilus leucurus), desert cottontail rabbits (Sylvilagus auduboni), and Merriam's kangaroo rats (Dipodomys merriami). No wildlife corridors were identified on the site or in the immediate surrounding area, and no breeding activities were observed among any of the wildlife species observed. Table 2 (Appendix A) provides a compendium of wildlife species observed on the site and other species known to occur in the region.

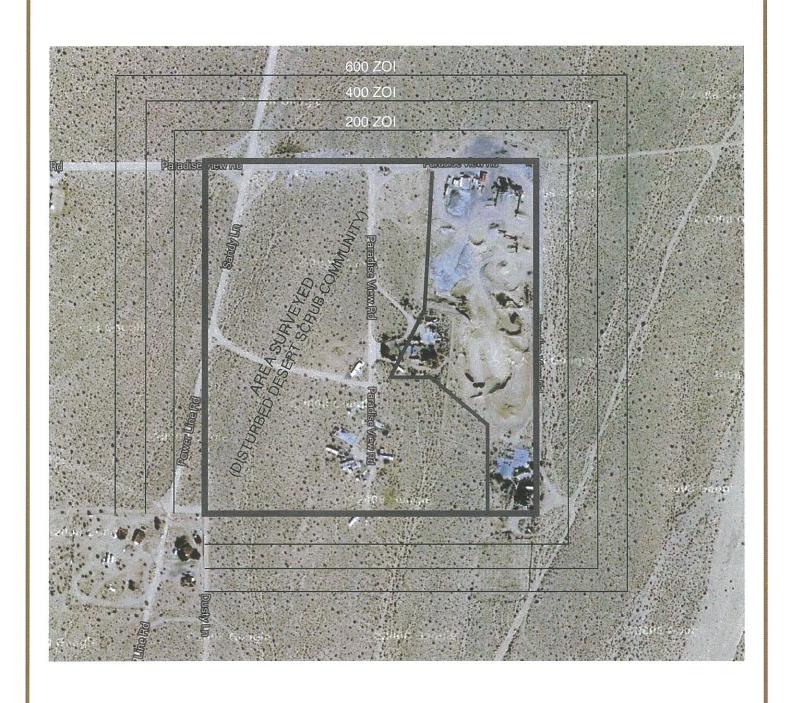


FIGURE 4 BIOLOGICAL RESOURCES MAP (R. HOVE FT. IRWIN PIT)

#### 5.0 RESULTS – DESERT TORTOISE

The focused desert tortoise surveys conducted on October 17, 2013 did not identify any tortoises or tortoise sign (e.g., scats, burrows, tracks, etc.) within the boundaries of the property or in the ZOI. The site does occur within the known distribution of the species; although, much of the property has been disturbed over the last several decades by various human activities and is unlikely to support any tortoise populations in the future. The absence of tortoises or any tortoise sign on the site is a function of the disturbed habitat conditions on the property. As previously indicated, there are documented populations in the region; although, tortoises are not expected to migrate onto the site in the near future.

#### 6.0 IMPACTS AND RECOMMENDATIONS

The proposed mining activities are not expected to have any direct or indirect impacts on tortoises or tortoise habitat based on the results of the October 17, 2013 survey. In addition, the project is not expected to disrupt any continuity of any important wildlife habitat or habitat/wildlife corridors. No additional investigations are recommended at this time; however, the survey results are only valid for 12-months, and CDFW, USFWS, and the County may require the site be re-surveyed for desert tortoise if the following mitigation measures (See Section 7.0) are not implemented in a timing fashion. In addition, if the site is modified by grading or otherwise disturbed prior to project approval, which results in the loss of desert tortoises, CDFW, USFWS, and the County Building and Safety Department should be notified. Such action prior to project approval may violate State and Federal endangered species laws and may be considered grounds for denial of the project. Mitigation and restoration plans may be required under such actions.

If tortoises are observed on the property during future activities, all on-site activities should cease immediately and CDFW and USFWS should be contacted to initiate consultations, and to discuss additional mitigation measures which may be required prior to continuation of on-site activities. CDFW and USFWS are the only agencies which can grant authorization for the "take" of the desert tortoise.

#### 7.0 PROPOSED MITIGATION MEASURES

The site does not support tortoises at the present time and the proposed mining project is not expected to impact the species. However, a Mining and Reclamation Plan (August 17, 2012) has been approved by the County of San Bernardino which outlines various mitigation measures which should be implemented to prevent any potential impacts to the tortoise. These measures specified in the plan include the following:

- 1. Install a tortoise proof fence as per CDFW and USFWS requirements.
- 2. Conduct clearance level tortoise surveys within the boundaries of the fenced area once installation of the tortoise proof fence is completed.
- 3. Conduct a worker education class to inform employees about desert tortoises and ways to avoid impacting the species and its habitat.
- 4. Prepare a summary report for submittal to the County which summarizes: (a) monitoring activities associated with installation of the tortoise proof fence; (b) results of the clearance survey; and (c) results of worker education class. Copies of the report will be submitted to the County within 30-days of completion of the mitigation measures.

#### 8.0 REFERENCES

#### California Department of Fish and Game

1990 California's Wildlife, Volumes 1, 2, and 3. Sacramento.

#### California Department of Fish and Game

2013 Natural Diversity Data Base. Sacramento

#### Circle Mountain Biological Consultants.

May 2001. Biological Resource Inventory and Habitat Evaluation for Special Status on a 12.2 acre site near Fort Irwin, San Bernardino County, California. 12pp.

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#### Holland, Robert F.

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#### Johnson, H.

1976 vegetation and Plant Communities of Southern California Deserts- a functional view. In Symposium proceedings: Plant communities of Southern California. June Latting, editor. California Native Plant Society, Spec. No. 2 Berkeley, CA.

#### Luckenbach, Roger A.

1982 Ecology and Management of the Desert Tortoise (*Gopherus agassizii*) in California. In North American Tortoises: Conservation and Ecology. U.S. Department of Interior, Fish and Wildlife Service. Wildlife Research Report No. 12. pp. 1-36.

San Bernardino County. August 17, 2012. Mining and Reclamation Plan (2001M-05): Prepared for Gordon Lint Mine, 91-36-0161. 15 pp.

#### U.S. Department of the Interior, Bureau of Land Management

1988 Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan. BLM, Washington, D.C.

1988 Recommendations for Management of the Desert Tortoise in the California Desert Conservation Area. BLM, Riverside, CA.

- U.S. Department of the Interior, Fish and Wildlife Service.

  1989 The Desert Tortoise Emergency and Proposed Listing. Portland, OR.
- U.S. Department of the Interior, Fish and Wildlife.

1989 Endangered and Threatened Wildlife and Plants; Desert Tortoise; Proposed Rule. Federal Register 50 CFR Part 17:42270-42278.

1990 Desert Tortoise Density Category Designation Maps. Maps obtained from Ray Bransfield, U.S.F.W.S. biologist, Laguna Niguel office, Laguna Niguel, CA.

# **TABLES**

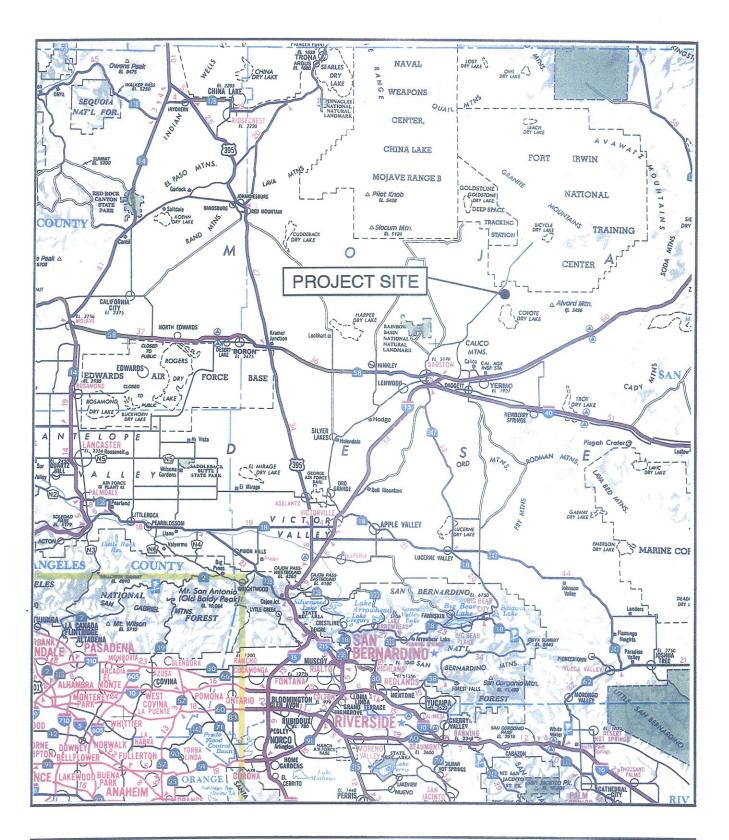
Desert Tortoise Populations in Surrounding Region (CNDDB 2013)

Table: Location of documented populations of desert tortoises in surrounding region within about six miles of the property according to data from the CNDDB (2013).

Species	Listing	Habitat	Presence/Absence	Location of
	Status	Requirements	On property.	Populations.
Desert tortoise (Gopherus agassizii)	Fed: T State: T	Desert scrub	No tortoises or tortoise sign (Scats, burrows, etc.) were observed on the	a. Occurrence #192. 1-mile southwest of property.
			site or within the ZOI during 2013 surveys. (Note: Tortoises and tortoise sign were	b. Occurrence #215. 6-miles south of property.
			observed in 2001 by Circle Mountain Biological Consultants, May	c. Occurrence #191. 3-miles northwest of property.
			2001.)	d. Occurrence #217.5-miles southeast of property.

**FIGURES** 

Vicinity Map

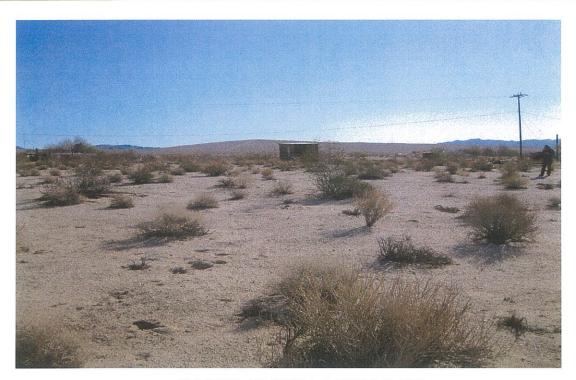


#### VICINITY MAP

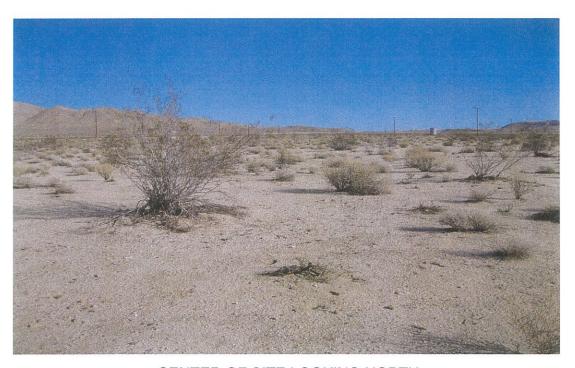
R. HOVE FT. IRWIN PIT (Source: USGS Paradise Range, CA Quad., 1986)



SITE PHOTOGRAPHS

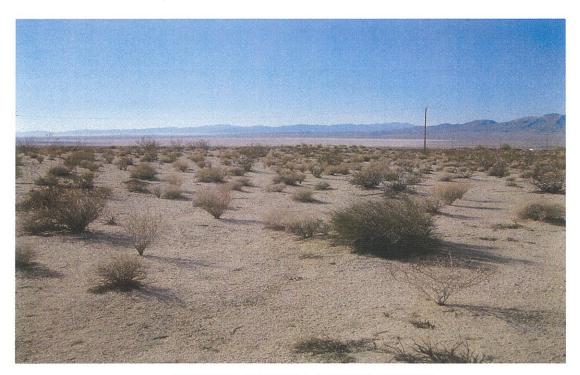


CENTER OF SITE LOOKING EAST

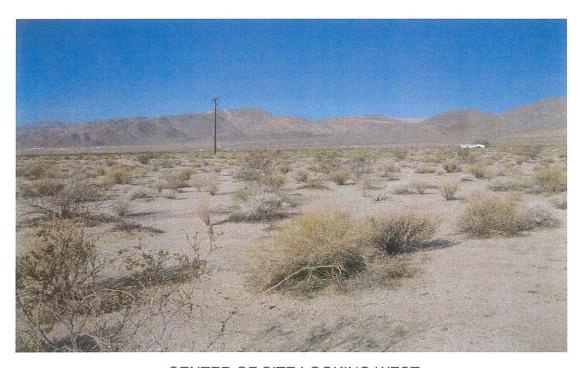


CENTER OF SITE LOOKING NORTH

SITE PHOTOGRAPHS (R. HOVE FT. IRWIN PIT)



CENTER OF SITE LOOKING SOUTH



CENTER OF SITE LOOKING WEST

SITE PHOTOGRAPHS (R. HOVE FT. IRWIN PIT)

# APPENDIX A

Flora and Fauna Compendia

Table 1 - Plants observed on the site and in zone of influence (ZOI).

Common Name	Scientific Name	Location	
Erodium	Erodium texanum	On-site & ZOI.	
Schismus	Schismus barbatus	66	
Buckwheat	E. fasciculatum	26	
Brome grass	Bromus sp.	cc	
Fiddleneck	Amsinckia tessellate	66	
Rabbitbrush	Chrysothamnus depressus	CC .	
Saltbush	Atriplex canescens	cć	
Creosote bush	Larrea tridentate	66	
Yellow-matchweed	Gutierrezia sarothrae	<b>دد</b>	
Russian thistle	Salsola tragus	cc	
Ephedra	Ephedra nevadensis	٠,	
Burrobush	Franseria dumosa	66	
Deciduous trees & shrubs	?	Near mobile home	
		dwellings.	

Table 2 - Wildlife observed on the site and those species expected to occur in ZOI.

Common Name	Scientific Name	Location
Common raven	Corvus corax	Observed on-site
Song sparrow	Melospiza melodia	cc
Morning dove	Zenaida macroura	cc
Western kingbird	Tyrannus verticalis	Observed in ZOI
Western whiptail lizard	Cnemidophorus tigris	May occur on site
Side-blotched lizard	Uta stansburiana	Observed on-site and ZOI.
Antelope ground squirrel	Ammospermophilus	Known to occur in ZOI.
	leucurus	
Desert spiny lizard	Sceloporus magister	46
California ground squirrel	Spermophilus beecheyi	cc
Coyote	Canis latrans	cc
Merriam's kangaroo rat	Dipodomys mohavensis	۲۲

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, LLC, or which are common species in the region.

#### CERTIFICATION FOR DESERT TORTOISE SURVEY

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by myself and biologists under my direction. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date:	11-	5-2013	Signed: Signed And And
			Report Author

Field Work Performed By: Randall Arnold

Senior Biologist

Field Work Performed By: Ryan Mann

Senior Biologist

# **EXHIBIT G**

**OMR Comment Letter** 

# Land Use Services Department Mining

Tom Hudson Director

January 6, 2016

Beth Hendrickson Reclamation Unit Manager Office of Mine Reclamation 801 K Street, MS 09-06 Sacramento, CA 95814-3529

ADVANCE NOTICE OF INTENT TO RECOMMEND APPROVAL OF A REVISION TO THE R.HOVE FORT IRWIN SURFACE MINING OPERATION FROM 12.2 ACRES TO 14.5 ACRES AND EXTEND THE MINING EXPIRATION DATE FROM 2014 TO 2044; AND RESPONSE TO OMR'S COMMENT LETTER DATED JANAURY 8, 2015; R.HOVE FORT IRWIN PIT; CA MINE # 91-36-0161, RECLAMATION PLAN NO. 2001M-05, APN 0518-181-13

Dear Ms. Hendrickson:

Pursuant to Public Resources Code Section 2774(d)(2), the County of San Bernardino is hereby providing advance notice to the Office of Mine Reclamation (OMR) of staff's intent to recommend approval of a request by Daily Transit Mix to revise their existing Mining Conditional Use permit and Reclamation Plan 2001M-05. The decision is anticipated to occur at the Planning Commission hearing scheduled for January 21, 2016. The R. Hove Fort Irwin Pit (formerly known as the Gordon Lint Mine) is located approximately 22 miles northeast of Barstow and is accessed via Paradise View Road from Fort Irwin Road. The Project proposes to increase the acreage of the existing sand and gravel surface mining operation from 12.2 acres to 14.5 acres on a portion of a 38.43-acre piece of property. Sand and gravel will be mined up to a depth of fifty (50) feet and the mine's termination date will be extended from 2014 to 2044.

County staff considered the comments offered by OMR in the letter dated January 8, 2015 and takes this opportunity to present responses that will facilitate the concurrent approval of the proposed Mining/Reclamation Plan amendment for the R. Hove Fort Irwin Pit. The following responses are in accordance with the Applicant's letter dated March 18, 2015, wherein revisions were made by the Applicant to address OMR's comments. The County, in its letter dated August 10, 2015, notified the Applicant of additional items that needed to be addressed prior to further processing of the application. The Applicant made changes that are reflected in their April 2015 Amended Mining and Reclamation Plan.

The final text and maps will be required to be made complete upon approval, incorporating final revisions and additions per the County's comments and further stated in the following responses and/or the conditions that will be imposed by Planning Commission prior to allowing new mining disturbance.

R. Hove Fort Irwin Pit CA Mine ID# 91-36-0161 Page 2

The following provides County staff's response to comments offered in OMR's January 8, 2015 letter, as addressed by the Applicant pursuant to the County letter dated August 10, 2015.

"Mining Operation and Closure"

COMMENT: SMARA Section 2772 (c)(5) requires a map that illustrates the topographic details of the lands. The Reclamation Plan Map does not show how the processing area, including the equipment and stockpiles, will be reclaimed.

#### RESPONSE:

The Reclamation Plan Map has been updated to delineate the processing and stockpiling areas and how the areas will be reclaimed upon the removal of the equipment.

COMMENT SMARA Section 2772(c)(9) states that the reclamation plan shall include an assessment of the effect of reclamation on future mining at the site. In the Project Description, Section IV.9 "Post-Reclamation and Future Mining", there is no discussion of future mining. A short statement assessing the potential for future mining at the site following reclamation should be added.

#### RESPONSE:

The Reclamation Plan has been updated referencing that "mining operations will proceed as one phase and reclamation will commence after all mining operations have completed". Completion of reclamation will occur within three (3) years of completion of mining operation (approximately 2047).

The County has, in addition, included a Condition of Approval that requires reclamation 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.

"End Land Use"

COMMENT: SMARA Section 2772 (c)(7) requires that the reclamation plan include a description of the proposed use or potential uses of the mined lands after reclamation, and, SMARA Section 2772 (c)(8) requires a description of the manner in which reclamation, adequate for the proposed use or potential uses will be accomplished. There are contradictory end uses proposed in the Project Description that should be clarified.

#### RESPONSE:

In light of OMR's comments, the Applicant's April 2015 updated Amended Mining and Reclamation cites that the proposed end land use of the project is to be vacant open space. A General Plan Amendment and Conditional Use Permit shall be required if the operation of the RMC plant, AC plant and recycling facility is allowed to continue within this land use zoning district.

"Geotechnical Requirements"

COMMENT: CCR Section 3704 (a) states that where backfilling is proposed for urban uses, the fill material shall be compacted in accordance with the Uniform Building Code. The amended reclamation plan must incorporate backfilling standards compatible with the appropriate building codes and grading ordinances.

R. Hove Fort Irwin Pit CA Mine ID# 91-36-0161 Page 3

#### RESPONSE:

The mine's end land use is to be vacant open space. No urban uses are proposed in the future. Regarding OMR's concerns regarding reclaimed slopes, a California licensed engineer or geologist shall determine the stability of the slopes following mining to determine whether the slopes require additional slope treatment at that time and conditioned accordingly.

"Environmental Setting and Protection of Fish and Wildlife Habitat"

COMMENT: CCR Section 3705(a) requires that the cover, density, and species richness of naturally occurring habitats shall be documented in baseline studies in order to establish a self-sustaining vegetative cover similar to the surrounding habitat.

#### RESPONSE:

A supplemental baseline study was conducted on March 5, 2015 by RCA Associates, LLC., for the Fort Irwin pit to meet current revegetation requirements. The project incorporates the mitigation recommended by the study.

"Resoiling and Revegetation"

COMMENT: CCR Section 3711 establishes mandatory standards for topsoil salvage, maintenance, and redistribution. On page 10 of the Project Description under Site Preparation, it states that the existing vegetation and topsoil will be scraped off and the scraped material will be used to create a berm along the sides of the excavation area. "in the event this materials suitable for vegetation purposed at the conclusion of mining operation, the operator shall spread the vegetation materials back over the reclaimed area per direction of the project biologist".

#### RESPONSE:

The first section of the sentence has been removed as requested. Similarly with regard to OMR's concern regarding Topsoil and Overburden, the Reclamation Plan now cites that "Topsoil and separately, overburden will be used as a berm along the perimeter of the mine site for storm water drainage control. The operator shall take appropriate measures to protect the topsoil berms from erosion by promoting plant cover. Lastly, the Mining/Reclamation Plan has been amended to provide the seed mix per OMR's recommendation and a description of a monitoring program as requested.

The County appreciates the opportunity to response to OMR's comments. Should you have any questions regarding this advance notice and response to comments, please feel free to call me directly at 909-677-9907.

Reuben J. Arceo, Contract Planner

RA/dp/cks

R. Hove Fort Irwin Pit CA Mine ID# 91-36-0161 Page 4

Attachment: OMR Comments dated January 8, 2015

Kjelstrom & Associates, Inc., response to OMR. County letter dated April 6, 2015

George H. Kenline, Engineering Geologist Cc: