



SIERRA ARMY DEPOT

DRAFT HAZARDOUS WASTE TREATMENT AND STORAGE PERMIT AND DRAFT EIR

Fact Sheet

October 1999

INTRODUCTION

The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) is seeking public comment on the **Draft Hazardous Waste Treatment and Storage Permit (Permit)** and the **Draft Environmental Impact Report (EIR)** for Sierra Army Depot (SIAD). The Permit will allow the U.S. Army at SIAD to receive munitions and explosives classified as hazardous waste from off-site facilities, to store hazardous waste in existing storage locations, and to treat hazardous waste by either incineration, open burning (OB), or open detonation (OD).

In response to public concern regarding noise and vibration impacts from ongoing operations at SIAD, DTSC has initiated the preparation of a revised noise and vibration analysis for the draft EIR. Upon completion, this revised chapter will be released for a 45-day public comment period. DTSC has determined that all other analysis of environmental impacts have been completed and are available for review in the draft EIR.

This fact sheet summarizes the documents available for review and describes how you can participate in the DTSC decision making process. Both of these draft environmental documents are available for review at the information repositories located in Reno, NV, and in Herlong, Susanville, and Sacramento, CA. (See page 6 for locations). The public comment period begins on October 29, 1999. A second public notice will announce the findings of the noise and vibration analysis and any changes to the draft EIR and draft permit. The second notice will also begin the final 45 days of the public comment period. Locations for the public meetings and the hearing will also be announced at that time.

FACILITY DESCRIPTION

Sierra Army Depot is located in Herlong, CA, 45 miles southeast of Susanville, CA., and 55 miles northwest of Reno, Nevada, along U.S. Highway 395 (see Figure 1). The Sierra Army Depot comprises over 96,000 acres which are divided into three areas: The Main Depot; OB/OD area; and Honey Lake.

Sierra Army Depot operates as a military maintenance and storage facility of munitions and explosives classified as both product and hazardous waste. SIAD also demilitarizes hazardous waste munitions and explosives by disassembly, incineration, open burning, and open detonation. Waste munitions and explosives 50 caliber or less are not regulated by this permit but may continue to be incinerated under the local Air Pollution Control District. SIAD has operated as a hazardous waste treatment facility since November 1980 under interim status granted by DTSC. Interim status hazardous waste facilities are those that were in existence before 1980 wherein the operator was required to file a RCRA permit application consisting of a Part A and Part B applications, and obtain an EPA identification number.

DRAFT EIR PROCESS

The California Environmental Quality Act, commonly known as CEQA, requires that before certain projects can be implemented, an objective, full-disclosure document called an Environmental Impact Report (EIR) must be prepared. The purpose of the EIR is to (1) inform decision makers and the general public about the potential impacts of a proposed plan on human health and the environment, (2) provide mitigation measures to

reduce or eliminate significant adverse impacts, and (3) identify and evaluate reasonable alternatives to the proposed project.

It is mandatory for DTSC to prepare an EIR because DTSC is considering the Draft Permit for a hazardous waste incinerator and for a large off-site treatment facility. The Draft EIR was prepared by an independent consultant under the oversight of DTSC. On November 21, 1994 and June 20, 1995, DTSC issued two Notices of Preparation to the general public and involved regulatory agencies to obtain input on the types of impacts that should be evaluated in the Draft EIR. The Draft EIR identifies three types of impacts associated with implementing the Draft Permit as a result of these meetings: (1) impacts not considered significant; (2) impacts which could be mitigated to a less than significant level and; (3) significant impacts that cannot be reduced with mitigation measures to a less than significant level. A discussion of these impacts can be found in the Draft EIR. Table 1 (enclosed) from the Draft EIR summarizes the resources which could potentially be impacted from this project. Mitigation measures to reduce impacts to less than significant levels are also identified. Impacts which are significant and unavoidable require DTSC to prepare a Statement of Overriding Considerations before a final permit decision is made. These impacts are identified in the Ecological Findings Section E of the Draft EIR. A Statement of Overriding Considerations identifies the reasons why DTSC believes that the benefits of the Permit outweigh the unavoidable adverse environmental impacts.

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HUMAN AND ECOLOGICAL RISK ASSESSMENTS

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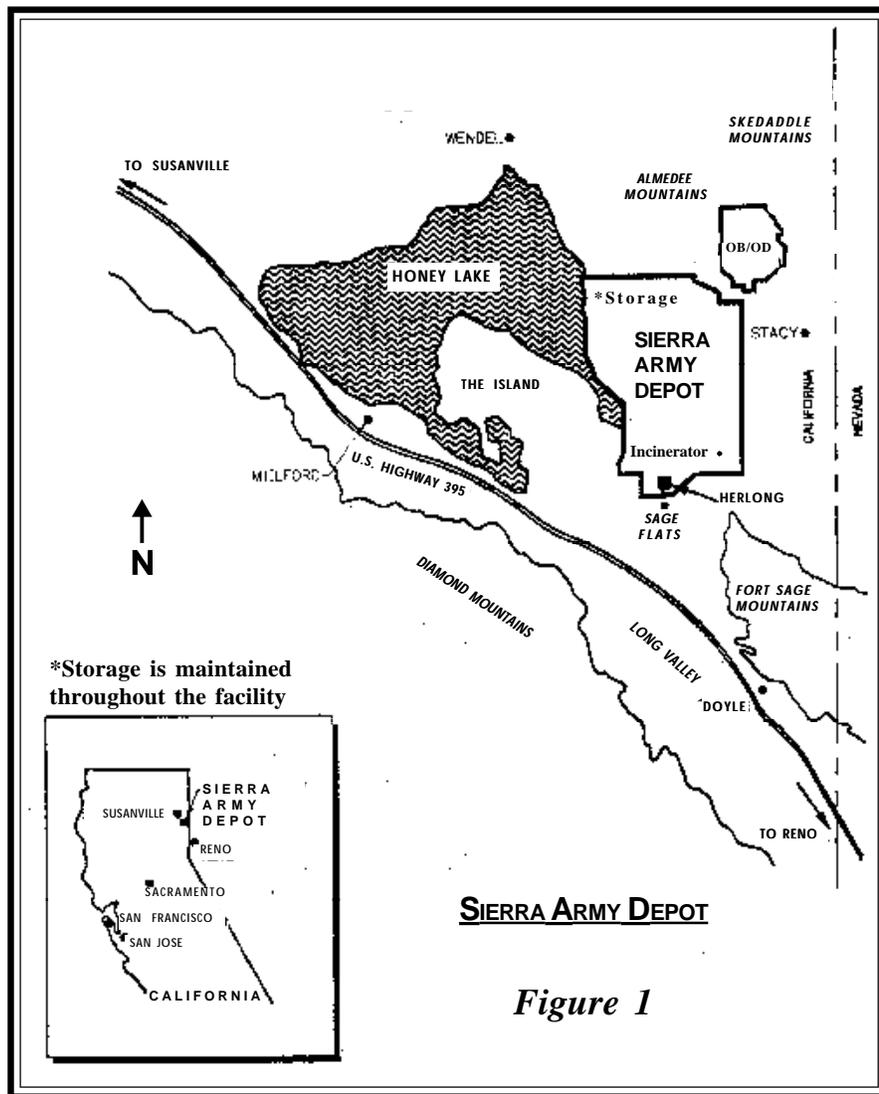


Figure 1

were conducted. The scenario posed for the assessments was for SIAD to operate under the full requested capacity and to thermally treat munitions which release the highest amount of toxic emissions. The air transport and dispersion model used was reviewed by the California Air Resources Board.

Human Health Findings

Emissions from each of the thermal treatment methods behave differently. Therefore, the receptors selected for the evaluation were based on the location with the calculated maximum exposure and also for the nearest actual receptor. Under this scenario, it was assumed that all treatment methods were being used and all emissions were blowing toward that one receptor. Three categories of human health impacts were compiled. These are: a)

long term carcinogenic risk, b) long term or chronic noncarcinogenic risk, and c) short term or acute noncarcinogenic risk. The long term impacts are evaluated for an individual exposed over a 30 year period, and the short term impacts are evaluated over a 24-hour period.

Under the scenario described above with maximum capacity, risk for both chronic and acute noncarcinogenic hazards were found to be above the acceptable level established by DTSC. Permit conditions are imposed to restrict SIAD treatment quantities not to exceed DTSC thresholds of 10 in a million for long term carcinogenic risk and a standard hazard index rating of 1 for chronic and acute noncarcinogenic risk. A hazard index is used to describe any noncarcinogenic risk such as birth defects, liver problems, etc., or other conditions not associated with cancer.

Ecological Findings

Plants, animals, and aquatic resources were evaluated. No endangered, threatened, or rare species of plants or animals were located within the area impacted by the project.

The assessment calculated that emissions were found to exceed acceptable levels for plant, animal, and aquatic resources. Permit conditions will restrict the amounts and types of hazardous wastes burned or detonated to not exceed acceptable limits. SIAD will also be required to prepare a biological monitoring program that will be reviewed by DTSC and the California Department of Fish and Game.

Surface and Ground Water Impacts

Emissions from operations which are deposited into Honey Lake, Pyramid Lake, and seasonal streams are not expected to exceed water quality standards. Currently, there is no indication of groundwater impact from emissions. Monitoring of streams and a groundwater evaluation will be required under the permit.

Air Quality Impacts

The impacts on ambient air quality was evaluated by comparing the maximum impacts for criteria pollutants to California, Nevada, and federal air quality standards. Under worst-case meteorologi-

cal conditions and depending on the types of waste treated, impacts from sulfur dioxide and the 24-hour particulate standards were predicted to exceed the ambient air quality standard. Permit conditions will restrict emissions from exceeding these standards.

Noise Impact

DTSC is currently completing a noise impact analysis to investigate and assess the blast noise impacts at off-site receptor locations. The results of the investigation will be discussed in a separate future fact sheet.

EVALUATION OF ALTERNATIVES

Under CEQA, an EIR must identify and analyze reasonable alternatives to the proposed project. The Draft EIR for SIAD provides an in-depth analysis of the preferred proposed plan as well as an analysis of three additional project alternatives. The four project alternatives are referred to as the (1) No Project Alternative, (2) On-Site Alternative, (3) Off-Site Alternative, and (4) Environmentally Superior Alternative. The four alternatives for the proposed project are summarized below.

The **No Project Alternative** would involve denial of the permit application by DTSC. SIAD would no longer store or treat hazardous waste munitions/explosives. SIAD could continue to store product munitions/explosives and to incinerate non-hazardous waste munitions. The OB/OD units would undergo RCRA closure under interim status requirements. SIAD would continue to generate hazardous waste munitions/explosives from outdated product and require off-site transportation to another permitted off-site storage and treatment facility. The No Project alternative would not accomplish the Department of Defense's waste management goals. With the current limited capacity of other OB/OD treatment facilities, longer storage of munitions/explosives could create unsafe conditions and require increases in emergency treatments of unsafe munitions/explosives.

The **On-Site Project Alternative** uses existing product storage facilities for storage of munitions/explosives either received or generated on-site as hazardous waste. Thermal treatment of hazardous waste munitions/explosives would occur in existing facilities and be limited to amounts that would not

cause significant impacts to human health. The significance of the potential impacts to plant, animal and aquatic resources would be monitored to establish a threshold level. Further permit conditions would be imposed based on the findings. SIAD would be required to continue to evaluate alternate treatment methods, such as reducing volumes through disassembly of munitions, reuse of energetics, and non-thermal treatment methods.

The **Off-site Project Alternative** requires a potential off-site location with a minimum of 53 square miles available to handle the capacity requested in the permit application. In addition to the minimum area, the locations would need to be suitable for munitions/explosives and have compatible surrounding land use. The uncertainty, delay and cost to select, purchase and permit another facility is significant. There are no existing off-site hazardous waste facilities that can accommodate the required capacity and services provided by SIAD.

CEQA requires that a Draft EIR determine the **Environmentally Superior Project Alternative** as either the proposed project, one of the project alternatives, or a combination. The Draft EIR finds that the Environmentally Superior Alternative for the proposed project is: (1) the permit Application with the proposed quantities with limitations based on permit conditions that protect human health, air quality and water quality; (2) permit conditions to establish and monitor acceptable threshold levels for plant, animal and aquatic resources, and (3) permit conditions to promote pursuing waste minimization and alternative treatment methods. The Draft EIR finds that the overall effect of the Environmentally Superior Alternative would be beneficial and that most impacts, while not immediate, could be reduced to a less-than significant level.

TREATMENT UNITS

If approved, the final Permit will authorize hazardous waste to be thermally treated by the following methods:

Incineration - small munitions (small arms ammunition, grenades, mines) and munition components (fuzes, primers, detonators) detonated in a rotary kiln.

Open Detonation in Pits - detonations of explosives and munitions items, such as bombs, projectiles and warheads, take place in any of 14 pits dug into the sides of hills, with a maximum of two treatment events per pit per day.

Open Burning in Pits - missiles, high explosive rockets, and large rocket motors are secured and ignited, burning for a period up to ten or more minutes.

Open burning in Pans - Bulk solid propellant, propellant charges and propellant munitions are placed in metal containment pans and burned in typically 2 minutes or less.

STORAGE UNITS

If approved, the final Permit will authorize hazardous waste munitions and explosives to be handled or stored as follows:

Magazine Staging Area - The Magazine Area is used for the handling and transferring of munitions/explosives between truck/rail and storage units.

803 Igloos - 799 igloos are constructed with reinforced concrete and are earth covered. Four additional steel arch earth-covered igloos are also used for storage;

664 Y Sites - Y sites are open storage sites which have earthen berms on three sides;

12 Standard Magazines - These are constructed of concrete foundation walls and piers, hollow tile walls, steel frames and concrete floors;

32 J-, K-, and N-Sites - These are additional open storage sites in the Magazine area without berms.

Storage of Residue Ash - Ash collected from the above thermal treatment methods would be containerized and stored for a period no longer than one year.

PERMIT CONDITIONS

The permit contains a number of conditions to protect public health and the environment. A summary of public health and safety requirements SIAD must meet are as follows:

Safe storage of hazardous waste - Hazardous waste munitions and explosives must be stored only with compatible materials. The storage configurations

must meet safety-based requirements and are inspected regularly. All lots of hazardous waste must be labeled and tracked;

Incinerator Operating Conditions - The incinerator must operate only within specified operating parameters;

Meteorological Limits on OB/OD - The impact of meteorological conditions on OB and OD treatment events is currently being evaluated. Other conditions or restrictions may be placed on SIAD as part of the ongoing impact analysis;

Training - Personnel must have adequate hazardous waste management and safety training. Records of this training must be maintained;

Risk and Hazard Limits - Limits are established for human risk and hazard resulting from treatment emissions. SIAD must track these risks and hazards in a database. Treatment events must be planned so that these limits are not exceeded. The standards and procedures used to maintain this database are described in the Emission Database Tracking System Manual. This draft manual is also available for review in the information repositories. The document has not yet been approved by DTSC. Any changes to this document will be listed in the second public notice. SIAD must also comply with all other regulatory standards, including the federal and the state Clean Air Act.

PUBLIC PARTICIPATION

DTSC strongly encourages the public and involved agencies to review and submit comments on the Draft Hazardous Waste Treatment and Storage Permit and the Draft Environmental Impact Report. State regulations require a minimum 45-day public comment period for the Draft Permit and the Draft EIR. The formal public comment period will begin on October 29, 1999. Another public notice will be issued at the time the Draft Noise Impact Analysis has been completed and is ready for public comment and review. At that time, the final 45-day public comment period will begin. At any time beginning October 29, 1999 you may send written comments to:

Jeff Van Slooten, Project Manager
Department of Toxic Substances Control
10151 Croydon Way Suite 3
Sacramento, CA 95827

At the conclusion of the public comment period, DTSC will evaluate all comments received and make a decision to either grant, deny or modify the Permit. Written responses to all comments received are distributed to those who made comments. Finally, a letter announcing the DTSC's decision will be mailed to all individuals on the project's mailing list. If you didn't receive this fact sheet in the mail and would like to be placed on the mailing list, please fill out and return the mailing list coupon located on the back page of this fact sheet.

In addition to the public comment period, DTSC will hold two informal public meetings to answer questions about the Draft Permit and Draft EIR and to give the community an opportunity to discuss project-related issues and concerns with DTSC staff. The dates for the meetings will be given in the second public notice. Please note that oral comments made at the meetings will not be considered part of the formal record. Persons wishing to make oral comments for the record should do so at the public hearing described below.

The date and time of the public hearing will be identified in the second public notice. The purpose of the hearing is to provide members of the public with an opportunity to verbally express their concerns about the permit process **for the record**. DTSC will not respond to comments received during the hearing, nor will it make its final decision at the end of the hearing. Written comments sent by mail and oral comments presented at the public hearing will be equally considered by DTSC and neither manner of commenting is considered more important or significant than the other.

If you plan to submit written or oral comments, DTSC recommends the following guidelines to make your input as effective as possible:

- Please make sure your comments address **specific** technical, legal, or policy issues regarding the documents being reviewed;
- If you believe information in a document is missing or may be inaccurate, please be specific about what is missing or inaccurate;
- Please make it clear which document you are commenting on.

FOR MORE INFORMATION

DTSC encourages members of the public to review the documents in the project Information Repository. The Information Repositories contains the Draft Hazardous Waste Treatment and Storage Permit, the Draft Environmental Impact Report, and many other key project documents listed below. The information repositories can be accessed at the following locations:

Lassen Community College 478-200 Highway 139 Susanville, CA 96130 (530) 251-8830	Mon-Thu Fri Sat Sun	8a.m. - 10 p.m. 8 a.m. - 4 p.m. 10 a.m. - 2 p.m. 2 p.m. - 6 p.m.
Reno Main Library 301 S. Center Street Reno, NV 98501 (775) 785-4190	MTuWed Th Fri Sat Sun	10 a.m. - 8 p.m. 10 a.m. - 6 p.m. 10 a.m. - 5 p.m. 12 p.m. - 5 p.m.
Sierra Army Depot Contracting Office Building 74, "C" Street Herlong, CA 96113 (530) 827-4835	Mon-Fri	6:30 a.m. - 5 p.m. Or By Appointment

*Department of Toxic Substances Control Mon-Fri 9 a.m. - 4 p.m.
Sacramento Office
10151 Croydon Way, Suite 3
Sacramento CA 95827
(916) 255-3758

***The full Administrative Record for the project is also available at this location.**

OTHER KEY PROJECT DOCUMENTS

- Part B Application for OB/OD/Storage
- Part B Application for Incinerator
 - Human Risk Assessment
 - Ecological Risk Assessment
 - Ecological Validation Study
- Emission Database Tracking System Manual

Mailing Coupon

If you did not receive this fact sheet in the mail and would like to be placed on the mailing list to receive information about this project in the future, please complete this coupon and return it to: Ms. Celeste Albanez (HQ15), Department of Toxic Substances Control, P.O. Box 806, Sacramento, CA 95812-0806

Name _____

Address _____

City _____ State _____ Zip _____

Please note: mailing lists are public information.