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# RECORD OF DECISION

## Eagle Mountain Landfill Project Riverside County, California

Land Exchange CACA-30070  
Right-of-Way Grant CACA-25594  
Right-of-Way Grant CACA-31926

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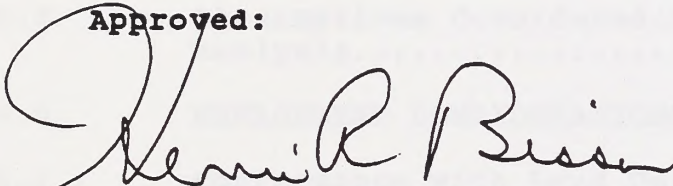
U.S. Department of the Interior  
Bureau of Land Management  
California Desert District  
6221 Box Springs Boulevard  
Riverside, California 92507

RECORD OF DECISION

Eagle Mountain Landfill Project  
Riverside County, California

Land Exchange CACA-30070  
Right-of-Way Grant CACA-25594  
Right-of-Way Grant CACA-31936

Approved:

  
Henri R. Bisson, District Manager

10/20/93  
Date





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RECORD OF DECISION

Eagle Mountain Landfill Project

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United States Department of the Interior  
Bureau of Land Management

R E C O R D O F D E C I S I O N

EAGLE MOUNTAIN LANDFILL PROJECT  
California Desert District

\*\*\*\*\*

1.0 INTRODUCTION

This document constitutes the Record of Decision (ROD) for the Eagle Mountain Landfill Project. The proposed action and alternatives were described and their impacts analyzed in the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) issued in June, 1992, which is incorporated herein by reference. The Final EIS/EIR was prepared for the Bureau of Land Management (BLM) in compliance with the National Environmental Policy Act (NEPA) and the County of Riverside in compliance with the California Environmental Quality Act (CEQA) as joint lead agencies. The Federal action that precipitated the need for the EIS and this ROD was the application for a land exchange and rights-of-way by Kaiser Eagle Mountain, Inc. (hereinafter referred to as Kaiser), 8300 Utica Avenue, Suite 301, Rancho Cucamonga, CA 91730. One of the right-of-way grants is to be held jointly by Kaiser and The Metropolitan Water District of Southern California (hereinafter referred to as MWD), 1111 Sunset Boulevard, Los Angeles, CA 90054. The land exchange and rights-of-way are a component in the development of a Class III solid waste landfill to be operated by Mine Reclamation Corporation (MRC), 960 Tahquitz Canyon Way, Suite 204, Palm Springs, CA 92262.

2.0 DECISION

I approve the land exchange, as described in Section 2.1 below and Exhibits A and B, with Kaiser and the issuance of right-of-way grants, as described in Section 2.2 below and Exhibit B, as part of a Class III nonhazardous municipal solid waste landfill at Eagle Mountain.

The project proponent or its successors in interest must comply with all mitigation and monitoring measures designed for this project including all stipulations for the right-of-way grants. The special stipulations, including those derived from the Biological Opinion prepared by the U.S. Fish and Wildlife Service, and standard stipulations are set forth in the right-of-way grants which are incorporated by reference.



Based on the environmental analysis of the proposed action and alternatives, I have determined that the land exchange and issuance of rights-of-way, as conditioned by the selection of the Reduced Landfill Operations alternative described in Section 3.0 below and the adoption of the mitigation and monitoring provisions set forth in Exhibit C, will not cause unnecessary or undue degradation to public lands and resources.

The environmental analysis of the proposed action and alternatives and the mitigation and monitoring provisions, are described in the following documents: Eagle Mountain Landfill Project Final EIS/EIR (June, 1992); the Draft EIS/EIR (July, 1991) which was incorporated by reference into the Final EIS/EIR; The Biological Opinion for Eagle Mountain Landfill Project, U.S. Fish & Wildlife Service (September 10, 1992); Development Agreement No. 47 (September 22, 1992) and; Conditions of Approval and Final Mitigation and Monitoring Program developed by the County of Riverside, BLM, the County Supervisors Task Force, the National Park Service, U.S. Fish & Wildlife Service and Kaiser. These documents may be reviewed at the Palm Springs-South Coast Resource Area, Bureau of Land Management, 63-500 Garnet Avenue, North Palm Springs, CA 92258-2000.

**2.1 LAND EXCHANGE:** Under the authority of and in accordance with Title II Section 206 of the Federal Land Policy and Management Act (FLPMA) of October 21, 1976, the BLM will dispose of public lands and certain interests in lands and acquire lands with threatened and endangered (T&E) species habitat. The BLM lands exchanged to Kaiser will be utilized to support the landfill operation. The legal descriptions of the offered and selected lands included in this exchange are shown in Exhibit A and displayed on a map in Exhibit B. The serial number (casefile number) for the land exchange is CACA-30070.

Under the Federal action 3,481.47 acres of BLM lands in and around the project site would be transferred to Kaiser in exchange for 2,846 acres owned by Kaiser. Based on the appraised value of the exchange lands, a difference of \$139,255 in favor of the United States has been determined between the public selected lands and the private offered lands. The selected lands and offered lands must be exchanged on an equal value basis, therefore Kaiser will pay the cash value difference in the amount of \$139,255 to BLM.

The offered private lands for exchange owned by Kaiser are located within the following areas: Group A - Salt Creek Pupfish/Clapper Rail Habitat Area of Critical Environmental Concern (ACEC); Group B - Orocopia Mountains Wilderness Study Area; Group C - Chuckwalla Bench ACEC; and, Group D - Chuckwalla Valley. The benefits of these offered private lands to the BLM's management goals are discussed in Section 4.0 below.



In addition, as part of this decision, the lands located in the eastern portion of the project (see Exhibit A) will be subject to a mineral reservation. The BLM concern is based on insuring the availability of construction aggregates in the southern California market in the future. The United States will receive fair market value should any construction aggregates be severed, removed and sold for commercial purposes from the lands designated in Exhibit A as valuable for aggregate. The reservation will apply to Kaiser, its successors in interest, assigns, lessees, permittees and licensees.

In accordance with Section 206(a) of FLPMA (U.S.C. 1716), I have given full consideration to better Federal land management and the needs of State and local people and have determined the values and the objectives which Federal lands to be conveyed would serve if retained in Federal ownership are not greater than the values of the private lands and the public objectives that they would serve if acquired. It is my determination that the loss of public resource values on the BLM lands would be less than the resource values gained by acquisition of the private lands resulting from this exchange.

**2.2 RIGHTS-OF-WAY:** Under the authority of and in accordance with Title V of FLPMA, two right-of-way grants will be issued to Kaiser to enable the operation of the Eagle Mountain Landfill Project. One of these right-of-way grants will be held jointly by Kaiser and MWD as described below.

A right-of-way (CACA-25594) comprising approximately 28.6 miles in length with an average minimum width of 200 feet and various widths for drainage purposes will be granted to Kaiser for the existing Eagle Mountain rail line on portions of BLM managed land between Eagle Mountain and Ferrum Junction on the northeast coast of the saline lake commonly known as the Salton Sea. The right-of-way also includes a portion of a rail spur to be constructed from the Eagle Mountain rail line to a container handling yard located adjacent to the landfill site. The rail line will be used to transport solid waste to the Eagle Mountain Landfill Project. Solid waste will be placed in sealed containers and transported by train to the site. Haul trains will not exceed 6 round trips daily. The rail line right-of-way is displayed on a map in Exhibit B. The right-of-way grant, including all standard and special stipulations, for the rail line is incorporated herein by reference.

Waste transported by truck would access the site over the existing Eagle Mountain Road and an extension of that road, locally known as Kaiser Truck Trail. A right-of-way (CACA-31926) will be granted to Kaiser and MWD for joint use of the existing Eagle Mountain Road beginning just north of Interstate 10 and ending just south of MWD's pumping station. This right-of-way is



approximately 6.75 miles long and of variable width averaging 110 feet wide. The Eagle Mountain Road Extension is included in the right-of-way grant (CACA-25594) to Kaiser for the rail line. The right-of-way for the road extension is approximately 5,000 feet long and of variable width averaging 110 feet wide.

Solid waste will be transported only after it complies with Assembly Bill 939, the California Integrated Waste Management Act of 1989. For the first three years from start-up, trucking of refuse to the landfill site will be limited to 100 truck round trips per day from all sources (about 2,000 tons of refuse per day). The use of transfer trucks will cease at the end of 3 years except those serving the Coachella Valley, Chuckwalla Valley, and Blythe areas, subject to the 100 truck round trips per day limit. The Eagle Mountain Road and Eagle Mountain Road Extension rights-of-way are displayed on a map in Exhibit "B". The right-of-way grant, including all standard and special stipulations, for the truck haul road is incorporated herein by reference.

If the environmental impacts of the implemented project exceed those identified in the Final EIS/EIR or if there is a major change in the landfill design or operation which could alter the impacts, additional environmental analysis of these rights-of-way in accordance with NEPA may be required. This could result in the imposition of additional mitigation measures or reconsideration of the approval of the right-of-way grants.

### **3.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION:**

Four alternatives, including the proposed action, were considered by BLM and the County of Riverside. Details regarding the proposed action and alternatives are set forth in the Draft and Final EIS/EIR. They are briefly summarized below:

**3.1 The Proposed Action:** The project, as originally proposed, is for the utilization and eventual reclamation of a deep pit iron ore mine in an isolated area of northeastern Riverside County, approximately 10 miles north of Interstate 10 near the communities of Desert Center, Eagle Mountain, and Lake Tamarisk as a Class III nonhazardous municipal solid waste landfill. The southern boundary of the Joshua Tree National Monument and designated wilderness area is approximately 8,000 feet north of the project site boundaries. The project provides for the development and operation of a landfill designed to receive up to 20,000 tons of nonhazardous solid waste per day from throughout Southern California shipped in sealed containers along the Southern Pacific mainline to the rail junction at Ferrum, from which it is transported along the 52-mile Eagle Mountain rail line to the project site. In addition to the landfill, the project also comprises access improvements along



the railroad and truck transport routes, monitoring and post closure site reclamation.

**3.2 Reduced Landfill Operations (BLM's Preferred Alternative):** Under this alternative, the landfill at full operation is still designed to accept an inflow of 20,000 tons of solid waste during peak operations. This alternative, however, incorporates modifications to the proposed action prescribed by the County of Riverside and the BLM based on public comments, new regulations, and analysis by participating agencies and the project proponent. These modifications include:

- 1) A change in the containment system to include installation of a composite liner beneath the entire refuse area as a requirement of new Federal Environmental Protection Agency regulations and recommendations of the Regional Water Quality Control Board;
- 2) A reduction in truck traffic with a daily limit of 100 trucks from all sources and a "sunset" of 3 years on all trucks which originate from outside of the desert communities. The truck haul component was reduced from 4,000 tons of refuse, (200 trucks per day) as originally proposed to 2,000 tons per day (100 trucks from all sources). After the third year only desert communities in the Coachella Valley, Chuckwalla Valley, and Blythe areas may utilize truck hauling to the landfill site provided the total number of trucks per day does not exceed 100.
- 3) The exclusion of the deep end of the East Pit from landfill operations for a minimum of 25 years after the start of landfilling operations in order to record future higher groundwater levels. A permit revision from the Local Enforcement Agency (LEA) and additional environmental review will be required to expand into the area of the East Pit.

I have determined that the Reduced Landfill Operations alternative with changes in the containment system, reduction in truck traffic and reduced landfill operations, including the mitigation and monitoring provisions, is the BLM's preferred alternative. My decision to approve the land exchange and issue the right-of-way grants is conditioned on the implementation of the Reduced Landfill Operations alternative.

**3.3 Proposed Action with Rail Access Only:** This alternative would limit the project to 16,000 tons per day of solid waste transported by rail only.

**3.4 No Project (Environmentally Preferable Alternative):** This alternative would leave the project area in its present condition and avoid the potential effects of the proposed landfill. The reclamation benefits of the project and the acquisition of important wildlife habitat would be foregone under this alternative. Although the potential indirect impacts



associated with continued reliance on existing or new landfills in southern California may be substantial, the no project alternative is the environmentally preferable alternative in terms of direct impacts on the human environment.

### **3.5 Alternatives Considered/Eliminated from Detailed Analysis:**

**3.5.1 Alternative Waste Diversion Programs -** Waste stream reduction strategies including recycling, composting and source reduction will have the effect of reducing the volume of refuse but would not eliminate the need for landfill capacity. Waste combustion for energy brings associated air quality impacts and hazardous materials in ash. Source reduction has significant potential to reduce impacts associated with landfills but currently the broad fundamental legislative programs and changes in society required for such concerted action are not in place and would not completely eliminate the need for waste disposal.

**3.5.2 Alternative Railroad Alignment -** Eliminating the use of the existing Eagle Mountain rail line and constructing track in alternative locations presents additional environmental issues. Three alternative locations for the rail line were discussed in the Final EIS/EIR and each was eliminated from further consideration due to environmental concerns.

### **4.0 MANAGEMENT CONSIDERATIONS:**

Based on a careful examination of the findings of the EIS/EIR and public comments, and after consultation with other agencies and local governments including the County of Riverside, I have concluded that the proposed action as modified, the Reduced Landfill Alternative, is consistent with BLM management goals and complies with the Federal Land Policy and Management Act (FLPMA) of 1976. Development of a landfill at a previously disturbed site and adoption of mitigation measures ensures that all reasonable means to avoid or reduce environmental harm have been incorporated into the project.

The following factors were considered in arriving at my decision:

**4.1 Conformance with Land Use Plan:** I have reviewed all of the relevant documents and concluded that the proposed land exchange and issuance of right-of-way grants for the Eagle Mountain project conform with the California Desert Conservation Area (CDCA) Plan of 1980, as amended.

BLM received comments from the public indicating concern about whether or not the land exchange conformed with the CDCA Plan guidelines for waste disposal. The current guidelines, pursuant to Amendment 4 of the 1985 Amendments to the CDCA Plan, state that in Multiple-Use Class M (moderate use) and Multiple-Use



Class I (intensive use): "Public lands managed by BLM may not be used for waste disposal (either hazardous or non-hazardous). Locations suitable for waste disposal, when found on BLM managed public lands, will be transferred to other ownership through sale or exchange." The proposed landfill site has been evaluated for its suitability as a waste disposal site. The analysis identified public lands suitable for the project. In accordance with the CDCA Plan, these lands can be transferred out of public ownership for use as a solid waste landfill.

**4.2 Acquisition of Important Wildlife Habitat:** The offered private lands are located in areas that contain important habitat for the desert tortoise, a Federally listed threatened species, and aquatic habitat supporting desert pupfish, a Federally listed endangered species. The land exchange would secure important habitat for these and other wildlife species, as well as enhance other important BLM management goals.

These lands are located in four geographic groups (see Exhibit B) and would provide the following benefits:

Group A: Salt Creek Pupfish/Rail Habitat ACEC

T. 8 S., R. 11 E.

Section 13: NE1/4

Section 21: E1/2E1/2SE1/4

Section 23: Described in metes and bounds.

These three parcels are located in the vicinity of the Salt Creek Pupfish/Rail Habitat ACEC. The entire area of about 14,000 acres includes both public and private lands and is popularly referred to as Dos Palmas/Salt Creek ACEC even though the ACEC only includes the public lands. One of the management objectives in the Dos Palmas/Salt Creek area is to acquire private lands for the management of various palm oases and seeps that provide habitat for the desert pupfish and Yuma clapper rail, both Federally listed endangered species. Over 2,500 acres have been acquired or are in the process of being acquired. All three of Kaiser's parcels will contribute to consolidating public lands, thus enhancing management of the area. The parcel in Section 23 contains desert pupfish habitat along a tributary to Salt Creek.

Group B: Orocopia Mountains WSA

T. 7 S., R. 12 E.

Section 35: Described by metes and bounds

Section 36: N1/2SW1/4, SE1/4NW1/4, S1/2NE1/4

T. 7 S., R. 13 E.

Section 31: Described by metes and bounds

These three parcels are located on the southern boundary of the Orocopia Mountains Wilderness Study Area (WSA). They are not contiguous to the portion of the WSA recommended by BLM as



suitable. However, consolidation of public lands in this area would simplify land management and enhance recreational opportunities. These parcels are in an area proposed by the U.S. Fish and Wildlife Service as critical habitat for the desert tortoise under the Endangered Species Act. A population of approximately 50 Nelson's bighorn sheep occurs in this WSA and another population of approximately 100-200 sheep occurs in the Chocolate Mountains to the south. These populations migrate between the mountain ranges in the vicinity of the parcels. Nelson's bighorn sheep is a State of California fully protected species and a BLM sensitive species. Populations of Orocoxia Sage, a Federal Category 2 candidate species, occur on all three parcels. Acquisition of Kaiser's parcels would block up a large area of BLM managed lands in the WSA while enhancing management of lands used by migrating bighorn sheep.

Group C: Chuckwalla Bench ACEC

- T. 6 S., R. 14 E.  
Section 16: W1/2W1/2  
Section 21: W1/2
- T. 7 S., R. 14 E.  
Section 5: All

These three parcels are located in the Chuckwalla Bench Area of Critical Environmental Concern (ACEC). These parcels are in an area proposed by the U.S. Fish and Wildlife Service as critical habitat for the desert tortoise under the Endangered Species Act. One of the management objectives of this ACEC is to acquire all private lands within the boundary of the ACEC primarily for the management of desert tortoise habitat. This area supports one of the four major populations of the desert tortoise in California. The parcels contain Category I tortoise habitat with a density of 20-50 individuals per square mile. Many signs of tortoises were observed when transects were run for the biological assessment prepared for the landfill. Thus far, over 17,000 acres of private land inside the Chuckwalla Bench acquisition area have been acquired. Acquisition of Kaiser's parcels in this area would contribute to consolidating public lands, thereby enhancing management of important desert tortoise habitat. The BLM has also placed a high priority on acquiring easements and land along Summit Road which crosses Kaiser's properties in order to provide public access to the historic Bradshaw Trail.

Group D: Chuckwalla Valley

- T. 5 S., R. 14 E.  
Section 27: N1/2, N1/2S1/2

This parcel is located just north of Interstate 10 in the Chuckwalla Valley. Although this parcel is not inside any specially designated management area, it is in an area proposed by the U.S. Fish and Wildlife Service as critical habitat for the desert tortoise under the Endangered Species Act and is adjacent



to a large block of BLM managed lands to the north. Tortoise densities are estimated to be 20-50 individuals per square mile. Many signs of tortoises were observed on this parcel when transects were run for the biological assessment prepared for the landfill. Acquisition of this parcel would contribute to management goals of consolidating public lands.

**4.3 Consistency with State and Local Programs, Plans and Policies:** BLM is required under Title II of FLPMA, to the extent consistent with the laws governing the administration of the public lands, to coordinate management activities with the land use planning and management programs of other Federal departments and State and local governments within which the lands are located.

The proposed action as modified (Reduced Landfill Operations alternative) is consistent with County of Riverside's land use determinations and policies which are set forth in the recitals, covenants and development standards embodied in the following documents: Resolution No. 92-517 Adopting Comprehensive General Plan Amendment No. 209 and the Environmental Findings pursuant to the California Environmental Quality Act. The action is also consistent with the County of Riverside's Development Agreement No. 47, Change of Zone No. 5499, Specific Plan No. 252, the Final Conditions of Approval for Specific Plan No. 252, and Ordinance No. 348.3477. Each of these documents are directed toward providing Riverside County's authority and legal basis for all aspects of the landfill project and support the planning and development considerations and assurances attached to the local land use determination. The County of Riverside approved the Eagle Mountain Landfill Project and certified the EIR on November 3, 1992.

The County of Riverside determined that the Eagle Mountain Landfill project fulfilled regional and local needs and would provide benefits to the County in their approval of the project. The major needs fulfilled and benefits provided by the project are summarized below:

- Approval of this project assists the County of Riverside in complying with the requirements of the State of California Integrated Waste Management Act of 1989. The Act calls for recycling of 25% of solid waste by 1995, and 50% by year 2,000. Recovery of recyclable materials at transfer stations will assist other Counties in meeting source reduction goals for the State of California.
- The project will provide replacement landfill capacity to 8 of the 24 landfills in Riverside, San Bernardino, Los Angeles and Orange counties that are currently accepting approximately 50% of the region's waste stream but which will use up their permitted capacity over the next four



years. The Eagle Mountain Landfill Project will serve as a major Class III municipal landfill site and as a component of the County's regional integrated waste management system. It is expected to accommodate a substantial portion of the County's waste disposal needs for the next one-hundred years.

- Potential short-term alternatives to the project would not be environmentally preferable, nor would they allow the County to adequately avoid waste disposal shortfalls due to increased waste generation and phasing out of existing landfills. The potential for long-term waste management options such as recycling and waste reduction are necessary in combination with the landfill capacity provided by the project, but in themselves do not constitute feasible or preferable alternatives to the project.

- The project will ultimately result in an average payment of \$24 million per year in payments for landfill rights. This represents approximately 9% of the discretionary portion of the County's 1992 budget and can be used to provide needed public services to Riverside County residents. Overall social benefits to the county include health care, child day care, care for senior citizens, revenue for parks and open space and an assured system for collection and disposal of solid waste. (County of Riverside Resolution No. 92-517 Adopting Environmental Findings Pursuant to CEQA and a Statement of Overriding Considerations).

I have determined that the needs fulfilled and the benefits provided by the landfill as defined by the County and analyzed in the Final EIS/EIR do not conflict with any Federal laws or regulations and that there are no overriding Federal considerations which warrant denial of the land exchange or issuance of right-of-way grants for the landfill.

**4.4 Procedural, Legal and Administrative Concerns:** There were administrative issues related to the proposed exchange of lands with Kaiser that required further analysis and clarification:

**4.4.1 The Reverter Clause:** There was a question as to whether or not lands patented to Kaiser pursuant to the authority of Private Law 790 had reverted to the United States. The selected lands include an interest in a tract of land containing approximately 460 acres which was conveyed to Kaiser under Patent 1153422 for campsite and millsite purposes, pursuant to Private Law 790 enacted by the United States Congress on July 8, 1952. The patent, as provided in the Act, contains a reversionary clause that if the lands are not used for a continuous 7 year period for mining related purposes, the land would revert to the



United States. Actual large scale mining operations ceased in 1982 when economic factors caused a major decline in the industry. However, Kaiser has provided sufficient documentation indicating a continuation of ore shipments, sand and gravel sales, gold exploration and other mining related activities in the area since the mine closure. The 460 acre tract of land is occupied by the mining town of Eagle Mountain which is owned by Kaiser. A legal opinion on the reversionary interest is set forth in Exhibit F.

In addition, in view of the fact that Kaiser received full and complete title to the surface estate, subject only to the possibility of the reverter, it is BLM's position that Kaiser's lease of a portion of the patented property for the operation of a return-to-custody facility is within the rights granted to Kaiser under the patent. The facility has been operating at Eagle Mountain since 1986 under a lease agreement from Kaiser and a County public use permit. Kaiser received full possessory interest in the surface of the property and had the right to utilize that surface according to its discretion subject only to the conditions of the reverter clause and the planning and zoning rules and regulations of the local jurisdiction which is the County of Riverside.

**4.4.2 Eagle Mountain Energy Company Proposal:** On January 31, 1991, the Eagle Mountain Energy Company (EMEC) filed an application for a preliminary permit for a pumped storage hydroelectric project at the Eagle Mountain mine site with the Federal Energy Regulatory Commission (FERC). The project proponents have stated that the public lands for this project were automatically reserved under the Federal Power Act from disposition upon filing their application with the FERC. The BLM has concluded that the EMEC and a FERC opinion misinterpreted BLM regulations when it determined that the BLM could not proceed with the land exchange even though the land had previously been segregated from new land use proposals by the BLM prior to EMEC's application for a preliminary permit, pending disposition of the proposed land exchange. It is the BLM's position that the mere filing of an application for a preliminary permit and its subsequent issuance would not interrupt or suspend the BLM's responsibility to manage the public land and proceed with the land exchange.

Concerns were also raised regarding the lack of a thorough analysis of the cumulative impacts associated with the EMEC project in the Final EIS/EIR. Assuming that EMEC moves into the development of an EIS on the proposed hydroelectric pumped storage project, a cumulative impact analysis will be completed at that time.

**4.4.3 Adequacy of the EIS:** During the public review period for the Draft and Final EIS/EIR, many non-specific comments concerning the over-all adequacy of the environmental



document were received by the BLM. The record of actions taken and the standards for NEPA documentation and procedures have been thoroughly reviewed. I have determined that all policy and procedural requirements of the National Environmental Policy Act (42 U.S.C. 4321 et seq.) have been satisfied. In addition, the County of Riverside has certified the EIR portion of the joint document under the California Environmental Quality Act (California Public Resources Code sections 21000, et seq.).

**4.4.4 Disclosure of Appraisal Data:** There were several members of the public, in response to the Notice of Realty Action on the proposed land exchange, who sought information relative to the appraisal of selected and offered lands. Some comments were also received which alluded to or assumed an attempt on the part of the BLM to "hide" or "cover-up" the appraisal. Disclosure of the appraised values to any person other than the principles of the exchange is inappropriate until after the BLM issues the notice of decision to the landowner. The premature release of the appraisal information would put the government at a competitive disadvantage. Appraisal information is specified under Exemptions 4 and 5 of the Freedom of Information Act (FOIA), to which all responsible public agencies must adhere concerning disclosure of property value estimates and other information contained within appraisals. Disclosure would remain limited due to confidential sales or financial data which under Exemption 4 of the FOIA protects "trade secrets and commercial or financial information obtained from a person which is privileged or confidential." The intent of this action is not to prevent public access to this information, but to facilitate successful negotiations.

**4.4.5 Notice of Realty Action Procedures:** A Notice of Realty Action (NORA) on the proposed land exchange was first published in the Federal Register on August 14, 1990, and in the Desert Sun, a Palm Springs newspaper of local circulation, on September 13, 20, and 27 of 1990, pursuant to regulations found in 43 CFR 2201.1. The notice segregated the public lands proposed for exchange from operation of the public land laws and the mining laws for a period of two years and called for comments from interested parties for a period of 45 days. A second NORA on the proposed land exchange was published in the Federal Register on August 13, 1992. The notice continued the segregation of the public lands for an additional two years and again called for comments for a period of 45 days. One comment received from that notice questioned why the notice was not also published in the local newspapers as required by BLM regulations. This comment was considered and on October 30 and November 6 and 13 of 1992 the NORA was published in the Desert Sun and the Riverside Press-Enterprise and called for comments for an additional 45 days. All parties that commented on the August 13, 1992, Federal Register notice and other known interested parties were also mailed a copy of the notice that was published in the



newspapers and given an additional 45 days to provide comments. Several comments received in response to these notices in the newspapers pointed out that the notices were not the same as the notice that was published in the Federal Register. It is acknowledged that the notices are not exactly the same; however, the notices address the same proposed action and describe the same lands involved in the proposed land exchange with the exception of the addition of a reversionary interest of the United States in a tract of land patented to Kaiser Steel Corporation for a campsite and millsite in the 1950's. It is felt that the intent of the regulations to notify interested parties and the public of the proposed exchange was fully satisfied. All comments were reviewed and considered.

**4.5 Impacts to Desert Tortoise and Desert Pupfish:** The protection of desert tortoise and desert pupfish during construction and operation of the project was a serious concern for the BLM, the U.S. Fish and Wildlife Service (USF&WS), the California Department of Fish and Game (CDF&G), environmental groups and members of the public. A portion of the existing railroad serving the project is located in the vicinity of Salt Creek, the habitat of the desert pupfish.

In compliance with Section 7 of the Endangered Species Act, the BLM consulted with the USF&WS on measures to mitigate impacts to the desert tortoise and the desert pupfish. It was the opinion of the USF&WS that the landfill is not likely to jeopardize the continued existence of the desert tortoise or the pupfish. After critical habitat was proposed for the desert tortoise, the BLM conferred with the USF&WS. It was the opinion of the USF&WS that the project will not destroy or adversely modify proposed critical habitat. The results of the Section 7 Consultation and Section 7 Conference with the USF&WS are set forth in Exhibits D and E respectfully.

The railroad, which has been operating for over 40 years as part of the previous mining operations at the project site, has the potential for killing or injuring tortoises and fragmenting their habitat. The mitigation measures are designed to reduce or eliminate that potential by requiring inspection of the railroad line before each train trip to remove tortoises which might be in harm's way and by enabling the tortoises to pass under the rail line by development of culverts beneath the line and over the line by placement of ballast between the rails. A monitoring program implemented for the life of the project will be instituted to determine the effectiveness of the mitigation and to help locate future culverts and ballast locations. The Section 7 Consultation with the USF&WS requires that the monitoring program also be approved by the BLM as well as the USF&WS and that it include 2 years of pre-operation monitoring, and specifies the transects where the information will be collected. An extensive program for ravens and other potential



tortoise predators is also included in the mitigation and monitoring program and will be activated for the life of the project.

The issue of ravens being attracted to the landfill area and raven predation of tortoise was a major concern of biologists and other interested parties. A raven monitoring program, including a minimum of two years of preparation monitoring, will be developed and enacted in conformance with BLM methodologies. Monitoring of ravens will continue throughout the life of the landfill project or until the BLM, USF&WS, and CDF&G determine it is not longer necessary. Examples of mitigation measures include minimum of six inches of soil cover placed over deposited refuse on a daily basis to minimize attracting ravens and other predators to refuse. The perimeter of the active landfill and waste handling areas will be fenced to exclude predators such as coyotes and kit foxes. A nonlethal raven control program will be conducted, including hazing at the landfill site, prompt removal of road-killed animals along access roads, and the possible use of bird repellent methyl anthranilate. If necessary, and subject to the approval of the BLM, USF&WS, and CDF&G, a raven control program will be implemented that may include nest destruction, shooting and/or alterations of landfill operations.

In addition, 375 acres of desert tortoise habitat are required to be provided to the BLM by Kaiser as compensation for habitat disturbed by the landfill project.

Implementation of the required mitigation measures will result in the avoidance or substantial reduction of the environmental impacts to desert tortoise and desert pupfish. Details of these mitigation measures are set forth in Exhibit C (Conditions of Approval & Mitigation/Reporting Monitoring Program) and Exhibit D (Biological Opinion for the Eagle Mountain Landfill Project, U.S. Fish & Wildlife Service). Given the mitigation and monitoring provisions, I have determined that all practicable measures have been taken to avoid or reduce adverse impacts to the desert tortoise and desert pupfish.

**4.6 Impacts to Other Biological Resources:** The EIS/EIR identified other important wildlife and plant species that occur on public and private lands within the project areas. These species have been observed or detected by sign at the landfill site or along the associated roads and railroad right-of-way. Wildlife species include Nelson's bighorn sheep, California leaf-nosed bat, Townsend's big-eared bat, ringtail, american badger, northern harrier, LeConte's thrasher, yellow warbler, yellow-breasted chat, and black-tailed gnatcatcher. There are several other species of wildlife potentially occurring but not observed during surveys that may also use habitats within the project area. No listed State or Federal plant species were observed within the project boundaries. However, one Federal Category 2



species, Alverson's foxtail cactus, and one Federal Category 3C species, California barrel cactus, were observed. A Category 2 species is one for which there is some evidence of vulnerability, but for which there are not enough data to support listing proposals as this time. A Category 3C species are those that have proven to be more abundant or widespread than previously believed and/or those that are not subject to any identifiable threat.

A detailed description of these biological resources is set forth in the Draft EIS/EIR and the Biological Assessment completed in March, 1992.

Mitigation and monitoring measures have been designed to address concerns for these and other biological resources and include such conditions as the placement of at least three new permanent water sources for bighorn sheep, preserving in open space approximately 644 acres of bighorn sheep habitat and a buffer area between the landfill and relocated sheep, monitoring surveys of bat activity and a conduit extension of an existing adit which the bats currently use as a roost, conservation easements for the Alverson's foxtail cactus and studies for relocation and a long term research program for cactus habitat rehabilitation. These are examples of a few of the mitigation and monitoring measures which are required for addressing other biological resources potentially affected by the landfill.

Given the mitigation and monitoring measures, I have determined that potential impacts to other biological resources have been reduced to an acceptable level.

**4.7 Impacts to Joshua Tree National Monument:** An important concern to the BLM, the National Park Service (NPS) and public was the proximity of the project to Joshua Tree National Monument (JTNM). JTNM is a Class I air quality unit under the Clean Air Act. JTNM is also a designated World Biosphere Reserve and contains a designated wilderness area.

NPS representatives from JTNM, BLM, County officials, members of the County Supervisor's Task Force on the Eagle Mountain Landfill Project, engineers and environmental consultants, and other interested parties met on numerous occasions to discuss potential impacts to JTNM and to work out a mitigation and monitoring program that would reduce the potential for short and long term adverse impacts.

Principle issues included the potential for wind blown trash, degradation of air quality, and potential impacts to wildlife. Mitigation measures such as the use of closed transport containers, daily litter pick-up, litter control fencing, fugitive dust control and a standard of "zero" escape of litter from the permitted landfill area was established. In addition,



the NPS requested a means to monitor and mitigate any potential for cumulative and long term subtle impacts that may have an adverse effect on the desert ecology. Comments were received from groups and individuals on these and other issues.

Adopted mitigation measures will reduce the potential cumulative impacts to desert ecology, including impacts on habitat and species at JTNM. In addition to the mitigation program set forth in the Final EIS/EIR, important measures to fund habitat and open space acquisition and research are provided for through the establishment of an Environmental Mitigation Trust and a Long Term Monitoring Team. These measures strengthen the overall mitigation and monitoring program and provide the means to acquire priority critical habitat areas, to maintain and preserve open space lands and to further mitigate the potential for cumulative and long term impacts on the desert ecology and JTNM.

The Final EIS/EIR states that results of revised modeling show project impacts including those at JTNM will not exceed Federal Class I increments established under Clean Air Act and will not impair visibility. At least two permanent PM 10 (particulate matter less than 10 microns in size, including for example fugitive dust) monitoring stations will be installed in accordance with South Coast Air Quality Management District Rule 403 in locations selected in consultation with the NPS.

Given the mitigation and monitoring provisions, I have determined that all practicable means have been taken to avoid or reduce adverse impacts on the JTNM.

**4.8 Impacts to Visual Resources and Wilderness Values:** As indicated in the Final EIS/EIR, to address the public concern that the landfill project might be seen from JTNM, it was noted that the project area is separated from the JTNM by a major ridgeline with an elevation from 2,000 feet to 3,500 feet which blocks views from the JTNM into the project area. The ridgeline also poses a natural barrier for JTNM against windblown debris.

Members of the public noted during the review of the Draft EIS/EIR that approximately 31 acres of the selected public lands were within the boundary of the Eagle Mountain Wilderness Study Area (CDCA-334) and were included initially within the proposed exchange parcels. This area in question has been resurveyed and relotted by the Cadastral Survey. The subject 31 acres will not be included in the land exchange.

**4.9 Impacts to Water Quality:** Another issue of major concern was the potential for degrading groundwater due to the migration of leachate and/or landfill gas under and adjacent to the project site. A comprehensive program for mitigating these potential impacts has been developed and imposed on the project



and will avoid or substantially reduce the potential for impacts.

The identified mitigation measures consist of prevention of leachate formation, leachate containment collection and removal, and containment, collection and removal of landfill gas, and a groundwater protection barrier composed of a geotextile composite liner with associated detection monitoring for leachate and landfill gas. The composite liner system is designed and constructed to eliminate potential hydrostatic pressure on the liner. The system will also operate as a barrier to the downward movement of fluid. The low annual rainfall in the arid desert climate reduces the potential for creating leachate from rainfall or surface water. The geology and hydrogeology of the area includes evidence of fractured bedrock which can be effectively monitored.

A thorough regulatory and enforcement program will be administered by the California State Water Resources Board and its Regional Water Quality Control Board and by the California Integrated Waste Management board and the local County Department of Health acting as the Local Enforcement Agency (LEA) for the State.

A summary of impacts and mitigation for groundwater protection is set forth on pages 63 and 64 in Table 1 of the Final EIS/EIR. In addition, the project is subject to the Resolution Regarding Fully Mitigated Impacts related to water quality and the Conditions of Approval and Mitigation Reporting/Monitoring Program as adopted by the County of Riverside. The mitigation measures and the existing enforcement structure ensures that all practicable means have been taken to avoid or reduce the potential for to water quality.

**4.10 Impacts to Groundwater Use and Supply:** Serious concern was expressed, particularly by members of the public who reside in northwestern Chuckwalla Valley, about the potential for the landfill project to deplete substantially the region's groundwater resources.

The landfill operation's maximum water consumption is expected to be about 1,972 acre-feet per year allowing for a worst-case analysis. Water would be used for haul road dust control, container cleaning, vehicle wash and maintenance, personal use, liner preparation, landscaping, and daily cover dust control. Due to evaporation, none of this water would recharge the groundwater supply.

The total inflow to the basin is estimated at 12,240 acre-feet per year. Approximately 23,000 acre-feet per year of groundwater is used in the northwestern Chuckwalla Valley mainly dedicated to agricultural uses. If the total drawdown remained constant and all conditions remained the same, the increase in water use would



result in approximately 536 years of groundwater reserves. The landfill operation would represent approximately 8 per cent of the region's total water consumption. The region's water resources are currently in an overdraft condition, however calculating a 536 year groundwater reserve, the landfill operation is not a substantial contribution to the overdraft condition.

It is my determination that the potential for direct and cumulative impacts to the groundwater supply is not substantial.

**4.11 Impacts to Air Quality:** An important concern of the public and other agencies is that air pollution emissions from truck and train transport of waste would exceed thresholds. In particular, concerns were expressed by some residents of the Coachella Valley that air quality would be degraded by truck transport of waste along Interstate-10 to the landfill site. It has been determined that the action will not violate any State air quality standards or Federal Class I or II increments.

The project includes mitigation measures consistent with the best available control technology and includes operational measures for landfill equipment with combustion engines, control of fugitive dust, maintenance requirements for truck and locomotive engines, and a landfill gas recovery system. Also included is a feasibility study for electrification of the Eagle Mountain railroad and feasibility studies for use of selective catalytic reduction or natural gas fuels. As referred to in the section on Measures to Protect JTMM concerning air quality, two permanent PM 10 monitoring stations will be installed either pursuant to provisions in SCAQMD rule 403 or at locations chosen in consultation with NPS.

In response to comments regarding air quality as well as traffic concerns, the "truck haul" component has been reduced as described in Section 3.2, Reduced Landfill Operations.

Results of the air quality analysis and modeling show that project impacts will not result in an unacceptable health risk nor will the project impair visibility.

**4.12 Impacts to Minerals:** Sand and gravel located on the eastern selected properties, valuable as construction aggregate, was identified by P. K. Morton in the Mineral Potential Report. The Morton report was reviewed and amended by the BLM California Desert District to reflect a market analysis of the mineral potential. Although a current market for sand and gravel does not exist, demands will be placed on deposits in areas where previous development and a mining infrastructure exists, making the property "prospectively valuable." Therefore, the BLM has determined that a reservation is applicable ensuring that the United States receive a fair market value for any construction



aggregates severed, removed and sold for commercial purposes from the property. Market demand for a desert source for mineral materials is increasing due to limited access and availability in the Los Angeles Basin. Areas within the desert bio-regions of southern California are currently undergoing land use planning decisions for the protection of the desert tortoise, which will put large areas of alluvial material off-limits to sand and gravel development. It is important that the BLM assures mineral materials are available to meet local, regional, and State needs.

The affected ore deposits on the project site represent less than one percent of the economically recoverable iron ore reserves in the United States. However, since it has been determined that the landfill operation could render portions of these existing iron ore reserves unminable, landfill operations will be phased to assure that the iron ore most feasible to mine are impacted last to allow for recovery, if ore recovery becomes economically feasible.

The Morton report concluded overall that the selected lands were judged to have low potential for iron and gold mineral resources. Morton examined the selected lands and found that a few gold veins of the Black Eagle Mine type are scattered throughout the property. Analysis of samples taken and the opinion of Morton was that these veins did not contain sufficient ore to be considered valuable. Kaiser also examined the property for gold during the late 1960's and concluded that there was not sufficient mineralization to warrant economic development.

The selected lands are not currently classified by the BLM as being valuable, prospectively or otherwise, for leasable minerals or Geothermal Steam Act minerals.

Kaiser indicated in a memorandum that the subject offered parcels are without value. The BLM examined the offered parcels and completed a mineral evaluation of the offered lands as required by BLM policy. The BLM concluded that the offered lands did not contain minerals of economic value that could be developed under the United States mining and mineral leasing laws. As such, the probability that future development of mineral resources on the offered parcels interfering with the purpose and intent of acquiring the parcels is low.

**4.13 Concerns Regarding Hazardous Materials:** Public concern was expressed about the possibility of hazardous materials being transported to the landfill site or the potential for the prior existence of hazardous material occurring on either the selected or offered lands due to past activities. The project provides for only the development of a Class III nonhazardous solid waste landfill. Waste delivered to the landfill site will only be accepted from solid waste facilities serving jurisdictions in compliance with Assembly Bill 939, the



California Integrated Solid Waste Management Act of 1989, as well as any successive implementing legislation and any applicable Federal or State waste diversion legislation. Class I hazardous wastes will be diverted from the waste stream to disposal areas designed to accept them, all of which are presently located outside of Riverside County. In addition, certain liquid wastes, white goods (e.g., appliances), sewage and water treatment sludge, incinerator ash, infectious wastes, and radioactive wastes will be diverted from the waste stream and sent to disposal areas designed and approved to accept them.

In regard to the potential for the prior existence of hazardous material occurring on the lands to be exchanged, a contaminant survey was conducted in accordance with Section 120(h) of the Comprehensive Environmental Recovery and Liability Act (CERCLA). The selected public and offered private lands were examined. No evidence or recorded information was found to indicate that any hazardous substance was stored, disposed of, or released on the offered lands. To the best of our knowledge, no hazardous materials were used in conjunction with iron ore recovery at the mine on the selected lands. Hazardous materials may occur on the selected lands. If any time after the conveyance of the selected lands, any condition on the land is found to be in violation of any Federal, State or local laws or regulations, Kaiser or its successors shall be responsible to immediately take all actions necessary to abate any such violation, and perform all activities required to remediate the site consistent with all applicable laws and regulations, irrespective of whether or not Kaiser or its successors caused, contributed to, or had actual knowledge of the activities or conditions causing the violations. Further, Kaiser and its successors will hold the United States harmless from any liability and expense resulting from such condition or activities.

**4.14 Irreversible and Irretrievable Commitments of Resources:** The most widely shared comment in opposition to the Eagle Mountain Landfill related to the mere idea of hauling waste from cities and other locations in southern California to deposit in the desert. The perception that the desert would become a "dumping ground for Los Angeles" was expressed by many of the desert residents who oppose the project.

There are several aspects to this issue. The first has to do with the policy of disposing of wastes outside of the jurisdiction in which it is generated. Establishment of this policy is a State, local or regional responsibility and not one which the BLM has any role in shaping.

The second aspect of the "desert dumping" issue is the concern that the approval of this project sets a precedent and would lead to the approval of other landfill projects in the desert resulting in irreversible impacts on the desert ecology. The



EIS/EIR on this project did examine in full the direct, indirect and cumulative impacts on the desert. The decision on this project is not intended to be an indicator of what the BLM's decision may be on any other landfill project. However, the BLM is concerned about the overall impacts of private land developments, particularly waste disposal developments, on the desert ecology and is working with the Southern California Association of Governments on their Regional Comprehensive Plan to address the larger issue of waste disposal in the entire southern California region.

With respect to this project, there are irreversible and irretrievable commitments of resources that must be acknowledged. The size and life of the project represents a large commitment. Over 2,000 acres will be directly affected by the project. Adjacent lands within the leasehold of MRC or in proximity to the Eagle Mountain community will be indirectly affected. The estimated lifetime for the landfill is 100 years which is beyond the scope of an average public works project. After formal closure of the landfill, maintenance and monitoring activities will continue.

The most significant irreversible impact, as in other land development projects, relates to the land on which the project is actually located. The land in question for the Eagle Mountain Landfill, however, has already been subject to very severe disturbance from past mining activities. The irreversible change in the land has already taken place, and the project involves a beneficial use and ultimate restoration of the disturbed land. The development of a landfill at a previously disturbed site, such as Eagle Mountain, avoids significant adverse impacts of locating a landfill in an area not previously disturbed.

It is my determination that the irreversible and irretrievable commitment of resources associated with the Eagle Mountain Landfill Project is not sufficient to warrant disapproval of the project or selecting another alternative.

#### **5.0 MITIGATION AND MONITORING:**

It is my determination that all practicable means to avoid or reduce environmental harm have been adopted. The mitigation and monitoring conditions of approval for this ROD are the Eagle Mountain Landfill Project Conditions of Approval & Mitigation Reporting/Monitoring Program Checklist as set forth in Exhibit C and the Biological Opinion from the U.S. Fish & Wildlife Service as set forth in Exhibit D.

As part of the overall mitigation and monitoring program, special measures have been incorporated and are described below:



**5.1 Environmental Mitigation Trust:** This measure assists the desert communities of eastern Riverside County in meeting the biodiversity challenge by providing an additional source of funding for acquisition of wildlife habitat and open space and for conducting certain research activities. Specifically, it provides for an Environmental Mitigation Trust to administer Mine Reclamation Corporation's contribution of \$1.00 per ton of waste deposited at the landfill. The Environmental Mitigation Trust will be comprised of and administered by the Riverside County Board of Supervisors. A Trust Advisory Committee will be established to make grant applications and make recommendations to the Trustee. The purpose of the Trust will be to preserve and enhance biological, scenic and cultural resources in the County, particularly in the desert regions of eastern Riverside County. The Trust will acquire, restore, maintain and preserve open space lands, interests in lands, water or water rights, wildlife habitats, and provide public access to such lands. The Trust will also support research and education concerning conservation of natural resources and monitor the long term effects of the project on the desert. Expenditures will be restricted to purposes that are set forth in Section 4.7.7 of the County's Development Agreement No. 47.

The Trust will expend at least eighty-five percent (85%) of the annual expenditures for the Trust for the acquisition of lands and interests in land, including water or water rights. The remaining fifteen percent (15%) or less of the total annual expenditures of the Trust will be used for administrative, operational and other costs of the Trust and grants and awards and funding of the Long-Term Monitoring Team to study and monitor any effects the project might have on the surrounding desert areas.

**5.2 Long Term Monitoring Team:** A Long Term Monitoring Team will be established to conduct biological monitoring for the landfill. The Monitoring Team will consist of three full-time biologists, one from the NPS, the BLM and the USF&WS who will be overseen by a Monitoring and Research Methodology Oversight Committee. Funding for the operations of the Monitoring Team will be received from the Environmental Mitigation Trust. In addition the project operator (MRC) will provide and maintain office, work room, and storage space for the Monitoring Team. MRC will provide funding not to exceed \$75,000 per year to enable the Monitoring Team or its designees to conduct baseline studies prior to commencing landfill operations. Funds advanced by MRC will be credited against the \$1 per ton contribution to the Environmental Mitigation Trust.

**5.3 Citizen Oversight Committee:** A Citizen Oversight Committee will be established to oversee implementation of the landfill. The Committee is designed to function as a "watchdog" to provide an added safety check regarding conditions imposed on



the project. A consensus was reached among interested parties and participating agencies, the project applicant and the working task force composed of multi-agency representatives, and members of the public to organize a Citizen Oversight Committee. Meetings will be scheduled as needed to review status reports, technical data and reports on the landfill issued by all agencies having regulatory authority over the project. Although the BLM would not be directly involved as a member of the Citizen Oversight Committee, it is reasonably foreseen that the BLM will be concerned with pertinent issues, reports or data involving public land management in the area of the project. The Citizen Oversight Committee will prepare an annual report summarizing its findings and will make inquiries or file such reports with other regulatory agencies as it deems appropriate.

#### **6.0 PUBLIC INVOLVEMENT:**

The NEPA process to identify the scope and contents of the Draft EIS/EIR was initiated by the Notice of Intent (NOI) to prepare the Draft EIS/EIR which was published in the Federal Register on November 15, 1989. A total of seven public scoping meetings were held by the County and BLM.

Approximately 1,100 copies of the Draft EIS/EIR were distributed for public review. The 60-day public review of the draft EIS ended on September 17, 1991. During the public review period on the Draft EIS/EIR, 170 letters of comment were received. Two public hearings on the Draft were held by the BLM. The date and locations of the two BLM public hearings were: August 27, 1991 in Palm Desert and August 28, 1991 in Desert Center. The County of Riverside Planning Commission held nine public hearings on the Draft in various locations throughout the County to gather public input related to the project.

The Notice of Availability on the Final EIS/EIR was published by the EPA on August 7, 1992, beginning the 30-day public review period which ended on September 7, 1992. Approximately 1,000 copies of the Final EIS/EIR were distributed to individuals, groups and agencies. In response to the Notice of Availability and the Notice of Realty Action, approximately 700 letters of protest and concern were received. Again, concern over groundwater quality was emphasized. Another strongly expressed concern related to potential degradation of air quality in the Coachella Valley and in Joshua Tree National Monument. Other issues such as traffic, noise, and biological impacts associated with the transportation of solid waste were raised as well as administrative, procedural and legal issues and concerns. All of the major issues raised during the comment period on the EIS/EIR and the Notice of Realty Action are addressed in Section 4.0 above.



The Riverside County Board of Supervisors, following three public hearings on the Final EIS/EIR conducted during the fall of 1992 in the City of Riverside, voted to approve the Eagle Mountain Landfill Project and certify their EIR on November 3, 1992.



EXHIBIT A

EAGLE MOUNTAIN LANDFILL PROJECT

The offered and selected lands included in the Eagle Mountain Landfill exchange are described as follows:

Offered Private Lands

San Bernardino Meridian  
Riverside County, California

- T. 5 S., R. 14 E.,  
Sec. 27:  $N\frac{1}{2}$ ,  $N\frac{1}{2}S\frac{1}{2}$
- T. 6 S., R. 14 E.,  
Sec. 16:  $W\frac{1}{2}W\frac{1}{2}$   
Sec. 21:  $W\frac{1}{2}$
- T. 7 S., R. 12 E.,  
Sec. 35: Described by metes and bounds  
Sec. 36:  $N\frac{1}{2}SW\frac{1}{4}$ ,  $SE\frac{1}{4}NW\frac{1}{4}$ ,  $S\frac{1}{2}NE\frac{1}{4}$
- T. 7 S., R. 13 E.,  
Sec. 31: Described by metes and bounds
- T. 7 S., R. 14 E.,  
Sec. 5: All
- T. 8 S., R. 11 E.,  
Sec. 13:  $NE\frac{1}{4}$   
Sec. 21:  $E\frac{1}{2}E\frac{1}{2}SE\frac{1}{4}$   
Sec. 23: Described by metes and bounds

Selected Public Lands

San Bernardino Meridian  
Riverside County, California

- T. 3 S., R. 14 E.  
Sec. 25: Lots 5 and 6,  $SW\frac{1}{4}$ ,  $W\frac{1}{2}SE\frac{1}{4}$   
Sec. 26:  $SW\frac{1}{4}$ ,  $SW\frac{1}{4}SE\frac{1}{4}$ ,  $E\frac{1}{2}SE\frac{1}{4}$   
Sec. 27: Lots 1 and 2,  $SE\frac{1}{4}$ ,  $N\frac{1}{2}SW\frac{1}{4}$   
Sec. 28: Lot 9  
Sec. 33: Lots 1, 2, 4, 6, 8 and 11,  
 $S\frac{1}{2}NE\frac{1}{4}$ ,  $E\frac{1}{2}NW\frac{1}{4}$ ,  $SE\frac{1}{4}$   
Sec. 34: Lots 1-7,  $SE\frac{1}{4}SE\frac{1}{4}$ ,  $W\frac{1}{2}SE\frac{1}{4}$ ,  $SW\frac{1}{4}$   
Sec. 35: Lots 1-4 and 9,  $NE\frac{1}{4}NW\frac{1}{4}$ ,  $N\frac{1}{2}NE\frac{1}{4}$   
Sec. 36: Lot 12

(Continued on Next Page)







- T. 3 S., R. 15 E.  
 Sec. 31: Lots 5, 10-14, 17-19
- T. 4 S., R. 14 E.,  
 Sec. 1: Lots 8-11, SW $\frac{1}{4}$ SE $\frac{1}{4}$ , E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ ,  
 E $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$   
 Sec. 2: Lots 7-9, S $\frac{1}{2}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ ,  
 W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$   
 Sec. 11: Lots 1-4  
 Sec. 12: Lots 1-4
- T. 4 S., R. 15 E.,  
 Sec. 6: Lots 4, 5, 8-11  
 Sec. 7: Lots 4-10, 12 and 13

Also: The Reversionary Interest of the United States in that certain 480 acre tract of land patented under Patent 1153422 pursuant to Private Law 790 enacted by the United States Congress on July 8, 1952.

Selected Public Lands Valuable for Aggregates

The following selected public lands are prospectively valuable for construction aggregates. A reservation of all minerals, in favor of the United States, will be included in the patent. If upon receipt of a plat showing areas where proposed surface use will preclude development of the reserved minerals, the United States shall reserve only a royalty interest in the area affected. The royalty interest is proffered to protect the interest of the United States should future mining and sale of these minerals occur.

San Bernardino Meridian  
 Riverside County, California

- T.3 S., R. 14 E.  
 Sec. 25: Lots 5 and 6, SW $\frac{1}{4}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$   
 Sec. 36: Lot 12
- T. 3 S., R. 15 E.  
 Sec. 31: Lots 5, 10-14, 17-19
- T. 4 S., R. 14 E.,  
 Sec. 1: Lots 8-11, SW $\frac{1}{4}$ SE $\frac{1}{4}$ , E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ ,  
 E $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$   
 Sec. 2: Lots 7-9, S $\frac{1}{2}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ ,  
 W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$   
 Sec. 11: Lots 1-4  
 Sec. 12: Lots 1-4
- T. 4 S., R. 15 E.,  
 Sec. 6: Lots 4, 5, 8-11  
 Sec. 7: Lots 4-10, 12 and 13







**EXHIBIT B**

**EAGLE MOUNTAIN LANDFILL PROJECT**

**MAP OF PROJECT AREA**

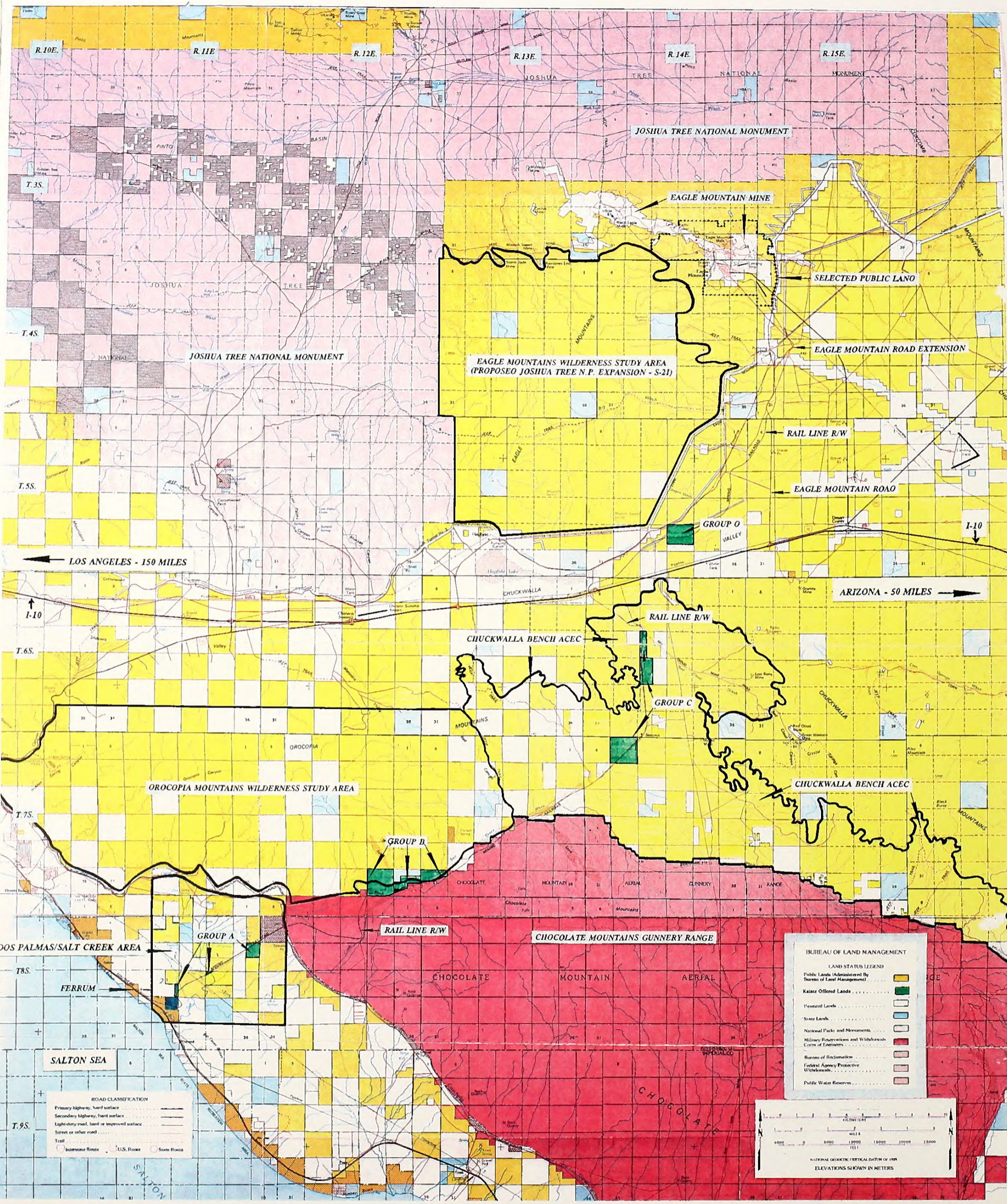






# EAGLE MOUNTAIN LANDFILL PROJECT

## LAND EXCHANGE & RIGHT-OF-WAY GRANTS









## EXHIBIT C

### EAGLE MOUNTAIN LANDFILL PROJECT

#### Conditions of Approval & Mitigation Reporting/Monitoring Program

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The Mitigation and Monitoring Program was developed by the BLM and the County of Riverside as joint lead agencies, and RECON Environmental Consultants, the U.S. Fish & Wildlife Service, the National Park Service, the California Department of Fish and Game, and other interested parties. It is designed to include all mitigation recommended in the Final EIS/EIR, arranged by issues as they are discussed in the Final EIS/EIR document (i.e., water quality, air quality, desert tortoise, etc.).

Codes, abbreviations, and acronyms used in the program are identified on page 3 of this exhibit.

The first column lists each potentially significant environmental effect identified in the EIS/EIR; and for each effect, the second column lists corresponding mitigation measures. The third column identifies the applicable documents, permit, or regulation. The "Checkpoint" heading is intended to identify the place in the activity under consideration where the monitoring or reporting of mitigation will occur, and by a coded entry, the action such as a field check or report that would be accomplished. "Monitor Period" indicates at what phase of the project the action would occur. The overall project includes operation of the landfill itself and a number of related off-site activities. The coded entry in the "Monitor Period" column indicates whether the entry applies to the landfill itself or another activity. "Report Frequency" lists whether reporting is intended to be done once, at regular periods, or triggered by an event.

The Mitigation and Monitoring Program is a cooperative effort. One or several agencies responsible for particular resources or services may have an obligation or interest in accomplishing mitigation. In some cases more than one agency may have a responsibility for tracking or monitoring a given measure. These agencies are listed in the next to the last column, and are the ones with the associated responsibility for accomplishing the measure. This column contains acronyms which are identified in the code list. The Local Enforcement Agency (LEA) is established by the California Code of Regulations specifically as a local agency with responsibility for tracking and enforcing the regulation of solid waste disposal. The Riverside County Department of Environmental Health is the LEA for this project. The coded entry in the last column in the program indicates the sanctions applied in the case of noncompliance with the mitigation measure.





EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 25) CONDITIONS OF APPROVAL  
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CONDITION OF:

AC/PO Authority to Construct/Permit to Operate  
 AER Air Emissions Regulations  
 BP Building Permit  
 EMTSP Eagle Mountain Township Specific Plan  
 GP Grading and Improvement Plans  
 MRF Contract of landfill operator with materials recovery facility/transfer stations  
 MSWFP Solid Waste Facilities Permits of material recovery facility/transfer stations  
 NA Not Applicable  
 NPDES National Pollutant Discharge Elimination System Permit  
 PP Plot Plan (Site Specific Plot Plan or Plot Plan)  
 S7 Section 7 Permit (U.S. Endangered Species Act)  
 SP Specific Plan  
 SPac Contract of landfill operator with Southern Pacific  
 SWFP Solid Waste Facilities Permit  
 WDR Waste Discharge Requirements

MONITOR/REPORT AGENCY:

APCD Air Pollution Control District  
 ARB Air Resources Board  
 CDFG California Department of Fish and Game  
 CHP California Highway Patrol  
 DMV California Department of Motor Vehicles  
 LEA Local Enforcement Agency  
 NPS National Park Service  
 RCBS Riverside County Board of Supervisors  
 RCDB&S Riverside County Department of Building and Safety  
 RCDEH Riverside County Department of Environmental Health  
 RDFD Riverside County Fire Department  
 RCFCDD Riverside County Flood Control District  
 RCPD Riverside County Planning Department  
 RCTD Riverside County Transportation Department  
 RWQCB Regional Water Quality Control Board  
 SBCM San Bernardino County Museum  
 SCAQMD South Coast Air Quality Management District  
 USEPA U.S. Environmental Protection Agency  
 USFWS U.S. Fish and Wildlife Service

CHECKPOINT:

I Inspection, plan or field check  
 P Payment  
 C Consultation  
 R Report

REPORT FREQUENCY:

a Once on completion  
 a1 On completion, each event  
 b On violation  
 c As required, needed, or conditioned  
 d Specified period  
 e At discretion of regulator

MONITORING PERIOD:

LA Preconstruction of landfill  
 LB Construction of landfill  
 LC Operation of landfill  
 LD Closure of landfill  
 LE Postclosure of landfill  
 LF As needed, required, or conditioned  
 PA Preconstruction of particular activity  
 PB Construction of particular activity  
 PC Operation of particular activity  
 PD Completion of particular activity  
 T Throughout project

SANCTIONS:

1 Withhold permit, certificate, or authority to proceed  
 2 Stop work order, violation notice, cease and desist order  
 3 Monetary

A. WATER QUALITY AND USE - Page 1 of 6

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potential for pollution of groundwater due to migration of leachate or landfill gas.	<p>a. The acceptance of hazardous waste is prohibited at this landfill. Leachate-causing material, such as free liquid and high-moisture waste, and hazardous waste material will be diverted from the landfill through a waste inspection program, established both at the landfill and at all waste processing facilities sending waste to this landfill, in order to minimize the pollution potential of these materials. All waste loads shall be screened at the respective facilities by trained personnel. Incoming waste will also be periodically checked by specialists with RCDEH. Identified hazardous waste will be collected, temporarily stored on-site in a special containment area provided by the operator for a period not to exceed 90 days, and later transported and disposed in accordance with State and Federal regulations. All hazardous materials waste inspection programs shall be approved by the RCDEH and will be subject to periodic inspection to determine compliance. Costs associated with these activities shall be borne by the operator.</p> <p>b. A composite liner, composed of a high-density polyethylene (HDPE) flexible geomembrane a minimum thickness of 80 mil, placed over two (2') feet of soil with a maximum permeability of 10<sup>-7</sup> cm/sec or other technologically-superior liner shall be installed below all refuse deposits and including side slopes. A protective geotextile filter fabric shall be placed above the flexible geomembrane liner.</p>	SWFP, MRF, PP	1			1			LEA, RCDEH, RWQCB	2	
			1	1	1			LB, PC	6	LEA, RCDEH, RWQCB	1, 2



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 251) CONDITIONS OF APPROVAL  
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A. WATER QUALITY AND USE - Page 2 of 6

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	e. A leachate collection and removal system will be installed above the bottom liner using a blanket drainage system and protected by an additional layer of geotextile fabric and a minimum of two feet of compacted soil cover to allow removal of any accumulated leachate from the landfill.	WDR,SWFP, PP	i	i	i		LB, PB	e	LEA, RCDEH, RWQCB	1,2	
	d. A drainage control system will be designed and constructed to divert surface water flow from adjacent areas around the landfill area to prevent run-on to the landfill.	WDR,SWFP, PP	i	i	i		LA, LB, LC	e	LEA, RCDEH, RWQCB	1,2	
	e. Final landfill cover shall be constructed in accordance with EPA, Subtitle D, RCRA Regulations, and other applicable State or Federal Regulations and shall consist of a minimum two (2') foot thick compacted soil foundation layer, a minimum 18 (18") inch thick soil layer with a maximum permeability of 1 x 10 <sup>-7</sup> cm/sec, and a minimum one (1') foot thick vegetative (erosion) cover or design which is technologically superior. The final grade shall have a minimum three (3%) percent slope.	SWFP, WDR, PP	i	i	i		LD, LE	d	LEA, RCDEH, RWQCB	1,2	
	f. A minimum 12-inch-thick compacted intermediate soil cover designed to minimize the percolation of rain water into refuse shall be installed over landfill areas expected to remain inactive for more than six (6) months after refuse placements.	SWFP, WDR, PP		i	i	i	LC	e	LEA, RCDEH, RWQCB	2	
	g. A landfill gas emissions and migration control system shall be installed to control all gas emissions.	SWFP, WDR, AC/RO, PP	i	i	i		LC	e	LEA, RCDEH, RWQCB, SCAQMD	1,2	



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 25) CONDITIONS OF APPROVAL  
& MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST  
A. WATER QUALITY AND USE - Page 3 of 6

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	<p>h. The foundation and vadose zone monitoring layer shall be placed a minimum of fifty (50) feet above the highest historically known groundwater level. Landfilling operations shall be phased to avoid disposal in the deepest part of the East Pit, hereafter described as Planning Area No. 1b), for a minimum of twenty-five (25) years after the start of landfilling operations in order to record potential future higher groundwater levels.</p> <p>Waste shall not be deposited within Planning Area No. 1b without review by the Planning Commission and approved by the County Board of Supervisors. A permit revision from the LEA will be required for an expansion into Planning Area 1b.</p> <p>These approvals will require further environmental review, including submission of slope stability analysis and at a minimum, ground water investigations demonstrating the feasibility of landfilling in this area.</p> <p>The operator should anticipate that prior to landfilling the Planning Area No. 1b, the bottom elevation shall be raised by filling with overburden or coarse tailing material to a level of at least 50 feet above the highest recorded ponding level.</p>	WDR, SWFP, PP	1					al	LEA, RCDEH, RWQCB	1,2	
	<p>i. A system of groundwater detection and monitoring wells consisting of at least six (6) down gradient wells and one (1) up gradient well shall be installed prior to initial landfill operations and monitored near the landfill margin and down gradient, in accordance with state and federal regulatory requirements.</p>	WDR, SWFP, PP	1					d,s	LEA, RCDEH, RWQCB	2	



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
2. Potential for windblown litter to pollute surface waters off-site.	j. A foundation and vadose zone monitoring layer an average of three (3') feet thick containing a lysimeter monitoring system will be installed to monitor the unsaturated zone beneath the landfill containment system.	WDR,SWFP, PP	i	i	i			d,e	LEA, RCDEH, RWQCB	2	
	e. Container-transported waste will be compacted to minimize the escape of refuse.	SWFP,MRF			i			•	LEA, RCDEH, RWQCB	2	
	b. Closed containers will be used to transport waste to the working face of the landfill.	SWFP			i			•	LEA, RCDEH	2	
	c. Waste will be compacted into the working face of the landfill as soon as practicable and covered promptly.	SWFP				i		•	LEA, RCDEH	2	
	d. A minimum of six (6") inches of compacted soil shall be used to cover refuse cells as each portion is completed, and all refuse shall be covered at the end of each working day.	SWFP				i		•	LEA, RCDEH	2	
	e. A daily litter pickup and disposal program shall be implemented at the landfill area and in adjacent off-site areas.	SWFP,SP					i	•	LEA, RCDEH, RCPD	2	
	f. Litter control fencing will be installed around all landfill and waste-handling areas. A standard of zero escape of litter from the permitted landfill area shall be established.	SWFP,SP,PP		i			i	•	LEA, RCDEH, RCPD	1,2	
	g. Measures to control fugitive dust shall be implemented, that may include, but are not limited to, paving of haul roads, water or chemical treatment of dirt roads, duststorm watch, and cessation of all activities when instantaneous or average wind speeds exceed limits set by AQMD rules.	SWFP, AC/PO		i			i	•	LEA, RCDEH, APCD	2	
h. Truck and container wash water will be treated to remove pollutants and the water shall be recycled.	SWFP, WDR,NPDES		i			i	•	LEA, RCDEH, RWQCB	2		



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL  
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Final: BOS: 11/3/92

A. WATER QUALITY AND USE - Page 5 of 6

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
	<p>i. A drainage control system will be installed to divert contaminated surface flows emanating from the active landfill area away from ponded water in the East Pit.</p>	SWFP,WDR, NPDES,PP	i	i			i	LEA, RCDEH, RWQCB, RCFCFCD, RCDB&S	2	
3. Potential for storm water to come into contact with refuse and pollute groundwater surface waters, including the Colorado River Aqueduct.	<p>a. Storm water from refuse disposal and handling areas will be collected and sent to on-site detention and evaporation basins or, if storm water has contacted refuse, it will be treated as leachate.</p>	SWFP,WDR, NPDES,PP	i	i			i	LEA, RCDEH, RWQCB, RCFCFCD, RCDB&S	2	
4. Wastewater collected at the landfill site and treated at the existing Eagle Mountain treatment plant could contaminate treatment plant discharge.	<p>a. Incoming wastewater and washwater at the treatment plant shall be pretreated to remove oils, greases, and organics, to lower biological oxygen demand.</p>	SWFP,WDR, NPDES	i	i			i	LEA, RCDEH, RWQCB	2	
5. Potential for runoff on completed landfill to permeate landfill mass and produce leachate.	<p>a. A low-permeability final cover, as specified in Mitigation Measure A.1.e., shall be placed on completed side slopes with gradients no steeper than three to one and on the top of the landfill with gradients no less than three percent.</p> <p>b. The top layer of the final cover will consist of vegetative soil to assure revegetation for erosion resistance.</p> <p>c. A system of groundwater extraction and monitoring wells shall be installed, in accordance with Riverside County Ordinance No. 682, and EPA, Subtitle D, RCRA Regulations and/or Article 5, Chapter 15, of the California Water Code.</p>	SWFP,WDR	i	i			i	LEA, RCDEH, RWQCB	2	
		SWFP,WDR	i	i			i	LEA, RCDEH, RWQCB	2	



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
6. Potential for water quality degradation from the landfill after its closure.	e. Groundwater monitoring, and any corrective actions on groundwater contamination, gas collection and control, and maintenance of landscaping and drainage shall be continued for 30 years, or as additionally required by State or Federal regulations after final closure, with a certified availability of funds for the above postclosure activities defined prior to initiation of each discreet landfill unit.	SWFP, AC/PO, WDR	i	i				LB	•	LEA, RCDEH, RWQCB, AFCD	2
7. Potential for ground water overdraft.	a. The applicant shall install low-volume toilets, faucets, and shower heads in all future buildings, and retrofit all existing toilets, faucets and shower heads in all buildings within the project boundary.	SP	i	i				T	•	RCDB&S	1
	b. The applicant shall prepare a ground water overdraft status report on the Chuckwalla Basin every 5 years and submit the report to the County Board of Supervisors, summarizing ground water trends and revealing new and ongoing measures to minimize the impact.	SP	i				r	T	d	RCBS	2
	c. Truck and container wash water will be treated to remove pollutants and the water shall be recycled. (see A.2.h.)	SWFP, WDR, NPDES	i	i				T	•	LEA, RCDEH, RWQCB	2
	d. Landfill liner construction during evening hours in the summer months shall be encouraged to minimize moisture evaporation within the low-permeability clay-like soil layer.	SWFP, WDR, PP	i				i	T	•	LEA, RCDEH, RCPD, RWQCB	2



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance	
			Plans	Installed	Completion	Per Event	Discretion					
1. Potential impact to workers from exposure to household hazardous materials in the waste stream.	a. Through contracts with the landfill operator, all transfer station and material recovery facility (MRF) operators using the landfill will be required to develop a plan of operations including a waste inspection program that allows for the safe detection and removal of hazardous waste materials.	PP,MRF, MSWFP	r				i		PA,PC	•	LEA,RCDEH	2
	b. A radioactivity detection device shall be employed at the landfill site to detect the presence of radioactive materials, which will be removed from the waste stream, stored, and transported to a safe disposal site according to applicable regulations.	SWFP,PP		i		r			LC	•	LEA,RCDEH	2
	c. All local waste delivered to the landfill shall be screened for the presence of hazardous materials, liquid waste, white waste, infectious waste, designated waste, special waste, sewage and water treatment sludge, and incinerator ash at an on-site inspection station.	SWFP,PP		i					LC	•	LEA,RCDEH	2
	d. All incoming waste shall be subject to regulatory spot checks for hazardous materials.	SWFP,PP		i					LC	•	LEA,RCDEH	2
	e. The landfill operator shall develop and implement safety-enhanced operational procedures that allow for the safe handling of hazardous waste by trained personnel.	SWFP,PP		r					LC	•	LEA,RCDEH	1,2
2. Potential worker safety and explosion impacts from the migration of landfill gases into work areas and enclosed spaces.	a. A landfill gas collection and removal system will be installed at the landfill, in accordance with plans and specifications approved by the SCAQMD.	SWFP, AC/PO,PP	i					LA,LC,LE	•	LEA, RCDEH, SCAQMD	1,2	
	b. A composite liner including a high-density polyethylene flexible geomembrane to restrict downward and lateral movement of landfill gases will be installed on the bottom and sides of the landfill.	SWFP,PP	i						LB,LC	•	LEA, RCDEH	2



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B. PUBLIC HEALTH AND SAFETY - Page 2 of 5

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	c. All new enclosed buildings constructed in the specific plan area within one mile of the ultimate landfill footprint shall have an impermeable membrane barrier below the foundation slab.	PP,BP	i	i				PA,PB	al,o	RCPD, RCDB&S	i
	d. All new enclosed buildings in the specific plan area within one mile of the ultimate landfill footprint shall have active or passive subfloor ventilation.	PP,BP	i	i				LC,PA,PB	al,o	RCPD, RCDB&S	i
	e. All new enclosed buildings constructed in the specific plan area within one mile of the ultimate landfill footprint shall have special explosion-proof seals for all utility conduits entering from below grade.	PP,BP	i	i				LC,PA,PB	al,o	RCPD, RCDB&S	i
	f. All new enclosed buildings constructed in the specific plan area within one mile of the ultimate landfill footprint shall have monitoring probes in the subfloor environment to verify system effectiveness.	PP,BP	i	i				LC,PA,PB	al,o	RCPD, RCDB&S	i
	g. Permanent subsurface LFG monitoring wells or detectors/alarms shall be placed near any existing and/or new enclosed structures within one mile of the ultimate landfill footprint when directed to do so by the RCDEH. The wells will be constructed to allow monitoring to a depth of 20 feet below grade.	SP,PP, SWFP	i	i				PA,LC, LE	•	RCDB&S, LEA, RCDEH	1,2
	a. Wells to monitor soils to a depth of 20 feet will be placed on about 1,000-foot centers along the northern town perimeter.	SP,SWFP, PP,AC/PO	i	i				LC,LE, PA,PB	•	LEA, RCDED, RCPD, SCAQMD	1,2
3. Potential impacts from landfill gas migration on structures in the town of Eagle Mountain.	b. An on-site emergency response plan will be developed by the landfill operator and submitted to RCPD, LEA and RCDFD. This plan will include adequate staffing and equipment.	SP	i	i			LC,LE	•	LEA, RCDEH, RCPD, RCDFD	2	



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B. PUBLIC HEALTH AND SAFETY - Page 3 of 5

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
4. Potential for night-of-way fires along the railroad.	a. A vegetation/weed abatement program for the Eagle Mountain rail line from Ferrum Junction to the landfill site will be implemented, including regular inspection, selective thinning or removal of vegetation, and use of a baillast regulator instead of a herbicide.	S7	i			i				USFWS	2
5. Potential for fires in the refuse load.	a. Incoming refuse will be screened and all burning or smoldering material will be removed or extinguished.	MRF, MSWFP, SWFP		i						LEA,RCDEH	2
	b. Transport container waste will be compacted prior to loading to reduce air spaces capable of supporting combustion.	MRF, MSWFP		i						LEA,RCDEH	2
6. Potential for subsurface fires at the landfill due to presence of combustible materials.	a. A landfill gas collection and control system will be installed and operated at the landfill.	SWFP, WDR, AC/PO,PP	i	i						LEA, RCDEH, RWQCB, SCQAMD	1,2
	b. An emergency response plan for the landfill will be developed and implemented.	PP,SWFP			i					RCFD,LEA, RCDEH,	1
7. Potential for surface fires at the landfill.	a. An emergency response plan for the landfill will be developed and implemented.	PP,SWFP	i		i					RCFD,LEA, RCDEH	1
	b. The landfill operator will be required to contribute on a fair-share basis to necessary local fire service improvements.	SP	i	P						RCFD	1,2
8. Potential increase in vectors for diseases.	a. Waste will be compacted into the working face of the landfill not more than one hour after it arrives at the working face.	SWFP,PP						i		LEA,RCDEH	2
	b. A minimum of six inches of compacted soil shall be used to cover refuse cells as it is placed and shall completely cover refuse at the end of each working day.	SWFP,PP						i		LEA,RCDEH	2
	c. The raven control program shall be implemented at the landfill, as described in the mitigation measure for biological impacts in this table.	S7						c,r		USFWS, CDFG	2



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B. PUBLIC HEALTH AND SAFETY - Page 4 of 5

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	d. A bird control program, in addition to the raven control program, to address other nuisance birds, ie. sea gulls, shall be implemented at the landfill site, in accordance with Title 14.	SWFP,PP	i					T	•	LEA, RCDEH, RCFD	1,2
9. Potential secondary impacts for waste handling workers to be exposed to small amounts of hazardous wastes at waste transfer stations and materials recovery facilities.	a. Contracts for transfer stations and materials recovery facilities to use the landfill will require inspection and screening of the waste stream, with safe-practice removal, handling, storage, and disposal of any hazardous materials.	MRF, MSWFP,PP						PC	•	LEA,RCDEH	2
10. Potential for exposing landfill workers to accident or harm from heavy equipment operations, noise, odors, and dust.	a. All employees will be trained in a standard set of safe operating procedures and provided a written manual. b. On-site inspections will be conducted on a regular basis to ensure safe operating conditions.	SWFP,PP						PC	•	LEA,RCDEH	2
11. Potential for landfill workers to be exposed to LFG condensate due to accidental spills.	a. Training of workers in standard safety procedures will include the use of protective equipment, detailed job and operating descriptions, identification of safety equipment and procedures, training, and emergency response procedures and provided a written manual.	SWFP,PP						PC	•	LEA,RCDEH	2
12. Potential for workers to be exposed to landfill gas.	a. A landfill gas collection and removal system will be installed and applicable design features will be employed for landfill buildings as described earlier in this section.	SWFP,PP	i	i				LC,LD	•	LEA, RCDEH, RWQCB, SCAQMD	2
13. Potential for rail and truck accidents to spill waste.	a. Adequate staff will be maintained on-site to provide clean-up support to Southern Pacific workers and local emergency response agencies. b. Local and state emergency plans will be required by existing statutes to include appropriate responses to accidents involving transported wastes.	SP,SWFP	i					LC	•	LEA, RCDEH, RCFD	2
	exist. statutes							T	•	RCFD,RCFD	2



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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
14. Potential for delays in rail transport system due to catastrophic events or workers strikes.	a. Containers will be designed to be transported by truck as well as rail to allow alternate means of transportation to Eagle Mountain or an alternate landfill site.	SWFP,PP	i	i				LEA,RCDEH	1	
15. Potential for public safety.	a. If the transportation of vagrants to the site via rail becomes a problem, the operator shall take steps at appropriate rail terminals to prevent vagrants from boarding the train and unloading at the site. An annual report shall be provided to the Citizen Oversight Committee together with the actions taken for a period of 5 years, and as often thereafter as requested by the Committee.	SP				r		RCPD	2	



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL  
& MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST  
C. TRAFFIC AND TRANSPORTATION - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potential conflict between proposed and ongoing railroad operations.	a. Refuse trains will be scheduled with Southern Pacific on a contractual basis to prevent any conflict with ongoing rail operations.	SPac,SP	i					i	LC	RCPD	2
	b. Train operations will be scheduled during evening, nighttime, and early morning hours to avoid peak-hour vehicle traffic.	SPac,SP	i					i	LC	RCPD	2
2. Potential safety hazard at the proposed railroad crossing of Kaiser Road.	a. Flashing lights will be installed at the railroad crossing of Kaiser Road.	SP	i	i					LB	RCPD, RCDB&S, RCTD	1,2
	b. Train operations will be scheduled during evening, nighttime, and early morning hours to avoid peak-hour vehicle traffic.	SPac,SP	i					i	LC	RCPD	2
3. Degradation of street surfaces could occur due to the weight of the refuse laden trucks.	a. Maintenance of Eagle Mountain Road will be funded by County revenue generated by the project on a fair share basis.	SP	i				P		T	RCTD	1,2
	a. Two-way stop signs will be installed at the new Eagle Mountain Road extension/Kaiser Road intersection.	SP	i	i					T	RCPD, RCDB&S	1,2
5. Concerns of Coachella Valley residents over increased traffic due to trucks hauling waste to the landfill.	a. The limit on trucks hauling waste from all sources to the landfill will be 100 roundtrips per day.	SP	i					r	LC	RCPD	1,2
	b. Three years after start-up of the landfill, there will be no truck-hauling of waste from outside the desert communities.	SP	i					r	LC	RCPD	1,2
	c. The limit on trucks hauling waste from the desert communities to the landfill will be 100 per day throughout the life of the project.	SP	i					r	LC	RCPD	1,2
	d. There will be no limit on the number of trucks employed during emergency conditions which interrupt railroad operations.	SP	i					r	LC	RCPD	1,2



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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Supervision of air quality monitoring and reporting program.	a. A qualified consulting air quality specialist approved by the County will be retained by the landfill operator to supervise all aspects of the air quality mitigation monitoring and reporting program.	SP	i			r,c	r,c	T	e	RCPD, BLM, NPS	1,2
	b. The qualified air quality specialist will periodically file a report on the status of all air quality mitigation activity with the County of Riverside and the SCAQMD.	SP	i			r		T	d	RCPD, SCAQMD, NPS	1,2
2. Emission of pollutants from equipment with internal combustion engines during site preparation and initial construction.	a. Operational measures to control emissions will be implemented, such as limiting idling time for engines and conducting regular preventative maintenance (MC-1).	SP		i			r	LB,LC	e	RCPD, SCAQMD	2
	b. All diesel engines will use low sulfur and low aromatic fuel meeting Calif. standards for on-highway motor vehicles (MC-2).	SP		i		r		LB,LC	e	RCPD, SCAQMD	2
	c. The feasibility of using heavy-duty diesel equipment with engines that are certified by the CARB for use in on-highway trucks will be evaluated prior to initial construction, and such equipment will be used, if feasible (MC-3).	SP		i			r	LB,LC	e	RCPD, SCAQMD	2
	d. Turbocharged and intercooled diesel engines with retarded injection timing will be used when available (MC-4).	SP		i			r	LB,LC	e	RCPD, SCAQMD	2
	e. An electric version of the temporary asphalt plant will be used, if feasible. If the applicant concludes infeasibility of installing electric equipment, a determination by the County Planning Director shall be made, after consultation with the applicant and other appropriate agency, and reasonable consideration of the availability of such technology in the commercial marketplace and the cost thereof. (MC-5).	SP		i				LB,LC	a1	RCPD, SCAQMD	2

Parent/basis notation corresponds to FEIR/EIS air quality technical report list of mitigation measures.



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance	
			Plans	Installed	Completion	Per Event	Discretion				
	f. An electric version of the temporary concrete batch plant will be used, if feasible. If the applicant concludes infeasibility of installing electrified equipment, a determination by the County Planning Director shall be made, after consultation with the applicant and other appropriate agency, and reasonable consideration of the availability of such technology in the commercial marketplace and the cost thereof. (MC-6).	SP, AER	i					LB, LC	ai	RCPD, SCAQMD	2
3. Fugitive dust emissions during site preparation, landfill construction, and operation.	a. Non-toxic chemical dust suppressants and/or water will be applied to all unpaved roads and parking lot surfaces during construction operations (MC-7).	SP, AER	i					LB	•	RCPD, SCAQMD	2
	b. All trucks using off-site paved haul roads will have covered loads or maintain a two-foot freeboard height (MC-8).	SP	i					LB, LC	•	RCPD, SCAQMD	2
	c. Soil will be prewatered prior to excavation (MC-9).	SP, AER	i					LB	•	RCPD, SCAQMD	2
	d. Spray nozzles or filters will be used at all open transfer points at the temporary asphalt plant (MC-10).	AC/PO	i					LB, LC	•	SCAQMD	2
	e. Spray nozzles or filters will be used at all open transfer points at the temporary concrete plant (MC-11).	AC/PO	i					LB, LC	•	SCAQMD	3
	f. Inactive areas disturbed by construction will be compacted and chemically treated or protected with a fabric cover (MC-12).	SP, AER	i		i			LB, LC	•	SCAQMD, RCPD	2
	g. Paved haul roads used during construction will be mechanically swept to remove the buildup of loose material (MC-13).	SP, AER				i		LB, LC	•	SCAQMD, RCPD	2
	h. All excavation, grading, and soil removal operations during the construction period will comply with SCAQMD Rule 403 (MC-14).	AER		i				LB	•	SCAQMD	2

Parabolic notation corresponds to FEIR/EIS air quality technical report list of mitigation measures.



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
4. Truck engines and diesel locomotive exhausts will produce emissions during transport of solid waste to the landfill.	i. Blowsand areas adjacent to paved haul roads will be chemically stabilized (MC-15).	SP	i					LB	•	RCPD	2
	j. Two permanent PM10 monitoring stations and one gaseous pollutant monitoring station will be installed either pursuant to provisions in SCAQMD Rule 403 or at locations chosen in consultation with NPS and SCAQMD.	AER,SP	i	i				T	•	RCPD, SCAQMD	2
	a. Waste haul trucks will comply with all applicable California motor vehicle pollution control regulations (AQ-1).	AER	i					LC	•	ARB,DMV, CHP	1,2,3
	b. Waste haul trucks will use diesel fuel which complies with all applicable California Air Resources Board (CARB) regulations for on-highway diesel motor vehicle fuel (AQ-2).	AER	i					LC	•	ARB	2,3
	c. Waste haul trucks will be subject to random checks for excessive smoke (AQ-3).	AER					i	LC	•	SCAQMD, CHP	2,3
	d. Waste haul trucks will be subject to periodic checks for excessive smoke and emissions control system tampering (AQ-4).	AER	i				i	LC	•	ARB,CHP	2,3
	e. Waste haul trucks will be low emission vehicles as defined in the CARB regulations (AQ-5)	AER	i					LC	•	SCAQMD, ARB,DMV	1,2,3
	f. Diesel locomotives on the Eagle Mountain railway will be shut down when the engines are not needed for an hour or more and will receive regular preventative maintenance, in accordance with manufacturers' recommendations (AQ-6).	SP	i					LC	•	RCPD SCAQMD	2
g. Diesel locomotives on the Eagle Mountain railway shall be fueled with diesel fuel which meets the requirements of CARB for on-highway motor vehicle diesel fuel (AQ-7).	SP,AER	i					LC	•	RCPD, SCAQMD	2	

Parametric notation corresponds to FEIR/EIS air quality technical report list of mitigation measures.



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
	<p>h. Diesel locomotive engines purchased for use on the Eagle Mountain railway shall comply with all applicable state and federal emissions control requirements (AQ-8).</p> <p>i. Two (2) Feasibility Studies within six (6) months of certification of the EIR/EIS will be initiated and completed within an additional twenty-four (24) months to evaluate the potential for use of selective catalytic reduction (SCR) or natural gas fuels to reduce locomotive NOx emissions to approximately 2 grams per brakehorsepower-hour at maximum rated load.</p> <p>Either SCR or natural gas fuel option shall be selected by the County Board of Supervisors after input and advice from SCAQMD and the landfill operator within six months of receipt of the feasibility study for final engineering and installation on one locomotive engine operating on the E.M. railway. The County's preference for the use of natural gas due to lower air emissions will be considered in this decision.</p> <p>The low emission locomotive demonstration program shall be operated for up to four years upon commencement of landfilling operations. A written report shall be provided by the operator to the Board of Supervisors which describes the status and the effectiveness of the demonstration program.</p>	AER		i			LC	al	USEPA, ARB	1,2
		SP	i,r	i			LC	al	RCPD SCAQMD	2



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	<p>Upon achievement of the demonstration program objectives and at least a fifty percent (50%) reduction in NOx emissions from uncontrolled levels, the demonstration engine shall be routinely operated with the installed low emission design. The selected low emission system shall be installed on a second diesel locomotive engine within 12 months of the completion of the demonstration phase and system installations shall continue at 12 month intervals until all E.M. railway locomotives have been equipped with the low emission control system.</p> <p>If the demonstration program is unsuccessful or not feasible, alternatively, the NOx emissions from the diesel locomotives used on the E.M. railway shall not exceed 6 gm/bhp-hr, or levels allowed by the CARB, whichever is more stringent (AQ-9).</p>	SP	i,r	i				LC	al	RCPD, SCAQMD	2
	<p>k. If upon completion of the initial cost effectiveness study of the electrification of the Eagle Mountain rail line, it is determined such electrification is infeasible, subsequent studies shall be prepared every 10 years thereafter. However, if, upon completion of any of the subsequent studies, it is determined that the electrification of the Eagle Mountain rail line is feasible, the applicant shall electrify said rail line within 5 years after approval of the environmental review for its installation.</p>	SP				i		T	d	RCPD, SCAQMD	2

Parenthetical notation corresponds to FEIR/EIS air quality technical report list of mitigation measures.



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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance		
			Plans	Installed	Completion	Per Event					Discretion	
5. Air pollutants will be generated by the exhausts of heavy mobile and stationary equipment used in handling solid waste and materials.	a. Engines will be shut down if equipment will be idle for 15 minutes or longer (AQ-11).	SP	i						•	LC	RCPD, LEA, RCDEH, SCAQMD	1,2
	b. Machines and operators will be scheduled to match the anticipated waste volumes, and the number of container haulers will be matched to the container hauling capability (AQ-11).	SP	i						•	LC	RCPD, SCAQMD	2
	c. Diesel-fueled heavy mobile and stationary equipment will be maintained in accordance with the engine manufacturers recommendations (AQ-11).	SP	i						•	LC	RCPD, SCAQMD	2
	d. A record will be maintained of all visual instrument checks for excessive smoke, as well as related repairs (AQ-11).	SP	i						•	LC	RCPD, SCAQMD	2
	e. All diesel-fueled equipment at the site will use diesel fuel that meets the requirements of the CARB for on-highway motor vehicle diesel fuel (AQ-12).	SP	i						•	LC	RCPD, SCAQMD	2
	f. The feasibility of purchasing equipment with engines certified by the CARB for use in on-highway trucks will be evaluated in implemented, if feasible (AQ-13).	SP	i						•	LC	RCPD, SCAQMD	2
	g. If there are no suitable on-highway equivalent engines, turbocharged and intercooled engines for any diesel-fueled landfill equipment will be purchased and maintained with retarded injection timing (AQ-14).	SP	i						•	LC	RCPD, SCAQMD	2
	h. All landfill equipment will comply with all applicable federal and state emission control standards (AQ-15).	AER	i						•	LC	USEPA, ARB	2

Parenthetical notation corresponds to FEIR/EIS air quality technical report list of mitigation measures.



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 253) CONDITIONS OF APPROVAL  
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Final: BOS: 11/3/92

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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non- Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	<p>I. Wherever available and feasible, electric versions of landfill equipment, including overhead cranes, crushers, conveyors, and pugmills will be used. Where not available, alternative fuel technology will be used depending on air-permitting standards. If the applicant concludes infeasibility of installing electrified equipment, a determination by the County Planning Director shall be made, after consultation with the applicant and other appropriate agency, and reasonable consideration of the availability of such technology in the commercial marketplace and the cost thereof. (AQ-16).</p>	SP, AC/PO	I	I			LC	.	RCPD, SCAQMD	1,2	
	<p>J. A study covering both economic and technical aspects shall be prepared every 10 years for the potential electrification of all types of on-site mobile and stationary equipment. If it is determined that the electrification of any of the equipment is feasible, the applicant shall electrify said equipment within three (3) years. If the applicant concludes infeasibility of installing electrified equipment, a determination by the County Planning Director shall be made, after consultation with the applicant and other appropriate agency, and reasonable consideration of the availability of such technology in the commercial marketplace and the cost thereof.</p>	SP					T	d	RCPD	2	
6. Potential emissions of air pollutants due to landfill gases.	<p>a. Collection and destruction of landfill gas is required by AQMD rules. When the landfill gas generation rate exceeds five million (5,000,000) cubic feet per day (MCFD), an analysis of the technical and economic feasibility of recovering energy from the flared landfill gas will be conducted (AQ-17).</p>	SP, AC/PO	i	i			LC, LB	e	RCPD, SCAQMD, USEPA	1,2	

Parenthetical notation corresponds to FEIR/EIS air quality technical report list of mitigation measures.



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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance	
			Plans	Installed	Completion	Per Event					Discretion
	<p>b. If the analysis indicates that energy recovery is feasible, energy recovery facilities shall be installed and operating before the landfill gas generation rate exceeds 10 MCFD (AQ-17).</p> <p>c. If the analysis indicates that energy recovery is not feasible and the landfill gas generation rate exceeds eight (8) MCFD, an oxidation catalyst system will be retrofitted to the flares which is capable of achieving at least an eighty (80%) percent reduction in carbon dioxide emissions and a fifty (50%) percent reduction in non-methane hydrocarbon emissions before the landfill gas generation rate exceeds ten (10) MCFD (AQ-17).</p>	SP,AC/PO	i	i			i	LC,LE	•	RCPD, SCAQMD, USEPA	1,2
	<p>d. If an energy recovery system is not feasible and no oxidation catalyst system is commercially available before the landfill gas generation rate exceeds 10 MCFD, permit applications will be submitted to the air pollution control agencies reflecting the higher carbon monoxide and non-methane hydrocarbon emission rates from the flares (AQ-17).</p> <p>e. If an energy recovery facility is not constructed and the landfill gas generation rate exceeds forty-five (45) MCFD, a urea injection system (or equivalent) capable of achieving at least a thirty (30%) percent reduction in oxides of nitrogen emissions will be retrofitted before the landfill gas generation rate exceeds 50 MCFD (AQ-17).</p>	AC/PO	i	i			i	LC,LE	•	SCAQMD, USEPA	1
	<p>f. Water will be applied as a dust suppressant to all unpaved road and staging area surfaces used temporarily (30 days or less) during landfill operations (AQ-18).</p>	AER,SP	i	i			i	LC	•	RCPD, SCAQMD	2

Parentetic notation corresponds to FEIR/EIS air quality technical report list of mitigation measures.



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
	b. Chemical dust suppressants will be applied over a base of compacted coarse tailings on all unpaved road surfaces used more than 30 days, but periodically reconstructed or relocated (AQ-19).	AER,SP	i					LC	•	RCPD, SCAQMD	2
	c. All permanent on-site roads which are to be used for periods of five (5) years or more will be paved and periodically cleaned with mechanical sweepers (AQ-20).	AER,SP,PP	i	i				LC	•	RCPD, SCAQMD	2
	d. Tailing piles will be prewashed prior to excavation (AQ-21).	AER,SP	i					LC	•	RCPD, SCAQMD	2
	e. Water or chemical dust suppressants will be applied as a dust suppressant prior to clearing material from pit benches, excavating landfill gas collection ditches, reconstructing transitional roads, and any other operations which could result in dust emissions visible from locations outside the project boundary (AQ-22).	AER,SP	i					LC	•	RCPD, SCAQMD	2
	f. All haul trucks will pass through on-site wheel-washing stations prior to leaving the site.	SP	i					LC	•	RCPD, SCAQMD	2

Parenthetical notation corresponds to FEIR/EIS air quality technical report list of mitigation measures.



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
1. Landfilling would render some existing iron ore reserves unrecoverable.	a. Landfill operations will be phased to assure that the iron ore resources most feasible to mine are impacted last to allow for recovery, if mining of the minerals is economically justified.	SP, SWFP	i						RCPD, LEA, RCDEH	1,2
	b. Landfill truck traffic will be restricted to Eagle Mountain Road and Eagle Mountain Road Extension only.	SP	i			i			RCPD, LEA, RCDEH	2
	c. All landfill structures will be set back a minimum of twenty-five (25') feet from the project boundary.	SP, PP, BP	i	i					RCPD, RCDB&S	1,2
2. Potential incompatibility with existing residential and recreational uses surrounding the landfill.	c. All landfill structures will be limited to a maximum height of 60 feet.	SP, PP, BP	i	i					RCPD, RCDB&S	1,2
	d. The base of the landfill be at least one half-mile away from the nearest residences.	SP, PP	i	i					RCPD, LEA, RCDEH	1,2
	e. The landfill will operate under a requirement to employ the "Best Available Control Technology" to control fugitive dust, including visible dust, under South Coast Air Quality Management District rules.	AC/PO	i	i			i		SCAQMD	1,2
3. Inconsistency of proposed landfill operations with the existing General Plan land use designation and zoning.	f. The appearance of the later phases of the landfill will be designed to blend with nearby areas by revegetation and control of color, tone, and texture of the final cover.	SP	i						RCPD	1,2
	a. Approval of a County of Riverside General Plan Amendment and Rezone will be required for project implementation.	Project Approval			i				RCPD	i
4. Conflict between proposed use and the current BLM land classification.	a. Approval of a land exchange between BLM and the project proponent that would divest the BLM of reversionary interest in the project site will be required for project implementation.	Project Approval			i				RCPD	i



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
5. Potential incompatibility of proposed transfer stations with existing or surrounding uses.	a. Siting of all transfer stations will require approval of local jurisdictions, including environmental review under CEQA.	•	•	•	•	•	•	•	•	



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL  
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F. SURFACE DRAINAGE/FLOODING - Page 1 of 3

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potential for increased leachate and adverse effect on groundwater if storm water infiltrates the landfill.	a. A temporary drainage ditch will be constructed around the up-slope perimeter of each working area of the landfill to divert storm water flows around and away from the fill area as filling occurs.	SWFP, WDR, PP	i	i					LEA, RCDEH, RWQCB	2	
	b. As each area is filled, it shall be capped with a low-permeability soil cap. Capped areas will have side slopes with an average steepness of 3:1 with intervening benches. Bench drains shall be constructed to discharge surface runoff into perimeter drains north and south of the landfill.	SWFP, PP		i					LEA, RCDEH	2	
	c. All drainage facilities within the waste management unit will be sized to handle runoff from a storm of 100-year frequency and 3-hour duration and a 500-year frequency will be adopted for review of channel freeboard design.	SWFP, NPDES, SP, PP		i					LEA, RCDEH, RWQCB, RCFCD	2	
	d. For Stage 1 perimeter drainage, Eagle Creek will be piped under the haul road south of the landfill, the existing upper detention basin will be opened, and a channel will be constructed along the north side of the haul road to discharge into the west bowl of the East Pit.	SP, PP, NPDES		i					RCPD, RCFCD, RWQCB	2	
	e. For Stage 2 perimeter drainage, Bald Eagle Creek will be intercepted by constructing a perimeter channel on the north edge of the landfill to discharge into a natural watercourse. On the south, the Eagle Creek drainage will be extended to discharge into the east bowl of the East Pit.	SP, PP, NPDES		i					RCPD, RCFCD, RWQCB	2	



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance	
			Plans	Installed	Completion	Per Event	Discretion					
	f. For permanent, completed landfill perimeter drainage on the south, a channel and detention system will be constructed along the southern borders of Planning Area Nos. 4 and 5 and under the railroad in a box culvert to discharge into a natural streamcourse through an energy-dissipating structure designed to avoid erosive velocities at the MWD aqueduct crossing.	SP,PP, NPDES	i	i				i	PB	•	RCPD, RCFC, RWQCB	2
	g. For permanent, completed landfill perimeter drainage on the north, runoff from the northern slope of the landfill and Bald Eagle Creek will be collected in a channel and detention system to the east through an energy-dissipating structure.	SP,PP, NPDES	i	i					PB	•	RCPD, RCFC, RWQCB	2
	h. Final landfill slope will be a minimum of three percent to promote drainage.	SWFP,PP	i	i					LD	•	LEA,RCDEH	2
	i. Final landfill cover will consist of a minimum thickness of four and one-half feet, including a minimum two-foot thick compacted soil foundation layer, a minimum 18 inch-thick low-permeability soil layer and minimum one-foot thick vegetative layer which maximizes the stability of the slope for the longest term possible, with minimum maintenance. The final cover shall include small islands of thickened vegetative layer and plantings throughout the landfill which will support local microbiologic resources. Also see A.1.e.	SWFP,PP	i	i					LD	•	LEA, RCDEH, RWQCB	2
2. Potential for contamination of runoff by storm water contact with refuse in landfill operational areas.	a. Storm waters that would enter operational areas from off-site will be intercepted and conducted into existing, modified, or constructed drainage systems discharging into natural watercourses off-site.	SWFP, WDR, NPDES	i	i				i	LC	•	LEA, RCDEH, RCFC, RWQCB	2



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance	
			Plans	Installed	Completion	Per Event					Discretion
	b. Runoff from active landfill areas currently being operated will be collected and diverted into a detention facility for testing. Uncontaminated runoff will be routed into the storm channel system. Contaminated runoff will be classified as leachate and treated in accordance with State and Federal regulations.	SWFP, WDR, NPDES	i					LC	•	LEA, RCDEH, RCFCD, RWQCB	2
3. Flooding, erosion, and effects on biological resources from discharge of storm waters collected from around the landfill.	a. In all cases, the drainage system will be designed to discharge into natural watercourses through energy-dissipating structures with peak flows reduced below per-mining conditions.	SP, PP, NPDES	i					T	•	RCDB&S, RCFCD, RWQCB	2
4. Potential for flooding in Eagle Mountain townsite as southerly flow patterns are reestablished because of diversion of storm waters around the landfill.	a. Collection, diversion, and discharge of storm waters through the landfill drainage system will eliminate the potential for flooding of the Eagle Mountain townsite due to construction of the landfill.	SP	i					T	•	RCFCD	1



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
A. General 1. Supervision of biological monitor and reporting program.	a. A qualified consulting biologist will be retained by the landfill operator to supervise all aspects of the biological mitigation monitoring and reporting program in cooperation with the NPS/BLM monitoring team.	SP	i			r,c	T	c	RCPD, BLM, USFWS, CDFG	1,2	
	b. The consulting biologist will file annual reports on the status of all biological mitigation activity and related information for the preceding year with the County of Riverside, the BLM, the CDFG, the USFWS and the NPS.	SP	i			r	T	d	RCPD, BLM, USFWS, CDFG, NPS	2	
B. Desert pupfish 1. Impacts to desert pupfish populations during repair and maintenance of the rail line near the Salt Creek tributary.	a. Plans for construction or major maintenance will be reviewed by a qualified biologist and will include designs and specifications that will avoid impacts to desert pupfish, to the satisfaction of the USFWS and CDFG.	S7	i			i	PA	al	USFWS, CDFG	2	
	b. Storage and staging areas will be placed in locations which will not affect the habitat, and measures to avoid any discharge of pollutants will be incorporated.	S7	i	i		i	PA, PB, PC	al	USFWS, CDFG	2	
	c. Construction activities will be prohibited during the fall when pupfish populations are most restricted and vulnerable.	S7	i	i		i	T	b	USFWS, CDFG	2	
2. Potential impacts to desert pupfish during weed abatement program.	d. A qualified biologist will be retained to monitor any maintenance work conducted on or near pupfish habitat.	S7				i	T	c	USFWS, CDFG	2	
	a. All weed/plant removal will be done by hand. No herbicides or other chemicals will be used.	S7				i	T	b	USFWS, CDFG	2	
3. Possible but unlikely impact on pupfish from train operations.	a. Data from ongoing CDFG surveys of pupfish in the Salt Creek drainage will be assessed to determine whether railroad operations are affecting pupfish.	S7					PA, PC	c	USFWS, CDFG	2	



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G. BIOLOGY - Page 2 of 9

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
	b. If the assessment of data suggests impacts on pupfish, corrective actions will be developed in consultation with USFWS and CDFG.	S7					c	USFWS, CDFG	2	
4. Potential impact to desert pupfish in the Salt Creek habitat area from a railroad accident.	a. In the event of an accident near pupfish habitat, a biologist will be included as a response and clean-up team member and USFWS, BLM, and CDFG will be notified immediately.	S7	i				a	USFWS, CDFG	1	
	b. Measures to restore the pupfish habitat in Salt Creek and its tributary in the event of an accident shall be incorporated as part of the response.	S7			i		c	USFWS, CDFG	2	
	c. If restocking of pupfish is required in the aftermath of an accident, the nearest suitable genetic strain of pupfish will be the source of the transplantation. Potential restocking sources shall be reported to the USFWS at 5 year intervals.	S7		i			PA, PC	USFWS, CDFG	2	
C. Desert tortoise 1. Possible direct impacts on tortoises during construction, and loss of 150 acres of tortoise habitat, from improvements and widening of Eagle Mountain Road.	d. All emergency procedures will be proposed to and approved by USFWS and CDFG prior to implementation.	S7					T	USFWS, CDFG	2	
	e. Reports of all emergency procedure results will be submitted to the USFWS and CDFG upon completion.	S7			r		PD	USFWS, CDFG	2	
	a. A preconstruction survey will be conducted by a qualified biologist who will remove all tortoises within the 150-acre construction zone to a safe distance (300 feet) in the immediate vicinity.	S7				i	PA	USFWS, CDFG, RCDB&S	1	
	b. The landfill operator will purchase 375 acres of tortoise habitat selected by BLM and transfer ownership of the habitat to BLM. All compensation acreage will be within the Chuckwalla Management Area.	S7			c		PD	USFWS, CDFG	1	



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL  
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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
2. Possible impacts from predation on juvenile tortoises by ravens, coyotes, kit foxes, and other predators attracted to the landfill.	a. A raven monitoring program, including a minimum of two years of preoperation monitoring, will be developed and enacted in conformance with BLM methodologies. Monitoring of ravens will continue throughout the life of the landfill project or until BLM, USFWS, and CDFG determine it is no longer necessary.	S7					c, f	T	a	USFWS, CDFG	2
	b. The perimeters of all active landfill and waste handling areas will be fenced with fencing designed to exclude predators such as coyotes and kit foxes.	S7, PP	i					T	e	RCDB&S, USFWS, CDFG	1
	c. A minimum six-inch covering of soil will be placed over deposited refuse on a daily basis to minimize attracting ravens to refuse.	SWFP, PP					i	LC	b	LEA, RCDEH	2
	d. A nonlethal raven control program will be conducted, including hazing at the landfill site, prompt removal of road-killed wildlife along access roads, and the possible use of bird repellent methyl anthranilate.	S7					e	LC	b	USFWS, CDFG	2
	e. If necessary, and subject to the approval of BLM, USFWS, and CDFG, a raven control program will be implemented that may include nest destruction, shooting, poisoning and alterations of landfill operations.	S7					e	LC	b	USFWS, CDFG	2
	f. A raven monitoring committee will be established to oversee the raven monitoring and control program.	S7					e	LC	b	USFWS, CDFG, NPS	2
3. Potential loss of desert tortoises during regular maintenance of rail track.	a. Prior to scheduled track maintenance, all occupied tortoise burrows within 100 feet of the track will be examined for the presence of tortoises and marked by a qualified biologist. Any burrow that collapses during repair and maintenance activities will be immediately excavated, and any tortoise found will be translocated to an artificial burrow no less than 300 feet from the original burrow site.	S7				i	PA	a	USFWS, CDFG	2	



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 25) CONDITIONS OF APPROVAL  
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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
4. Potential impact to desert tortoise populations due to train kills of tortoises and fragmentation of habitat by operation of the Eagle Mountain Railroad.	b. A qualified biologist will translocate any above-ground tortoises found within the rail corridor during repair activities to an abandoned or artificial burrow no less than 300 feet from the rail line, if determined necessary.	S7	i			i		PB	al	USFWS, CDFG	2
	c. During maintenance and repair to the railroad, the storage of equipment and materials, parking of vehicles, and other staging activities will be confined to three currently disturbed sites at Ferrum, Red Cloud and Summit.	S7	i			i		PB	b	USFWS, CDFG	2
	d. All weed control within the right-of-way will be done by hand. No herbicides will be used.	S7	e				i	T	e	USFWS, CDFG	2
	a. Existing culverts will be cleaned out and repaired under the rail line to allow use as crossings by tortoises.	S7		i		i		LA	a	USFWS, CDFG	2
	b. At an appropriate interval before each train trip on the Eagle Mountain rail line, a qualified biologist will survey and remove tortoises on or adjacent to the railroad right-of-way. Removed tortoises will be placed off the rail line berm.	S7				i		PA	al	USFWS, CDFG	2
	c. Records will be evaluated within three years to assess optimum locations for culverts and barriers, if needed. A barrier/culvert system will be constructed at appropriately identified locations.	S7					e	PC	e	USFWS, CDFG	2
	d. In BLM Category I and II Tortoise habitat, ballast will be placed between the tracks at 100-foot intervals in tortoise habitat areas to allow tortoises caught between the tracks to escape. In BLM Category III Tortoise habitat, ballast will be placed at 100-yard intervals.	S7		i				PB	al	USFWS, CDFG	2



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL  
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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance	
			Plans	Installed	Completion	Per Event	Discretion					
5. Potential loss of desert tortoises due to road traffic.	e. A long-term tortoise population monitoring program utilizing sampling methods approved by the USFWS adjacent to the E.M. Railroad and Eagle Mountain Road right-of-way will be developed to monitor changes in tortoise population as the project proceeds. This monitoring program will continue for the life of the project.	S7	c					i	T	•	USFWS, CDFG	2
	a. Tortoise-proof barriers will be installed on both sides of Eagle Mountain Road for the first four and one-half (4½) miles north of Interstate 10.	S7	i	i					PB	•	USFWS, CDFG, RCDBAS	1,2
	b. Culverts will be installed under Eagle Mountain Road at a minimum of one per mile of road.	S7	i	i					PB	•	USFWS, CDFG, RCTD	1,2
	c. A qualified biologist will monitor Eagle Mountain Road and Kaiser Road for tortoise activity throughout the life of the project.	S7							T	c	USFWS, CDFG	2
	d. Biologists will survey Eagle Mountain Road on a daily basis and tortoises encountered will be moved 300 feet from the right-of-way, including tortoises reported by truck drivers and local residents.	S7							T	c	USFWS, CDFG	2
	e. A speed limit of 35 miles per hour will be set and enforced along Eagle Mountain Road until barriers are in place.	SP							PA,PB	•	RCFD, RCDBAS	1
f. A mandatory local worker and truck driver education program will be implemented prior to commencement of landfill operations, with voluntary participation by townsite residents.	SP,S7							T	c	USFWS, CDFG,RCPD	1,2	



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
6. Potential cumulative impacts to desert tortoise regional population from habitat fragmentation and raven predation.	a. Measures described above will be implemented to mitigate potential cumulative impacts from habitat fragmentation and raven predation due to this project. Development of a desert tortoise management plan for the Joshua Tree National Monument and closure of the Desert Center landfill would also help mitigate cumulative impacts, but these measures cannot be implemented as a condition of this project. All mitigation measures implemented for this project will be altered, if necessary, to conform to the USFWS Desert Tortoise Recovery Plan.	See C.2.4. & 5. above								
7. Indirect impacts to tortoises associated with an increase in human activity including vandalism, illegal collection, and off-road-vehicle use.	a. A mandatory local worker and truck driver education program with voluntary townwide resident participation will be implemented.	See C.5.f. above								
D. California leaf-nosed bat 1. Impacts to the California leaf-nosed bat could occur due to loss of roost in the large adit location in an area to be landfilled in approximately 35 years.	a. Spring and winter monitoring surveys of bat activity at the adit will be conducted prior to commencement of landfill operations.	S7	i			r	LA	USFWS, CDFG	2	
	b. Monitoring will be continued until the landfill reaches the area of the adit.	S7	i			r	PB,PC	USFWS, CDFG	2	
	c. When filling reaches the adit, the mouth of the adit will be extended upward and/or outward above any landfill deposits.	S7	i			i	PC	USFWS, CDFG	2	
	d. The conduit material used to extend the adit will be impermeable to landfill leachate and gas. An impermeable liner will be used if necessary.	S7	i			i	PC	USFWS, CDFG	2	
	e. The adit entrance will be gated to allow free exit and entry of bats, but to prevent human intrusion.	S7	i				PA,PB	USFWS, CDFG	2	
	f. Bat monitoring will be continued through the life of the landfill operation.	S7	i				PA,PB	USFWS, CDFG	2	



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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
E. Eagle Mountain scrub jay i. Potential increase in regional raven population could result in raven predation of scrub jay eggs and young.	a. Raven control measures for impacts to desert tortoise will also mitigate the potential impact on the Eagle Mountain scrub jay.	See C.2.a.-e. above									
F. Alverson's foxtail cactus i. Impacts to 125 acres of Alverson's foxtail cactus habitat within Eagle Creek Wash by construction of the landfill and to approximately 33.3 acres of habitat by the proposed Eagle Mountain Road extension and railroad spur.	a. Approximately 157.4 acres of Alverson's foxtail cactus habitat in Specific Planning Area 6E will be preserved in a conservation easement. b. A 2 year test cactus transplantation study shall be conducted to determine the viability of relocating cacti. If the test study determines viability, a transplant program will be conducted on suitable areas within the project boundary as a research program on cactus habitat rehabilitation using transplants from impact areas.	S7,SP,PP  S7,SP	i  i				LA  PA	a  c	USFWS, CDFG, RCPD  USFWS, CDFG, RCPD	1  2	
G. Orocochia sage i. Potential impacts to Orocochia sage along the Eagle Mountain Railroad right-of-way.	a. Prior to commencement of construction activities, a qualified biologist will meet with the construction supervisor to discuss avoidance and minimization of impacts. b. Specific area to be avoided will be delineated before construction by flagging or other means. c. Maintenance and construction staging areas will avoid areas containing Orocochia sage. d. Roads adjacent to the rail line will be kept to their current width. e. Employees will be alerted to avoid off-road travel and other disturbances in areas where sage is present.	S7,SP  S7,SP  S7,SP	i  i  i				PA  PA  PA,PB  PA,PB	c  c  a  c	USFWS, CDFG, RCPD  USFWS, CDFG, RCPD  USFWS, CDFG, RCPD	2  2  2  2	
		See C.5.f. above									



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL  
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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
H. Nelson's bighorn sheep 1. Loss of three permanent and one temporary bighorn sheep watering sources.	a. A preconstruction telemetry study will be conducted to identify new locations to place permanent water sources, based on herd movements.	S7			i,r		LA	•	USFWS, CDFG	2	
	b. Three new permanent water sources will be placed at sites approved by BLM and CDFG away from the mine site.	S7	i		i,r		LA, LB	•	USFWS, CDFG	2	
	c. Buzzard Springs will be rehabilitated and cleared of lamnisk.	S7	i		r		LA, LB	•	USFWS, CDFG	2	
	d. If necessary, sheep will be translocated to areas near the new water source.	S7				i,e	LA, LB, LC	•	USFWS, CDFG	2	
	e. New and rehabilitated water sources will be maintained through the life of the landfill and replaced if necessary.	S7		i			T	•	USFWS, CDFG	2	
	f. Telemetry studies will be continued after operations begin to assess sheep use of new watering sources until USFWS and CDFG are satisfied that sheep water-source use has stabilized.	S7			r		LC	•	USFWS, CDFG	2	
2. Loss of about 994 acres of bighorn sheep habitat due to project implementation.	a. Creation and rehabilitation of water sources will allow expansion of sheep range into new habitat.	See H.I.a.-f. above									
	b. Approximately 644 acres of bighorn sheep habitat on-site will be preserved in open space as usable habitat and a buffer area between the landfill and relocated sheep population.	S7,SP,PP	i			i	LA	•	USFWS, CDFG,RCPPD	1,2	
3. Potential impacts from increased human presence, including landfill operations, residential uses, poaching, pets, and domestic livestock.	a. Information on bighorn sheep will be incorporated in the mandatory local worker and truck driver educational program described above as mitigation for desert tortoise impacts.	See C.S.f. above									
	b. Only authorized individuals will be allowed to possess firearms on the landfill site.	S7,SP	i				T	•	USFWS, CDFG,RCPPD	1,2,3	



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL  
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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
	c. Dogs will be prohibited on the landfill site unless they are confined or restrained.	S7,SP	i	i				USFWS, CDFG, RCPD	1.2.3	



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potentially expansive soils may occur in the fine tailing storage lagoons and in areas underlain by alluvial material.	a. Soils underlying the landfill footprint will be evaluated by a geotechnical engineer and/or an engineering geologist and area with expansive soils will be subject to appropriate mitigation before landfilling, such as selective or remedial grading.	SWFP	i	i				a	LEA,RCDEH	2	
2. Instability of manufactured slopes in bedrock and alluvial areas of the East Pit.	a. A grading for the landfill occurs, a geotechnical engineer and/or engineering geologist will determine safe slope angles and maintain slopes within this range, with flattening of slopes or construction of fill buttresses as needed. b. A geological engineer and/or engineering geologist will assure that the liner is placed against safe slope angles.	SWFP	i	i				c	LEA,RCDEH	2	
3. Potential for settlement in waste rock dumps northeast of the East Pit and loose alluvium in the eastern project areas.	a. Unstable soils will be excavated and/or recompacted prior to liner construction in areas of potential settlement.	SWFP	i	i				c	LEA,RCDEH	2	
4. Potential slope failure and dislodgment of loose materials from existing manufactured slopes in the strong seismic event.	a. Loose rock and materials will be progressively scaled from benches above the working face of the landfill, and berms will be constructed to intercept fallen rock.	SWFP	i	i				c	LEA,RCDEH	2	



I. VISUAL, RECREATION, AND WILDERNESS RESOURCES - Page 1 of 3

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Potential visual contrast between the landfill and the characteristics of surrounding landscape.	a. Shape and mass of the landfill area will blend with nearby forms more than the existing graded areas, and color, tone, and texture of the final cover will be designed to reduce contrast with adjacent undisturbed area.	SP	i	i					RCPD	2	
	b. Grading and landfill limits will be clearly staked or fenced, construction access will be controlled, and ancillary activities will be confined to existing disturbed areas wherever possible to minimize additional disturbance of the native landscape.	SP,PP	i	i				T	RCPD, RCDBAS, LEA,RCDEH	2	
	c. Final cover will include a top layer of vegetation soil containing a seed mix of native plants to encourage regrowth of native plant material.	SP	i	i				LD	RCPD	2	
2. Potential visual impacts from Desert Center, Lake Tamarisk, Interstate 10, and State Highway 177.	a. Visual contrast between the landfill and surrounding area will be reduced as described for the preceding impact.	SP,PP	i	i			T	RCPD	2		
	b. Operations will be phased so that natural topography, distances, and existing vegetation will screen the initial phases of landfill operations. Landforms created by the final phases and completed landfill will approximate original topographic conditions.	SP,SWFP	i	i				LC	RCPD	1,2	
	c. Truck traffic to the container handling yard will use I-10 and Eagle Mountain Road rather than going through Desert Center on Kaiser Road past Lake Tamarisk and other residences.	SP	i					LC	RCPD, RCDBAS	1,2	
3. Potential impacts of the visibility of the landfill from the townsite of Eagle Mountain.	a. The footprint of the landfill will be at least one half-mile away from the nearest residences.	SP	i				LA	RCPD	1		
	b. Final cover and revegetation of the landfill mass in later phases of operation will reduce visual contrast as described for the first impact discussed in this section.	SP	i	i			LD	RCPD	2		



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
4. Windblown debris and dust from landfill operations could adversely affect the visual quality of the surrounding area.	a. The perimeters of all active landfill and waste handling areas will be fenced and regularly patrolled for litter control.	SWFP,SP,PP	i	i		i	LC	•	LEA, RCDEH, RCPD	1,2
	b. Incoming refuse will be kept in closed containers until transported to the working face of the landfill. Upon deposit, the refuse will be compacted and covered on a daily basis with a minimum six-inch layer of soil.	MRF,SWFP	i	i			LC	•	LEA, RCDEH, RCPD	1,2
	c. A storm watch and early warning program will be implemented to alert landfill personnel to cover uncovered materials prior to a windstorm.	SP,SWFP	i	i		i	LC	•	LEA, RCDEH, RCPD	1,2
	d. A response plan to provide complete clean-up of accidental spills will be developed, including sufficient equipment and personnel to conduct a clean-up.	SP,SWFP	i	i		i	LC	•	LEA, RCDEH, RCPD	1,2
	e. Landfill personnel will be assigned for litter and debris cleanup on-site as well as in the area between the landfill and Joshua Tree National Monument.	SP	i			i	LC	•	RCPD	1,2
	f. Litter control personnel will be designated for direct contact and timely retrieval of any litter when Joshua Tree National Monument or BLM staff observed or receive reports of wind-borne debris. All litter shall be contained on-site. A helicopter search for blown litter in the vicinity of the project shall be performed every three (3) months for the first 5 years of operation and as needed thereafter as agreed to by the operator and the BLM and NPS. A NPS employee shall be taken along as an observer for all periodic aerial litter searches.	SP	i			i	LC	•	RCPD,NPS	1,2
	g. On-site soil will be used for daily cover, reducing potential dust production.	SP,SWFP	i				LC	•	LEA, RCDEH, RCPD	1,2



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
5. Potential for significant impacts on views of night skies in the surrounding populated and recreational areas from project night lighting and headlight glare from trucks.	h. Temporary haul roads within the project area will be paved or regularly watered, as will construction roads for the new railroad spur and Eagle Mountain Road Extension.	AC/PO,SP,PP	i	i				•	SCAQMD, RCPD		
	i. The landfill will operate under a requirement to employ the "Best Available Control Technology" to control fugitive dust, including visible dust, under South Coast Air Quality Management District rules.	AC/PO	i	i				•	SCAQMD	2	
	j. See Air Quality 2.k.										
	a. Nighttime operations requiring lights, other than landfill liner construction, as required by weather, and public health and safety conditions, will be permitted only in the container handling yard, with only low-level security lighting allowed in the landfill area.	SP,PP	i	i				b	RCPD	2	
	b. Lighting required for safety and security will be directed and locational, fixtures will have shields to cut off upward radiation, and light poles will be the minimum height necessary, with the goal of minimizing light spillage.	SP,PP	i	i				a,b	RCPD	1,2	
c. Truck traffic will use I-10 and Eagle Mountain Road and its extension rather than Kaiser Road to reduce visibility from most residences in the area.	SP		i				b	RCPD	1,2		



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL  
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J. UTILITIES AND SERVICES - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Fire protection impacts from increased demand on fire personnel and equipment and emergency medical services.	a. The landfill will contribute to required fire protection improvements, plans and funding, including a fair share of the operating costs for additional personnel and equipment and additional training for fire personnel to provide the emergency medical service level of training required by the Riverside County Fire Department.	SP,PP					P	LF	e	RCFD, RCPD	1
	b. A detailed plot plan of each planning area will be submitted to the Riverside County Fire Department for review and approval and a written agreement obtained for fire protection services.	PP,GP	i					LB	e	RCFD, RCPD	1
	c. A Fire/Life Safety and Emergency Response Plan will be submitted to the Fire Department.	PP,SWFP			i			LB	e	RCFD, LEA, RCDEH	1
	d. Fire hydrants and water mains will be installed on-site to provide adequate fire flows for the protection of buildings and improvements.	PP,GP				i		LB	e	RCFD, RCDB&S	2
	e. The landfill will be required to participate in the fire protection impact mitigation program adopted by the Riverside County Board of Supervisors.	SP,PP					c	LB	e	RCFD, RCBS	1
	f. Clearance from the Fire Department will be obtained prior to project use or occupancy of any existing structures within the project boundary or the Eagle Mountain townsite.	SP,PP						LC	e	RCFD	1



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion				
1. Operation of the proposed transfer stations could significantly affect adjacent land uses.	a. Construction and operation of all transfer stations will require approval of local jurisdictions, including environmental review under CEQA, to assure compliance with local noise standards and regulations.	•	•	•	•	•	•	•	•	•	
2. Increased noise levels along the Eagle Mountain rail corridor could affect future residential uses in the Eagle Mountain townsite.	a. Adequate buffer distances from the railroad to residences (150 feet for multi-family, 300 feet for single-family residences) will be required in any plan for development in the future-specific plan for the townsite of Eagle Mountain.	EMTSP	i						RCPD	1	
3. Truck traffic to the landfill could generate unacceptable noise levels at residences nearby.	a. All landfill-related truck traffic will be required to use Eagle Mountain road and Extension rather than Kaiser Road.	SP	i						RCPD	2	
4. Potential noise impact to residential areas due to landfill operations.	a. Equipment noise from landfill will be approximately 1,000 feet from nearest residential area and shielded from that area by existing berms around the fine tailing ponds. b. Spreading, compacting, and cover of refuse will be conducted only during daylight hours. c. Operations will be phased so that the body of the tailing pile nearest the townsite, which serves as a noise barrier, will be retained for as long as possible. d. Maintenance activities in Planning Area No. 2 of the Specific Plan shall occur within enclosed structures.	SP	i						RCPD	1	
		SP,SWFP	i						RCPD,LEA, RCDEH	i,2	
		SP	i						RCPD	2	
		SP,PP	i						RCPD,LEA, RCDEH	2	



Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint				Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event				
1. Potential for excavation involving improvements to Eagle Mountain Road and the I-10 interchange to destroy paleontological resources.	a. A paleontological monitoring program will be prepared by a qualified paleontologist and submitted to the RCPD, San Bernardino County Museum, and BLM for review and approval.	SP	i				PA	e	RCPD, BLM, SBCM	1
	b. A pre-excavation survey will be conducted to exposed paleontological resources.	SP			i		PA	e	RCPD, BLM	1
	c. Excavation activities will be monitored by a qualified paleontologist.	SP				i	PB	e	RCPD, BLM	1
	d. Recovered fossils will be prepared to a point of identification and stabilization.	SP				i	PD	e	SBCM	1,2
	e. Recovered specimens will be identified, curated, and stored in an established repository.	SP				i	PD	e	SBCM	1,2
	f. A report of findings will be prepared and submitted to the County of Riverside, BLM, and the San Bernardino County Museum for approval.	SP					PD	e	RCPD, BLM, SBCM	2



EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 152) CONDITIONS OF APPROVAL  
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M. ENERGY CONSUMPTION/GENERATION - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint						Monitor Period	Report Freq.	Monitor/Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Completion	Per Event	Discretion					
1. Potential for consuming more diesel fuel per day than landfills located closer to the waste source.	a. Diesel locomotives on the Eagle Mountain railway will be shut down when the engines are not needed for an hour or more and will receive regular preventative maintenance, in accordance with manufacturers' recommendations.	SP	i	i					LC	•	RCPD	2
	b. Whenever available and feasible, electric versions of landfill equipment including overhead cranes, pugmills, crushers, and conveyors will be used. Where not available, alternative fuel technology will be used depending in air permitting standards. If the applicant concludes infeasibility of installing electric equipment, a determination by the County Planning Director shall be made, after consultation with the applicant and other appropriate agency, and reasonable consideration of the availability of such technology in the commercial marketplace and the cost thereof.	SP, AC/PO	i	i					LC	•	RCPD, SCAQMD	1,2
	c. When the flare gas generation rate exceeds five million cubic feet per day (MCFD), an analysis of the technical and economic feasibility of recovering energy from the flared landfill gas will be conducted.	AC/PO	i	i			i		LC, LE	•	SCAQMD, USEPA	1,2
	d. If the analysis indicates that energy recovery is feasible, energy recovery facilities shall be installed and operating before the landfill gas generation rate exceeds 10 MCFD.	AC/PO	i	i			i		LC, LE	•	SCAQMD, USEPA	1,2







EXHIBIT D

EAGLE MOUNTAIN LANDFILL PROJECT

Biological Opinion for the Eagle Mountain Landfill Project

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

Dated: September 10, 1992

The BLM consulted with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act on the proposed Eagle Mountain Landfill Project. At issue were the effects that the land exchange, the rights-of-way, and the development of the Eagle Mountain Road may have on desert tortoise (Gopherus agassizii) and the desert pupfish (Cyprinodon macularia).

The U.S. Fish and Wildlife Service determined that the proposed project would not likely jeopardize the continued existence of the desert tortoise or the desert pupfish and would not destroy or adversely modify habitat of the desert tortoise.

The Biological Opinion provides a synopsis of mitigation measures to alleviate impacts to desert tortoise and desert pupfish. Also set forth are the binding terms and conditions which will be included as **special stipulations** that must be undertaken by the project proponent as a condition of the **right-of-way grants**.









# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

FISH AND WILDLIFE ENHANCEMENT  
SOUTHERN CALIFORNIA FIELD STATION  
2730 Loker Avenue West  
Carlsbad, California 92008

September 10, 1992

### MEMORANDUM

To: State Director, Bureau of Land Management, Sacramento, California

From: *Acting* Field Supervisor *J. S. Smith*

Subject: Biological Opinion for the Eagle Mountain Landfill Project  
(1-6-92-F-39)

This Biological Opinion responds to the Bureau of Land Management's (Bureau) request for formal consultation with the Fish and Wildlife Service (Service) pursuant to section 7 of the Endangered Species Act (Act). Your request was dated April 21, 1992 and was received by us on May 5, 1992. At issue are the effects that the exchange of land, the right-of-ways, and the development of Eagle Mountain Road may have on the desert tortoise (Gopherus agassizii) and the desert pupfish (Cyprinodon macularia).

This Biological Opinion was prepared using the following information: 1) Supplemental Desert Tortoise Survey for the Eagle Mountain Landfill Project in Riverside County, California (Recon 1991c); 2) Draft Biological Assessment for the Eagle Mountain Landfill Project (Recon 1991d); 3) Environmental Impact Statement/Environmental Impact Report For The Eagle Mountain Landfill Project (Recon 1991b); 4) Biological Assessment for the Eagle Mountain Landfill Project (Recon 1991a); 5) and other materials contained in our files.

### Biological Opinion

It is the opinion of the Service that the proposed project is not likely to jeopardize the continued existence of the desert tortoise or the desert pupfish. Critical habitat has not been designated for the desert tortoise in California. Therefore, the proposed action will not result in adverse modification of critical habitat for desert tortoise. The proposed project is also not likely to result in the adverse modification of critical habitat for the desert pupfish.

### DESCRIPTION OF THE PROPOSED ACTION

In general, the proposed action involves the conversion of an existing unused open pit iron ore mine to a Class III, non-hazardous, solid waste landfill. The landfill operation would be located at the now inactive Eagle Mountain Mine in northeastern Riverside County. The federal actions of this proposal include a land exchange between the Bureau and Kaiser Steel Resources, Inc. (Kaiser), and the issuance of new rights-of-way under the Federal Land Policy



and Management Act (FLPMA) for the entire length of the existing Eagle Mountain rail-line, which would be reactivated, for the existing Eagle Mountain Road, and for the proposed Eagle Mountain Road extension.

The proposed landfill site consists of 4,659 acres of private and public lands in the Eagle Mountains (map attached). Eagle Mountain Road and the Eagle Mountain rail-line traverse the bajadas of the eastern edge of the Eagle Mountains. The railroad continues southwest of the Eagle mountains and crosses the Chuckwalla Valley and Interstate 10. The railroad continues south through the Chuckwalla Bench area and then runs between the Orocopia and Chuckwalla mountains along Salt Creek. The railroad follows the Salt Creek drainage between the Orocopia and Chocolate mountains in a southwesterly direction until its connection with the Southern Pacific Railroad line at the northeast edge of the Salton Sea, at Ferrum Junction.

Specifically, Mine Reclamation Corporation (Corporation) proposes to develop a municipal solid waste Class III landfill which would accommodate up to 20,000 tons per day. The existing mine at Eagle Mountain is located on approximately 4,659 acres, of which 2,280 acres are under public ownership. These lands are proposed to be transferred out of federal ownership to Kaiser Steel Resources, Inc., in exchange for lands owned by Kaiser along the existing Kaiser railroad.

The existing Eagle Mountain Road is currently maintained by the County of Riverside and is proposed to serve as the main access route to the proposed landfill site. Under the landfill proposal, the road would be widened from an existing 20-foot paved road to a 40 foot-wide paved road. The total right-of-way under application is 110 feet wide to allow for the paved roadway, shoulders and berms. This portion of the right-of-way is approximately seven miles long.

the proposal also includes the extension and widening of Eagle Mountain Road. This extension would begin in NE1/4 Sec. 30, T.4 S., R. 15 E., SBM, just south of the Metropolitan Water District pumping station and would continue northeasterly at first and then northwesterly before heading northerly to an existing landfill on-site haul road. This partially existing dirt road is approximately 15 to 18 feet wide in most areas and is known locally as the Kaiser Truck Trail. This portion of the road is also being proposed for widening to a 40-foot paved road within an 110 right-of-way. It is important to note that this portion of the proposed right-of-way is approximately six miles long. Ultimately, its purpose is to provide a means for trucks to skirt the townsite of Eagle Mountain on their way to the proposed Phase I container handling hard and at a later date into the Phase II container handling yard.

Currently, an existing 52-mile long private rail-line connects the Southern Pacific rail-line at Ferrum Junction to the mine site at Eagle Mountain. Approximately 32 miles of the rail line exist on Bureau lands. The rail line is authorized under right-of-way grant LA-0121701 for mining-related activities only. This right-of-way is proposed to be converted to a FLPMA right-of-way. The purpose of the rail-line is to allow train transport of trash containers from the Southern Pacific rail-line at Ferrum Junction to the proposed Phase I container handling yard and/or repair and maintenance



facility. No more than one train per day would use this preliminary route. At a later date, up to six trains per day will be routed around the Eagle Mountain townsite into the proposed Phase II container handling yard via a rail-line spur. The proposed rail-line spur is approximately 2.5 miles long and would route traffic around the townsite of Eagle Mountain into the proposed Phase II container handling yard.

It is important to note that solid waste brought in by train would have already been sorted. This sorting process would occur at the place of origin. After reaching the landfill, it would be spread by heavy equipment and covered at the end of each day's operation. A minimum of six inches of daily cover (i.e. soil and/or mine spoil) would be placed on the refuse.

Under FLPMA, the Bureau would transfer approximately 3,271 acres of publicly owned lands in the Eagle Mountains to Kaiser. In return, approximately 2,849 acres of land would be received by the Bureau. Lands to be received by the Bureau from Kaiser to offset direct impacts to 150 acres of desert tortoise habitat at a 2.5:1 mitigation ratio (375 acres), and lands associated with the general land exchange are generally located along Salt Creek and the entire length of the Eagle Mountain rail line from Ferrum Junction to just north of Interstate 10.

A synopsis of other proposed mitigation measures developed by the project proponent and the Bureau to alleviate impacts to desert tortoise and desert pupfish are as follows:

#### Desert Tortoise

##### 1. Eagle Mountain Landfill Site.

- A) To mitigate potential increases in raven populations from the presence of trash at the landfill site, a raven monitoring program will be conducted for the life of the project. This includes a minimum of two years of preparation and post-closure monitoring. Monitoring will continue throughout the life of the project or until the agencies (i.e. Bureau, Service, and National Parks Service) determine that it is no longer necessary.
- B) At the end of each working day, all trash will be covered with a minimum of 6 inches of dirt/mine tailings. The active portion of the landfill will be fenced to aid in controlling wind-blown trash. The fencing is also intended to reduce the ability of other wildlife species such as coyote and kit fox to gain access to the trash. A coordinated hazing program will be established to discourage raven use of the landfill during times when refuse is exposed. In addition, large road-killed animals along truck routes will be promptly removed to prevent attracting ravens.
- C) The application of methyl anthranilate has been recommended/proposed to deter raven use of the landfill refuse. Experiments have been conducted using this Food and Drug Administration approved food additive (i.e. grape flavoring) as a bird repellent on food crops and turf (Cummings et al. 1991a;



Cummings et al. 1991b after Recon 1991a). Exact concentrations and spray mediums need to be determined through a testing program.

- D) If the common raven population increases despite passive control measures and the desert tortoise populations are threatened, then an active raven control program will be implemented. The program will include one or more of the following control measures: nest destruction, poisoning, shooting, alteration of landfill operations, or any other measures the responsible agencies deem appropriate. All necessary depredation permits, plus a comprehensive raven management/control program, will be developed and in place before landfill operations begin.

2. Eagle Mountain Railroad Right-of-Way

- A) A preconstruction survey will be conducted along each portion of track to be repaired. All occupied burrows within 100 feet of the track will be examined for the presence of desert tortoise and conspicuously marked by a qualified biologist. Any occupied desert tortoise burrows that collapse during repair and maintenance activities will be immediately excavated and the desert tortoise translocated to an artificial burrow no less than 300 feet from the original burrow site. Any above-ground desert tortoise found within the rail corridor during repair procedures will also be translocated to an abandoned or artificial burrow no less than 300 feet from the rail line if the on-site biologist believes it is threatened with construction activities.
- B) Each train trip between February 1 and October 31 will be preceded by a qualified biologist to survey and remove any desert tortoise found on or adjacent to the rail-line. Removed desert tortoise will be placed off the rail-line berm. This monitoring program will be conducted for a minimum of three years. At that time, or earlier if deemed necessary by the Service and the Bureau, the monitoring data will be evaluated to determine which areas warrant placement of a barrier/culvert system. Exact locations and designs of barriers and culverts will be selected in the field with the direction of Service, Bureau, and California Department of Fish and Game personnel. If barriers are required, sheet metal 18 inches in height can be affixed directly to the railroad ties on the outside of the tracks during track rehabilitation. These metal strips should adequately prevent desert tortoise movement onto the tracks.
- C) The project proponent is committed to placing a barrier/culvert system along any portion of the rail-line where it would be required to protect the desert tortoise. At least 20 linear feet of ballast will also be placed between, and flush with, the rails at intervals (e.g. every 100 feet) along the portions of the rail-line traversing desert tortoise habitat to aid the escape of any animals caught between the tracks.
- D) A long-term desert tortoise monitoring program will be instituted that will monitor changes in the populations as the project



proceeds. The intent of the monitoring program is to detect the long-term effects on the desert tortoise population from train noise and vibration. This program shall be approved by the Service and the Bureau. The program will include two years of preconstruction monitoring. Information will be collected in the immediate vicinity of the Eagle Mountain railroad corridor using one mile transects paralleling and at incremental distances from the tracks. Information will be collected along transects located at distances of 10, 100, 200, 400, and 800 meters from the tracks.

- E) A common raven monitoring program will also be established along the rail-line.
- F) To alleviate potential population fragmentation due to the active railroad functioning as a desert tortoise barrier, existing culverts under the rail-line will be cleaned out and repaired in such a way that they provide easy access for desert tortoise. New culverts may be placed in areas where current desert tortoise use of the railroad track berm is high. The design of all barriers and culverts, and their locations, will be approved by the Service and the Bureau. Desert tortoise-proof barriers placed parallel to the tracks will be oriented to guide desert tortoise to culverts. Culverts will be monitored for indications of desert tortoise use. The culverts will be monitored regularly and kept clear of obstructions for the life of the project.

3. Eagle Mountain Road, Road Extension, and Rail Spur

- A) A preconstruction survey will be conducted by a qualified biologist, and all desert tortoise within the 150-acre construction zone will be removed to a safe distance (300 feet) in the immediate vicinity.
- B) As compensation for the loss of 150 acres of Bureau Category III desert tortoise habitat, habitat off-site will be purchased and dedicated as permanent open space. Using a Bureau compensation formula, a multiplying factor of 2.5 has been calculated. Therefore, 375 acres of desert tortoise habitat will be purchased as compensation for impacts. The exact parcel(s) to be purchased will be selected under the direction of the Bureau and will be in the Chuckwalla Management Area.
- C) A desert tortoise-proof barrier will be installed on both sides of Eagle Mountain Road. An 18-inch vertical barrier (e.g. fencing) will be incorporated into the berm on each side of the improved Eagle Mountain Road. Initially, barriers and culverts will be placed along both sides of Eagle Mountain Road between I-10 and Victory Pass (approximately 4.5 miles). The culverts (at ground level with dirt floors) will be placed along the road (a minimum of one per mile of road) to facilitate the movement of desert tortoise across the road. The barrier system will be aligned to guide desert tortoise to these crossings. The culverts will be placed at



high points along the road to reduce the need for diking and water diversions adjacent to the road.

- C) A mandatory employee education program will begin before implementation of the landfill operation. The program will emphasize the legal protections afforded sensitive species and measures to minimize impacts to those species and their habitats. The program will include a handbook outlining the details of the protections and measures to be followed by each employee. The program will be extended to contracted truck drivers delivering solid waste to the project site, and on a voluntary basis to other local residents to increase awareness of potential desert tortoise occurrence along Eagle Mountain Road.
- D) The common raven population along Eagle Mountain Road will be regularly monitored as part of the project-wide monitoring program. If this raven population is found to increase, then an active raven control program will be instituted. An active raven control plan, along with appropriate depredation permits, will be developed and in place before landfill operations begin. Road-killed wildlife species found along the road will be promptly removed to reduce the attraction of ravens and other potential desert tortoise predators to the area.

#### 4. Tipping Fee

"The owner/operator of the Eagle Mountain landfill shall pay \$1 per ton of nonhazardous municipal solid waste deposited at the landfill into a trust or nonprofit corporation established by the County of Riverside which shall expend those funds to preserve and enhance biological, scenic and cultural resources in Riverside County, particularly in the desert regions of eastern riverside County by acquiring, restoring, maintaining and protection open space lands or interest in lands, water or water rights and wildlife habitat, and by providing limited public access to those lands, and by supporting research regarding the ecology of the desert and the effects of the landfill project upon the desert ecology and education concerning the preservation of desert natural resources including, but not limited to, research, education and monitoring activities conducted by the Bureau, the Service, and the National Park Service" (Selzer 1992).

#### Desert Pupfish

- 1. Mitigation for potential impacts to the desert pupfish will include monitoring during rail line repair/maintenance activities as well as during any emergency cleanup operations. All monitoring will be conducted by a qualified biologist.
- 2. If train operations affect the habitat corrective actions will be developed by MRC in consultation with the Service, the Bureau, and the California Department of Fish and Game (Department).



3. If maintenance of the trestle or railroad in the Salt Creek tributary must occur, mitigation measures shall be incorporated into the project plans to reduce potential impacts to desert pupfish.
4. Plans for construction or major maintenance will be reviewed by the Service and the Department.
5. If construction is required on the trestle or rails crossing the tributary, construction plans shall include designs and specifications that will avoid impacts to desert pupfish, including prohibition of construction during the fall when pupfish populations are most restricted and vulnerable.
6. Storage and staging areas shall be placed in locations which will not affect the habitat, and measures to avoid any discharge of pollutants will be incorporated.
7. A qualified biologist will be on-site whenever any maintenance work is conducted on or near desert pupfish habitat.
8. In the event of a rail accident in the vicinity of desert pupfish habitat, a qualified biologist will be included as a response and cleanup team member. The Service, Bureau, and the Department will be notified immediately. Cleanup operations will be monitored by the biologist so that additional adverse impacts are not incurred by the cleanup operation.
9. Measures to restore pupfish habitat in Salt Creek and its tributary in the event of an accident will be incorporated as part of the response plan. This will include removal of any portion of the streambed that is contaminated, and the placement of a similar-type clean fill material such that the hydrology of the stream is not altered.
10. If an accident causes the loss of the local pupfish population, the habitat will be restocked with pupfish of the same genetic strain.

For further information regarding the proposed action refer to the Environmental Impact Statement/Environmental Impact Report for the Eagle Mountain Landfill Project (Recon 1991b) and/or the Biological Assessment for the Eagle Mountain Landfill Project (Recon 1991a).

#### EFFECTS OF PROPOSED ACTION ON LISTED SPECIES

##### Species Account

##### Desert tortoise

On April 2, 1990, the Service determined the Mojave population of the desert tortoise to be a threatened species. Desert tortoise are large herbivorous reptiles and are very active in the spring at which time large quantities of annual vegetation are consumed. These animals also show increased activity during the fall and during storm events during the summer. During extreme



weather conditions of summer and winter, they retreat to the shelter of their burrows. During these times of inclement weather, if conditions become mild enough, these animals can be found on the surface away from their burrows.

Desert tortoise burrows have been found in a variety of locations such as along the banks of washes, at the base of shrubs, in the open on flat ground, under rocks, on steep hill sides, in caliche caves, and in berms along rail-lines.

Further information on the range, biology, and ecology of the desert tortoise can be found in Luckenbach (1982), Lamb et al. (1989) and Burge et al. (1976).

#### Desert Pupfish

On March 31, 1986, the Service determined the desert pupfish to be an endangered species. Desert pupfish, as indicated in the Environmental Assessment, occur in Salt Creek and San Felipe Creek and its tributaries in Riverside and Imperial Counties, California. Furthermore, critical habitat has been designated for this species at San Felipe Creek, Carrizo Wash and Fish Creek Wash. This species also occurs at, and within, the mouths of agricultural drains which enter the Salton Sea.

Desert pupfish typically occur in shallow water and forage on a variety of insects, other invertebrates, algae, and detritus. This species is threatened with extinction throughout its range due to habitat destruction, introduction of exotic fish, contaminant issues, and other impacts. Further information on the status, range, biology, and ecology of the desert pupfish can be found in 50 CFR 17.95, and the Desert Pupfish Recovery Plan (Service 1983).

#### Analysis of Impacts

##### Desert Tortoise

The proposed project may result in the direct take of any desert tortoise which enter the landfill site, cross the access road, cross the rail line, or are residing in burrows within the vicinity of the site. In addition, the landfill activity could increase predation of desert tortoise by attracting additional coyotes and common raven to the vicinity of the action area.

Of more concern than the direct impacts associated with this project is the extent of indirect impacts. In particular, the rail-line currently passes through desert tortoise habitat which has been reported to have relatively high numbers of this species. In addition, the rail-line passes through and may currently fragment a portion of the population found at the Chuckwalla Bench. This area is identified by the Bureau as an Area of Critical Environmental Concern because of the desert tortoise population. If the rail-line is currently an effective barrier to movement of this species, then approximately 31,288 acres of Category I habitat appear to have been isolated from the remaining population to the south. This area of habitat is bordered on the north by Interstate 10. The population to the south of the rail-line, which is characterized, at least in part, as Category I desert tortoise habitat encompasses a minimum of 200,000 acres of contiguous habitat. In an



attempt to reconnect, or improve on the biological connection between desert tortoise found on opposite sides of the rail-line, the culverts will be modified. Moreover, appropriate fill material (e.g. gravel fill) will be placed within the tracks at intervals of approximately 100 feet while within Category I and II desert tortoise habitat.

If the population to the north of the line is truly isolated at this time from the population to the south, re-connection may represent a risk. This risk lies in the problems associated with the respiratory tract disease that is impacting this species. Habitat that contains no or extremely low population densities of desert tortoise and/or abrupt barriers may be important in preventing the spread of the causative agent to all population centers of this species.

The persistence of this expansive population in the Colorado Desert is of considerable importance. Proposed actions which would undermine the health and viability of this population must be closely examined and extensively monitored to ensure the persistence of this population of the species. Desert tortoise are declining range wide in California due to a variety of factors. The apparent presence and virulence of the causative pathological agent associated with the upper respiratory disease within most populations of desert tortoise in California is the most difficult issue to deal with at this time. The presence and importance of this disease is complicated and possibly compounded due to the presence of a variety of other factors which impact desert tortoise individuals and ultimately populations.

These other factors include adult mortality associated with vehicle strikes and the grazing of domestic livestock during environmental extremes (e.g. low annual plant production) within this species' core areas. In this case, core area is being used to describe an area in which a significant portion of a desert tortoise population can sustain itself during years of generally low or nearly nonexistent annual production within a general region due to the special environmental conditions which occur within the smaller area. High valleys in close approximation to mountains typically benefit from the affects of orographic rain as compared to inland valleys of lower elevation. These high valleys would therefore be expected to have correspondingly higher production of both perennial and annual vegetation and may be the sites of such population refugium. Mortality due to vehicle strikes or impacts associated with domestic grazers (which occur in exceedingly high densities for this habitat type when they are present), or other unidentified causative factors within these core areas could have catastrophic effects on a desert tortoise population's ability to sustain itself and could lead to an overall collapse of a regional population.

During maximum operations, an estimated 4,000 tons per day of solid waste would be delivered by truck to the landfill from local areas in Riverside and San Bernardino counties. According to information provided in the biological assessment, no more than 200 truck trips up and down Eagle Mountain Road will occur during any one 24 hour period. The distribution of these trips over a 24 hour period is not known at this time. If these trips were to be concentrated during day light hours (13 hour period), this equals one truck passing a point along the Eagle Mountain Road approximately every 4 minutes.



With this level of use, it seems likely that many desert tortoise would be struck while attempting to cross Eagle Mountain Road. Moreover, the mortality of desert tortoise and other desert animals would increase food availability for local predators. Therefore, not only would the situation exist for a significant increase in direct mortality over natural conditions, but the potential for an increase in hatchling and juvenile mortality is also possible due to an increase in predation.

The only permitted access to the mine site for this truck traffic will be Eagle Mountain Road. An estimated 150 acres of desert tortoise habitat would be removed in widening and extending Eagle Mountain Road. This acreage includes habitat lost due to the rail-line spur construction.

A small tipping floor, waste sort area, and compactor would be needed to receive, inspect, and process trash from local areas. This area will require special consideration from the perspective of providing additional forage for local predators. Without appropriate action, the available food base of desert tortoise predators could increase and lead to higher densities of these species in the general area. Higher densities of these species could lead to higher than normal predation rates on hatchling and juvenile desert tortoise.

A maximum of six trains per day would deliver trash to the landfill site. This equates to a maximum of 12 train passages per 24 hour period. Unit trains would consist of one or more diesel electric locomotives pulling up to 14 rail cars. Each train would be less than 4,000 feet long and carry approximately 3,500 tons of refuse (Recon 1991a). The passage of these trains would have an as yet un-quantified effect on desert tortoise. Vibration associated with the trains' passage could collapse burrows constructed within close approximation of the rail bed and desert tortoise could be struck if on the tracks. Moreover, the tracks as stated earlier may currently function as an effective barrier to desert tortoise movement.

Maintenance and restoration to prepare the rail line for service may impact desert tortoise (e.g. inadvertent crushing and/or the collapsing of burrows). Repairs include replacement of segments of rail and ties, and the maintenance of culverts which pass under the tracks. Areas which may be impacted due to this activity include a 10 mile strip through Bureau Category I desert tortoise habitat, 18 mile strip through Bureau Category III, and a strip through 24 miles of un-categorized habitat.

During rehabilitation and routine maintenance activities along the railroad, the storage of equipment and material, parking of vehicles, and other staging activities will be confined to three currently disturbed sites at Ferrum, Red Cloud, and Summit. The total area of these three sites is approximately 5 acres and no desert tortoise habitat is expected to be impacted due to staging activities.

Potential fuel spills could also occur as a result of the proposed project. The potential problem areas include locomotive refueling, delivery of fuel, and accidental rupture of locomotive fuel tanks. A ruptured fuel tank could contaminate Bureau Category I and III desert tortoise habitat. Moreover, a



fuel spill would necessitate clean-up activities which would poise an additional hazard, aside from the fuel itself, to desert tortoise.

Another plausible impact is the potential for the attraction of common ravens and other predators to the landfill. Common ravens have been observed traveling up to 30 miles from nesting territories to landfills (Recon 1991a). Moreover, the additional food source from landfills apparently does not discourage predation upon juvenile desert tortoises (Recon 1991a). In addition, an increase in the number of local residents could also increase the food base of local predators such as coyotes and common raven. A potential increase in the local raven population, coupled with the movement of ravens into habitat near the landfill, could result in increased tortoise losses through predation.

There is a substantial population of desert tortoise in Joshua Tree National Monument which essentially abuts the proposed Eagle Mountain Landfill site. Currently, Joshua Tree National Monument (Monument) has no common raven control program. If predators such as coyote and common raven populations increase due landfill activities, the desert tortoise population at the Monument could be impacted through increased predation.

The effects of sound on desert tortoise are not well understood. However, detailed sound sensitivity curves have been determined for three species of tortoise. The tortoise, Testudo horsfieldi, was found to have excellent sensitivity in the range from 100 to 800 Hertz at 60 decibels (dB). The sensitivity at 20 dB ranged from 50 to 1500 Hz. Geochelone carbonaria exhibited the most sensitive frequency range at 80 to 400 Hz. The most sensitive of the species indicated within the biological assessment was Kinixys belliana. This species was found to have a sensitivity range for 30 to 600 Hz (Weaver 1978 after Recon 1991a).

The frequency range of sound expected to be generated by the passage of trains is from 80 to 2,000 Hz (Recon 1991d). Based on information provided by Recon (1991a), the very low frequency ground vibrations (2 to 10 Hz) created by the impact of train wheels with rail joints are below the expected level of sensitivity of the desert tortoise's ear. In an experiment conducted by Weaver (1978 after Recon 1991a) no auditory response to vibrations introduced at a turtle's leg was detected. However, it seems likely that they feel these vibrations.

Based on information provided by Recon (1991a), the expected noise level of passing trains along the Eagle Mountain rail line will likely fall within 74 to 95 dBA range at a distance of 50 feet. At a given point along the tracks, this maximum noise level is expected to last 55 to 73 seconds for each train trip.

Several surveys were conducted along active rail lines in an attempt to determine the impacts of train noise on desert tortoise. According to Recon (1991a), a 2.5 mile portion of the Southern Pacific Railroad tracks were surveyed between Mojave and Searles, California. A total of 22 burrows/pallets, 19 of which were determined to be active within the last year, were recorded along this transect. Moreover, 18 of the 22 sign records



were 40 to 60 feet from the tracks along a large drainage control berm north of the tracks.

For the second survey, the Atchison Topeka and Santa Fe rail-line between Mojave and Barstow, California, was used. At this site, 11 tortoise burrows (7 judged to be recently active) were found along the south face of the berm supporting the tracks. The north face of the berm was not surveyed. This track averages 20 trains per day (Waters, pers. comm. 1991 after Recon 1991a).

In a further attempt to assess train related impacts to desert tortoise, a 6 mile portion of the Union Pacific railroad tracks running between Barstow, California and Las Vegas, Nevada was surveyed. This line handles an average of 20 trains per day (Waters, pers. comm. 1991 after Recon 1991a). The results of this survey found 20 desert tortoise burrows along the tracks while only 8 burrows were observed along the parallel transect 0.25 miles away from the tracks. The surveyed portion of habitat at the tracks and 0.25 miles away from the tracks were both 30 feet wide and 6 miles long.

The results of these surveys support the idea that desert tortoise do make use of habitat adjacent to active rail-lines. Moreover, they provide anecdotal evidence that desert tortoise occur in higher densities along rail-lines due to the availability of potential burrow sites. However, further assessment is necessary to determine any deleterious effects of active rail-lines. It is possible that active rail-lines may be functioning as a sink. That is, desert tortoise may be continually lost at a significant rate due to the passage of trains.

If active rail-lines are chronic death traps for desert tortoise, it is instructive to compare and contrast the density and distribution of desert tortoise along active roads and highways to those found along active rail-lines. Based on current information, desert tortoise populations have been found to be depressed along highways (Nicholson 1978). This effect diminishes with distance from the road and is apparently gone at about one half-mile (Nicholson 1978). There are a variety of potential reasons for the difference in desert tortoise density and distribution between highways and rail-lines. Mortality of desert tortoise along highways alone may account for the reduced population along these corridors. However, collection by people in itself or in conjunction with direct mortality along highways may account for the pattern of distribution and abundance.

Conversely, mortality along rail-lines may not be high enough to have revealed its long-term effect on adjacent desert tortoise populations or the rate of mortality due to rail-line use may be so low as not to constitute a significant impact on a population's ability to sustain itself. Even if mortality due to rail-line operations is in itself not intense enough to reduce a population's ability to persist, other small impacts, in addition to the rail-lines impacts, could in combination reduce or prevent the persistence of a desert tortoise population within the rail-line's zone of influence.

The effects of vibration generated from passing trains on the integrity of desert tortoise burrows were also evaluated. Based on the information provided by Recon (1991a) no increase was detected in the percentage of



deteriorated (i.e., collapsed) burrows in the railroad track berm (6 miles of Union Pacific rail-line) as compared to the burrows encountered along the transect located .25 miles away. It is instructive to note that the total number of collapsed burrows were the same for both transects though there were more burrows in the berm.

The applicant's proposed mitigation/compensation measure (i.e. the tipping fee) is also important in this analysis of impacts. In analyzing the effects of the action, the Service is required to assess all activities, private and federal, that may directly or indirectly impact a listed species. In determining if the action would reasonably be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild, the Service considers the effects of the action on the species' reproduction, numbers, and/or distribution. The Service must also consider all past or present impacts (regardless of source) on the species within the action area in making its final determination.

The project proponent/Bureau proposed mitigation measures along with the terms and conditions of this biological opinion should greatly reduce the potential for the direct killing of desert tortoise. Additional applicant proposed compensation measures (i.e. the tipping fee) would help support the collection and analysis of data related to direct and indirect impacts. This information would help guide appropriate corrective measures. Moreover, this compensation measure would help support the consolidation of desert tortoise habitat within the region. This consolidation would help in the protection and conservation of this important desert tortoise population.

The Service believes the impacts described above are not likely to jeopardize the continued existence of the desert tortoise. We present this conclusion for the following reasons:

- 1) The amount of occupied desert tortoise habitat which will be directly impacted by the proposed project is small in relation to the overall area occupied by this species in the Chuckwalla Bench and vicinity.
- 2) The monitoring program should provide information necessary to direct corrective action. That is, activities of the landfill may need to be adjusted depending on the information obtained through research designed specifically to address direct and indirect landfill related impacts to desert tortoise.
- 3) The proposed mitigation/compensation proposal should adequately offset impacts to this species by improving the biological integrity of the desert tortoise population through appropriate mitigation and land acquisition.

#### Desert Pupfish

The proposed action could result in impacts to this species. The possibility exists for there to be impacts associated with a train derailment and any associated fuel spill. Furthermore, activities associated with rail maintenance or a derailment (e.g. track mending, lifting of railroad cars,



etc.), if not planned for, could have negative impacts on this species through material falling into the species habitat.

Another issue related to rail-lines is the potential use of herbicides. According to the Biological Assessment (Recon 1992a) no such materials will be used. That is, all weed/plant removal will be done by hand.

Maintenance or reconstruction of the trestle at some time during the life of the project could impact this species if water quality was effected. This biological opinion can not access these impacts at this time due to the lack of information. Therefore, any work associated with the trestle which may impact desert pupfish will require further consultation prior to commencement of construction activities at some later time.

During normal rail-line operations the potential exists for fuel and/or oils to leak from the locomotives and enter desert pupfish habitat. Moreover, rail-cars incorporating oil/wick wheel bearings provide an additional source of contaminants if leaking. Toxicity of these materials are high for both invertebrates and desert pupfish.

The Service believes the impacts described above will not jeopardize the continued existence of the desert pupfish. We present this conclusion for the following reasons:

- 1) Occupied habitat within the vicinity of the action area should not be adversely affected by normal activities of the proposed project.
- 2) No herbicides will be used to control plants along the rail-line.
- 3) Contaminants associated with this proposed project should be precluded from entering this species habitat.

#### CUMULATIVE EFFECTS

Cumulative effects are those impacts of future State and private actions affecting endangered and threatened species that are reasonably certain to occur in the action area. Future federal actions will be subject to the consultation requirements established in section 7 of the Endangered Species Act (Act), and therefore are not considered cumulative to the proposed action.

#### Desert tortoise

An activity anticipated to affect this species within the project's action area within the foreseeable future are vehicle strikes along Interstate 10. Moreover, new jojoba farms could impact occupied desert tortoise habitat if the market improves for the plant's oil. There is also heavy off-road vehicle activity in this region of the desert tortoise's range which undoubtedly results in the mortality of individuals of this species. With the exception of illegal take, no additional loss of occupied habitat is anticipated unless and until a permit is issued under section 10(a)(1)(B) of the Act.



**Desert pupfish**

There are only a few activities anticipated to affect this species within the foreseeable future within the action area of this proposed project. This includes tamarisk removal programs along Salt Creek and illegal off-road vehicle activity within and adjacent to the creek. With the exception of illegal take, no loss of occupied habitat is anticipated unless and until a permit is issued under section 10(a)(1)(B) of the Act.

**INCIDENTAL TAKE**

Section 9 of the Endangered Species Act prohibits the take of listed species without special exemption. Taking is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Under the terms of sections' 7(b)(4) and 7(0)(2) of the Act, taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take statement. The terms and conditions described below are non-discretionary, and must be undertaken by the agency or made a binding condition of any grant or permit, as appropriate.

**Desert Tortoise**

1. One (1) adult desert tortoise may be killed due to direct and indirect effects of the action on a yearly basis for the life of the project.
2. One-hundred and sixty (160) desert tortoise may be taken in the form of harassment during the course of moving them out of harm's way on a yearly basis.

**Desert Pupfish**

1. One (1) desert pupfish may be taken due to direct and indirect effects of the action.

If, during the course of the action, the amount or extent of the incidental take limit is exceeded, the Federal agency must reinitiate consultation with the Service immediately to avoid violation of section 9 of the Act. Operations must be stopped in the interim period between the initiation and completion of the new consultation if it is determined that the impact of the additional taking will cause an irreversible and adverse impact on the species, as required by 50 CFR 402.14(i). The Bureau should provide an explanation of the causes of the taking.

**Reasonable And Prudent Measures**

The Service believes that the following reasonable and prudent measures are necessary and appropriate to minimize incidental take.



#### Desert Tortoise

1. Safe access for desert tortoise shall be provided across Eagle Mountain Road and the railroad tracks.
2. Effects of the landfill shall be monitored as they pertain to the persistence and recovery of desert tortoise within the action area and corrective action taken as appropriate.
3. A contingency plan shall be established to provide formal guidance in the event of a train derailment or fuel spill.

#### Desert Pupfish

1. A contingency plan shall be established to provide formal guidance in the event of a train derailment or fuel spill.
2. Contaminants associated with this project shall be kept out of this species habitat.

#### Terms And Conditions

In order to be exempt from the prohibitions of section 9 of the Act, the project applicant and/or Bureau are responsible, as appropriate, for compliance with the following terms and conditions, which implement the reasonable and prudent measures described above. A portion of the following terms and conditions have been incorporated from the mitigation measures contained in the Biological Assessment or otherwise proposed by the proponent for the Eagle Mountain Landfill Project.

#### Desert Tortoise.

1. To mitigate for direct impacts to 150 acres of desert tortoise habitat, the Bureau shall receive 375 acres of desert tortoise habitat from Kaiser.
2. If the project proponent fails to comply with the reasonable and prudent measures or any of the terms and conditions of this biological opinion, the Bureau shall suspend the rights-of-way for the proposed action until such time that the proponent is in compliance with these terms and conditions. The Bureau shall also notify the proponent at that time that failure to comply will lead to revocation of their rights-of-way.
3. The Bureau shall ensure that ballast or other suitable material is placed within the railroad tracks to facilitate movement of desert tortoise out of the interior of the tracks.
  - a. These areas shall be distributed every 100 feet along the rail line while within Bureau designated Category I and II desert tortoise habitat and shall contain at least 20 linear feet of ballast.



- b. These areas shall be distributed every 100 yards while in Bureau designated Category III or non-designated desert tortoise habitat.
  - c. These areas shall be inspected monthly during the months of March through September and repaired immediately (i.e. prior to the next monthly inspection).
4. The Bureau shall ensure that a preconstruction survey for desert tortoise shall be conducted within one week of commencement of construction and/or maintenance activities for each portion of track to be repaired. All occupied burrows within 100 feet of the track shall be examined for the presence of desert tortoise and conspicuously marked by a qualified biologist. These burrows shall be inspected on a daily basis during construction and/or maintenance activities that could cause their collapse. Any occupied desert tortoise burrows that collapse during repair and maintenance activities shall be immediately excavated and the desert tortoise translocated to an artificial burrow the minimum distance necessary to ensure protection. Any above-ground desert tortoise found within harm's way along the rail-line corridor during repair procedures shall also be translocated the minimum distance necessary to ensure its safety.
5. The Bureau shall ensure that new culverts shall be placed in areas where current tortoise use of the railroad track berm is concentrated. The design of all barriers and culverts, and their locations, shall be approved by the Service and the Bureau. Tortoise proof barriers, if found to be needed by the Service, shall be placed parallel to the tracks and oriented to guide desert tortoise to the culverts. Culverts shall be monitored for indications of desert tortoise use. The culverts shall be monitored regularly and kept clear of obstructions for the life of the project.
6. The Bureau shall ensure that where culverts are needed to provide for flood flows, their size shall be such as to allow unobstructed movement of desert tortoise under the railroad tracks.
  - a. The mouth of the culverts shall be tied into the natural terrain to facilitate unobstructed movement of desert tortoise under the railroad tracks.
  - b. These culverts shall be monitored yearly (prior to each spring's desert tortoise activity period) and corrective action taken (prior to each spring's desert tortoise activity period) to maintain an unobstructed path for desert tortoises through the culverts.
  - c. Immediately following storm events, during the desert tortoise's activity period, all culverts shall be inspected and repaired as necessary to maintain an unobstructed path to this animal's movement.



7. The Bureau shall ensure that each train trip between February 1 and October 31 shall be preceded by a qualified biologist to survey and remove any desert tortoise found on or adjacent to the rail-line. Removed desert tortoise shall be placed off the rail-line berm. All desert tortoise that are found within the immediate vicinity of the tracks shall be moved off the tracks the minimum distance necessary to ensure their safety. These animals shall be placed in the shade of a shrub on the side of the tracks which corresponds with the direction they were heading. This monitoring/protection program shall be conducted for a minimum of three years. A report shall be submitted within 30 days to the Service following the first desert tortoise activity period which coincides with rail-line activity. The monitoring data shall be evaluated to determine which areas warrant placement of a barrier/culvert system. Exact locations and designs of barriers and culverts shall be selected in the field with the direction of Service, Bureau, and Department personnel.
8. Culvert passage areas shall be provided at least once every mile. These culvert passage areas shall be placed along Eagle Mountain Road from the intersection of Interstate 10 and Eagle Mountain Road north along a distance of approximately 4.5 miles. A minimum of four crossing, comprised of a minimum of three culverts each (each culvert being no smaller than 18 inches in diameter), shall be provided.
9. Fencing shall result in a non-breachable barrier and its support structure may be comprised of a variety of materials. Galvanized hardware cloth of 1/8 inch diameter, or smaller, shall be used along the base of the fence and be buried 24 inches underground and extend at least 18 inches above ground. Where burial is not possible, the bottom 1/2 of the fence shall be laid flat on the ground, opposite the road, and secured in a way which prevents desert tortoise from gaining access to the road.
10. This fencing shall be tied into the culvert/bridge system so that desert tortoise moving along the barrier will be passively guided to safe passage points under the road.
11. This fencing shall be monitored yearly (prior to each spring's desert tortoise activity period) and corrective action taken (prior to each spring's desert tortoise activity period) to maintain the integrity of the barrier to desert tortoise. In addition, following storms, the integrity of the fence shall be determined and repaired immediately if found to be damaged.
12. In washes and other areas susceptible to flash-flooding events, "break-away" tortoise fabric may be installed. These segments will be loosely tied to the fence on higher ground, permitting them to "break away" in the event of substantial surface flows.
13. If desert tortoise are found not to make use of the culverts under Eagle Mountain Road, then other measures shall be developed as necessary.



This may include the construction of several low bridges over the washes to facilitate movement of desert tortoise across this barrier.

14. If monitoring shows an additional need for culvert crossings further north along Eagle Mountain Road, they shall be installed within one year of that determination.
15. At the end of each working day, all trash shall be covered with a minimum of 6 inches of dirt/mine tailings. Furthermore, the active portion of the landfill shall be fenced to aid in controlling wind-blown trash.
16. To mitigate potential increases in common raven populations from the presence of trash at the landfill site, a common raven monitoring program shall be conducted for the life of the project. This includes a minimum of two years of preparation and post-closure monitoring. Monitoring shall continue throughout the life of the project or until the agencies (i.e. the Bureau and Service) determine that it is no longer necessary. Moreover, the Bureau shall ensure that the common raven population along Eagle Mountain Road shall be regularly monitored as part of the project-wide monitoring program. If the regional raven population is found to increase due to landfill activities, then an active raven control program shall be instituted. An active raven control plan, along with appropriate depredation permits, shall be developed and in place before use of rights-of-way begins.
17. Road-killed wildlife species found along the road shall be promptly removed to reduce the attraction of ravens and other potential desert tortoise predators to the area.
18. Prior to construction or maintenance activities, a desert tortoise survey shall be completed. All desert tortoise found within the impact area shall be removed.
  - a. All surveys shall be consistent with Service protocol.
  - b. For desert tortoise found within the impact area of the road alignment, if an existing burrow of the correct dimensions is not available, an artificial burrow shall be constructed outside of the road alignment and the animal shall be released at that site as soon as the exclusion fence is in place.
19. All staging areas shall be clearly marked. No habitat damaging activity shall be permitted outside of these designated areas.
20. While in or adjacent to desert tortoise habitat and outside of areas cleared of desert tortoise and enclosed by a desert tortoise proof fence, operators shall inspect under all vehicles, equipment, and supplies for desert tortoise prior to their movement. If a desert tortoise is present, the appropriate party permitted to handle desert tortoise shall be summoned to remove the animal from harm's way per the terms and conditions of this biological opinion.



21. An authorized biologist (a professional biologist with demonstrated experience with desert tortoise involving techniques to locate desert tortoise and their sign, including correct tortoise handling) shall be present on-site during the clearance survey(s). This biologist should have experience in marking (acrylic paint/epoxy technique) desert tortoise for future identification. The biologist shall provide a full report to the Bureau and Service of all desert tortoise which are found and moved from harms way. This information shall include: 1) the locations (narrative and maps) and dates of observations; 2) general conditions and health, any apparent injuries and state of healing and whether animals voided their bladders when handled; 3) locations moved from and locations moved to; 4) diagnostic markings (e.g., identification numbers or previously marked lateral scutes.
  - a. Tortoise that are encountered in the summer shall be held until temperatures have dropped to or below 90°F and then released at the relocation site at an empty burrow or an artificial burrow after appropriate information (i.e., weight, length, width, height, sex, apparent health, and identification number) has been collected. These animals shall not be held more than 24 hours. Desert tortoise found during the winter shall be held and isolated from other desert tortoise by containing them in individual cardboard boxes and kept in a cool place, yet protected from freezing temperatures, until the following spring at which time they shall be released at the relocation area after the required information is collected. The release site shall be next to an empty desert tortoise burrow or an artificial burrow and the animal shall be placed in the shade of a shrub. Under certain circumstances (i.e. episodes of warm weather), with prior Service approval, desert tortoise removed from harm's way during the winter may be released and not held for the duration of the winter.
  - b. Desert tortoise that are handled shall be marked for future identification. An identification number (using the acrylic paint/epoxy technique) shall be placed on the 4th costal scute (Fish and Wildlife Service 1990). Additionally, a 35mm photograph (slide) of the carapace, plastron, and the 4th left costal scute will be taken. Notching is not authorized.
  - c. Artificial burrows shall be approximately 5 feet long and two feet deep at the distal end. The angle of decline for the burrow floor shall not be more that 20° from the mouth to the distal end of the burrow. Other burrow dimensions may be used as deemed appropriate by a desert tortoise expert with prior Service approval.
  - d. All desert tortoise that are handled shall be marked using epoxy and a tag which incorporates the Service's consultation number for this biological opinion (i.e. 1-6-92-F-39) and an individual specific identification number.
22. Only persons authorized by the Service under the auspices of this Biological Opinion shall handle desert tortoise. The authorized person(s) shall be approved by the Service prior to the onset of



activities that would impact desert tortoise. The Bureau/project proponent shall submit the name(s) and credentials of the person(s) that will handle desert tortoise to the Service for review and approval at least five (15) days prior to the onset of activities.

23. Desert tortoise that are relocated or otherwise handled due to project related activities shall be handled in accordance with the procedures as detailed in *The Interim Techniques Handbook for Collecting and Analyzing Data on Desert Tortoise Populations and Habitats* (Service 1990), Chapter III, "Protocols for Handling Live Tortoises," which identifies specific handling techniques and precautions to be employed to protect tortoise.
24. The Bureau shall ensure that a long-term desert tortoise monitoring program shall be instituted that will monitor changes in the populations as the project proceeds. The intent of the monitoring program is to detect the long-term effects on the desert tortoise population from both direct and indirect impacts associated with the project. This program shall be approved by the Service and the Bureau. The program shall include two years of preconstruction monitoring.
25. All landfill associated employees shall participate in a desert tortoise education program. The program shall be developed by the project proponent prior to implementing all authorized activities. Employees shall be advised of the potential impact to the desert tortoise and the potential penalties for taking a threatened species. The content of the education program shall be submitted to the Bureau for review at least 30 days prior to the presentation of the program to employees. At a minimum, the program shall include the following topics: occurrence of the desert tortoise and general ecology, sensitivity of the species to human activities, legal protection for desert tortoises, penalties for violations of federal and state laws, reporting requirements, and project features designed to reduce the impacts to desert tortoises and promote the species long term survival.
26. A Desert Tortoise Procedure Card (to be distributed to all employees) shall be developed to reflect the measures necessary to comply with the threatened status of the desert tortoise. The card shall reflect the current status of the desert tortoise and the prohibition of take. The card shall identify the person(s) authorized to handle this species.
27. The project proponent shall designate a field contact representative (FCR) who will be responsible for overseeing compliance with protective measures for the desert tortoise and for coordination on compliance with the Bureau's stipulations. The FCR shall have the authority to halt all associated project activities which may be in violation of the stipulations.
28. To avoid the possibility of this type of accident, refueling equipment should be maintained at the junction of the Eagle Mountain rail-line and the main tracks.



## Desert Pupfish

29. The Bureau shall ensure that a contingency plan will be in place prior to the movement of a locomotive engine on the rail line.
  - a. The Bureau shall be the lead agency who will coordinate the corrective actions/activities in the event of a derailment.
  - b. The bureau shall coordinate the identification of the responsible parties and their roles in the event of a spill or other project related activity.
  - c. The participating parties shall be signatory to the contingency plan
30. Prior to each passage of a locomotive engine over the rail-line, an inspection of the fuel and lubricant holding tanks shall occur. All leaks shall be fixed prior to passage over Salt Creek. A log of all such inspections shall be kept and provided to the Bureau or Service upon request.
31. A non-porous material or other suitable material or structure capable of containing petroleum products shall be incorporated into the rail-line at the Salt Creek trestle. The integrity of this material shall be inspected on a daily basis to help prevent the possibility of petroleum products entering Salt Creek. Drainage shall be established so runoff from the trestle or adjacent rail-line does not enter desert pupfish habitat.
32. All landfill associated employees will participate in a desert pupfish education program. The program will be developed by the project proponent prior to implementing all authorized activities. Employees will be advised of the potential impact to the desert pupfish and the potential penalties for taking an endangered species. The content of the education program will be submitted to the Bureau for review at least 30 days prior to the presentation of the program to employees. At a minimum, the program will include the following topics: occurrence of the desert pupfish and its general ecology, sensitivity of the species to human activities, legal protection for desert pupfish, penalties for violations of federal and state laws, reporting requirements, and project features designed to reduce the impacts to the species and promote its long term survival.
33. A qualified biologist shall be on site during all maintenance, construction, and emergency activities which may impact desert pupfish or their habitat.
34. If maintenance of the trestle or railroad in the Salt Creek tributary must occur, mitigation measures shall be incorporated into the project plans to avoid impacts to desert pupfish. Furthermore, mitigation plans for construction or major maintenance activities shall be reviewed and approved by the Service, the Bureau, and the Department prior to implementation.



35. If construction is required on the trestle or rails crossing the tributary, construction plans shall include designs and specifications that shall avoid impacts to desert pupfish, including prohibition of construction during the fall when pupfish populations are most restricted and vulnerable.
36. Storage and staging areas shall be placed in locations which will not effect the habitat, and measures to avoid any discharge of pollutants shall be incorporated.
37. A qualified biologist shall be on-site whenever any maintenance work is conducted on or near pupfish habitat.
38. In the event of a rail accident in the vicinity of desert pupfish habitat, a qualified biologist shall be included as a response and cleanup team member. The Service, Bureau, and the Department shall be notified immediately (same day). Cleanup operations shall be monitored by the biologist so that additional adverse impacts are not incurred by the cleanup operation.
39. Measures to restore pupfish habitat in Salt Creek and its tributary in the event of an accident shall be incorporated as part of the response plan. This plan shall include provisions for the removal of any portion of the streambed that is contaminated and the replacement of such material such that the hydrology of the stream is not altered.
40. If an accident causes the loss of the local pupfish population, the habitat shall be restocked as soon as biologically appropriate with pupfish of the same genetic strain.

#### Disposition of Sick, Injured, or Dead Individuals

The Service's Carlsbad Office (619-431-9440) must be notified within three working days should any listed species be found dead or injured in or adjacent to the action area. Notification must include the date, time, and location of the carcass, cause of death or injury, and any other pertinent information. In the event that the Bureau suspects that a species has been taken in violation of the terms and conditions contained within this biological opinion, such situation shall be reported to the Service's, Division of Law Enforcement, Torrance, California at (310) 984-0062.

#### CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. The term "conservation recommendations" has been defined as Service suggestions regarding discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information. The recommendations provided here relate only to the proposed action and do not necessarily represent complete fulfillment of the agency's section 7(a)(1) responsibility for these species.



Desert Tortoise

1. The Bureau should conduct ecological studies designed to detect and quantify the affects of the proposed project on the desert tortoise population found within the action area of the project.

Desert Pupfish

1. The Bureau should conduct ecological studies designed to detect and quantify the affects of the proposed project on desert pupfish found in Salt Creek. A routine water quality assessment is needed to help determine the affects of an active rail-line on desert pupfish. Furthermore, this assessment needs to include an analysis of organic compounds and their quantification.

In order for the Service to be kept informed of actions that either minimize or avoid adverse effects or that benefit listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

CONCLUSION

This concludes formal consultation on the proposed Eagle Mountain Landfill Project. As required by 50 CFR 402.16, re-initiation of formal consultation is required if the action is significantly modified in a manner not discussed above, if new information becomes available on listed species or impacts to listed species, or if the incidental take limit is exceeded. We would appreciate notification of your final decision on this matter. Any questions or comments should be directed to Arthur Davenport of my staff at (619) 431-9440.

Attachment



## REFERENCES

- Burge, B.L. 1978. Physical characteristics and patterns of utilization of cover sites by Gopherus agassizii in southern Nevada. Proc. 1978 Symp., The Desert Tortoise Council. pp. 80-111.
- Burge, B.L., and W.G. Bradley. 1976. Population density, structure and feeding habits of the desert tortoise, Gopherus agassizii, in a low desert study area in southern Nevada. Proc. 1976 Symp., The Desert Tortoise Council. pp. 51-74.
- Lamb, T., Avise, J.C., Gibbon, J.W. 1989. Phylogeographic patterns in mitochondrial DNA of the desert tortoise (Gopherus agassizii), and evolutionary relationships among the North American gopher tortoises, Evolution, 43(1), pp. 76-87.
- Luckenbach, R. A. 1982. Ecology and management of the desert tortoise (Gopherus agassizii) in California. In: R.B. Bury (ed.). North American Tortoise: Conservation and Ecology. U.S. Fish and Wildlife Service, Wildlife Research Report 12, Washington, D.C.
- Nicholson, L. 1978. The effects of roads on desert tortoise populations. Pages 127-129 in M. Trotter and C.G. Jackson, Jr. (eds.). Proc. 1978 symposium of the Desert Tortoise Council. Also, U.S. Dept. of Interior, Bureau of Land Management, CDP, Riverside, Calif. Draft report. Contr. No. CA-060-CTB-000024.
- Recon. 1991a. Biological Assessment for the Eagle Mountain Landfill Project. Prepared for the Bureau of Land Management, Riverside County, California.
- Recon. 1991b. Environmental Impact Statement/Environmental Impact Report For The Eagle Mountain Landfill Project. Prepared for the Bureau of Land Management and the County of Riverside, California by Recon and Mine Reclamation Corporation.
- Recon. 1991c. Supplemental Desert Tortoise Survey for the Eagle Mountain Landfill Project in Riverside County, California.
- Recon. 1991d. Draft Biological Assessment for the Eagle Mountain Landfill Project. Prepared for the Bureau of Land Management, Riverside County, California.
- Selzer. 1992. Letter dated July 27, 1992, that was received by the U.S. Fish and Wildlife Service regarding the addition of the "tipping fee" as a mitigation measure to be use in the Biological Opinion for the Eagle Mountain Landfill project. This letter in on file in the Carlsbad Office of the U.S. Fish and Wildlife Service.
- U.S. Department of the Interior. July 15, 1991. Endangered & Threatened Wildlife and Plants, 50 CFR 17.11 & 17.12



U.S. Fish and Wildlife Service. November 1990. Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise.



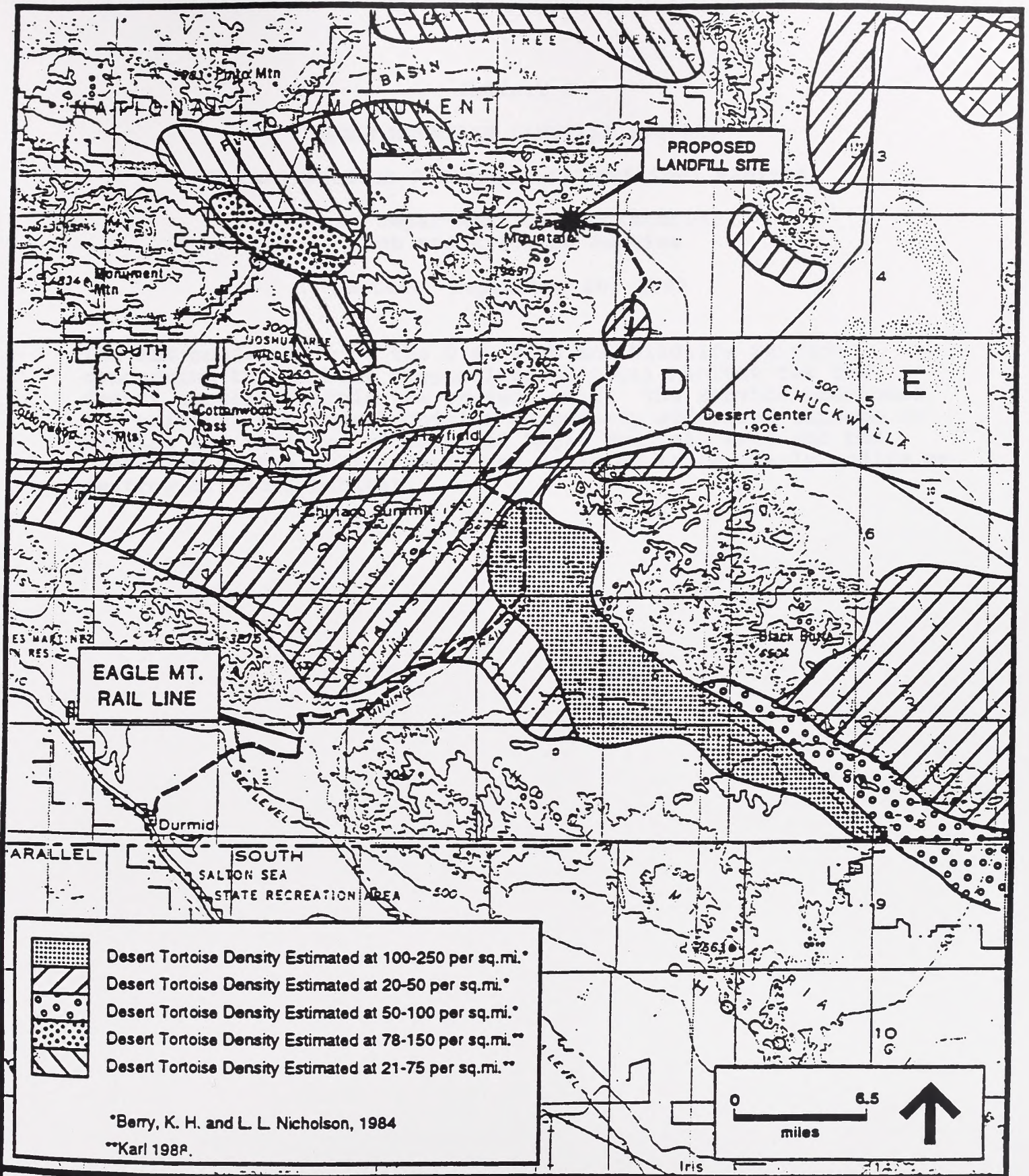


FIGURE 12. DESERT TORTOISE DISTRIBUTION







**EXHIBIT E**

**EAGLE MOUNTAIN LANDFILL PROJECT**

**Formal Section 7 Conference (Critical Habitat)**

**U.S. Department of the Interior  
Fish and Wildlife Service**

**Dated: September 20, 1993**

The BLM conferred with the U.S. Fish and Wildlife Service concerning the current proposal of critical habitat for the desert tortoise within the project area. The Service concluded the original Biological Opinion adequately addressed impacts to habitat and that the widening of Eagle Mountain Road and the operation of the rail line is not expected to adversely modify or destroy critical habitat.















**EXHIBIT F**

**EAGLE MOUNTAIN LANDFILL PROJECT**

**Opinion on Campsite/Millsite Reverter**

**U.S. Department of the Interior  
Office of the Solicitor  
Pacific Southwest Region**

**Dated: February 2, 1993**

As discussed in Section 4.4.1 of the Record of Decision, the selected lands include an interest in a tract of land containing approximately 460 acres which was conveyed to Kaiser under Patent 1153422 for campsite and millsite purposes, pursuant to Private Law 790 enacted by the United States Congress on July 8, 1952. The patent, as provided in the Act, contains a reversionary clause that if the lands are not used for a continuous 7 year period for mining related purposes, the land would revert to the United States. The 460 acre tract of land is occupied by the mining town of Eagle Mountain which is owned by Kaiser. The opinion of the Regional Solicitor, Pacific Southwest Region, on the matter of the reversionary interest of the United States follows.

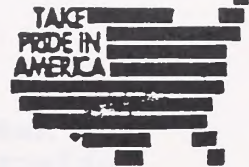








# United States Department of the Interior



## OFFICE OF THE SOLICITOR

Pacific Southwest Region

2800 Cottage Way

Room E-2753

Sacramento, California 95825-1898

IN REPLY REFER TO:

February 2, 1993

### MEMORANDUM

**TO:** State Director, Bureau of Land Management, California

**FROM:** Regional Solicitor, Pacific Southwest Region

**SUBJECT:** Eagle Mountain Project - Kaiser Steel Exchange

Your memorandum of January 19, 1993, requests my opinion on several questions of law concerning the proposed exchange of lands with Kaiser Steel Corp. The public lands and interest in the lands proposed for disposal, were patented to Kaiser Steel Corporation pursuant to the authority of Private Law 790 (66 Stat. A129) and contained a reservation of all minerals and a reversionary clause which provided for the return of title to the United States if Kaiser or its successors did not use the property for a continuous period of seven years as a camp site or mill site or for other incidental purposes in connection with Kaiser's mining operations. You have also advised that Kaiser issued a surface lease for the operation of a correctional facility and received compensation therefore.

To properly answer your inquiry, one must determine what interest Kaiser has in the property and what interest remains in the United States. An examination of Private Law 790, supra, and the patent issued to Kaiser discloses that Kaiser received the surface estate, subject to the possibility that that estate might revert to the United States. The control of the reversion rests with Kaiser, however, I am of the opinion that the surface estate will not revert to the United States automatically, but would only revert upon the election of the Secretary, based upon a finding that the facts support the applicability of the reversionary clause. The factual evidence furnished by Kaiser leads to the inescapable conclusion that the conditions of the reverter have not been triggered.

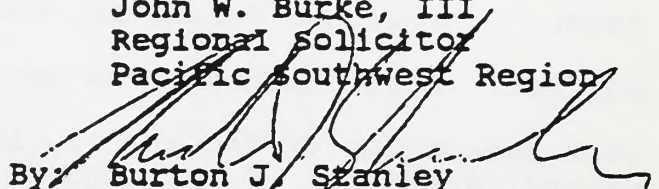
In view of the fact that Kaiser received full and complete title to the surface estate, subject only to the possibility of reverter, I am of the opinion that Kaiser's lease of a portion of the property for the operation of a correctional facility was well within the rights granted to Kaiser by the patent. Kaiser received full possessory interest in the surface of the property



and had the right to utilize that surface at its discretion, subject only to the conditions of the reverter clause.

The remaining question concerns the value to be given to Kaiser's interest in the property. The United States has reserved title to the mineral estate in the property and has the right to reacquire the surface estate of the property should Kaiser not utilize a portion of the property as a mining camp, mill site, etc. Kaiser may exchange only its surface estate with the United States and may be given credit only for the value of the surface estate less the improvements placed upon the property by Kaiser. I will be pleased to work with your appraiser in properly valuing Kaiser's interest in this property.

John W. Burke, III  
Regional Solicitor  
Pacific Southwest Region

By:  Burton J. Stanley  
Assistant Regional Solicitor

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