

August 2003

**SAN ONOFRE NUCLEAR GENERATING STATION (SONGS)  
SAN CLEMENTE, CALIFORNIA**



**Public Comment Period: Draft Hazardous Waste Facility Permit**

**DTSC is one of six Boards and Departments within the California Environmental Protection Agency. The Department's mission is to restore, protect, and enhance the environment, to ensure public health, environmental quality, and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.**

*State of California*



**California  
Environmental  
Protection Agency**



*South Yard Facility-Batch Plant. The space in front of the brick wall is one of the three areas used for temporary storage of mixed waste included in the draft hazardous waste facility permit.*

We are seeking public input on a proposed hazardous waste permit for the San Onofre Nuclear Generating Station (SONGS) near San Clemente, California.

If granted, the permit would authorize the continued use of three areas at the facility for the temporary storage (up to one year) of "mixed waste." Mixed waste is hazardous waste contaminated with low levels of radioactivity. The waste is packaged and stored on site until it is shipped to a permanent disposal site.

This permit does **not** apply to the spent fuel rods from the nuclear reactors.

Our agency is the Department of Toxic Substances Control (DTSC). We regulate the generation, storage, and treatment of hazardous waste in California.

**Public Comment Period**

August 8, 2003 through  
September 23, 2003

We invite you to submit comments during this period, and to attend the public hearing. Please see pages 4 and 5 of this fact sheet for information on where to find the documents and how to submit comments.

**Workshop and Public Hearing**

**Monday, September 8, 2003**

Workshop: 5 p.m. – 6:30 p.m.

Public Hearing: 7 p.m.

San Clemente Community Center

100 N. Calle Seville

San Clemente, California

The workshop is an opportunity for you to talk with us informally about the project. At the public hearing we will give a presentation, followed by a formal public comment session.

This fact sheet summarizes the proposed action and tells you how to provide comments. We have also included a section with answers to frequently asked questions. Full details are provided in two documents offered for public review and comment. The first is a Draft Hazardous Waste Facility Permit. The second is a Draft Negative Declaration, which is our determination that the storage would not have a significant impact on the environment.

Page 4 of this fact sheet gives information on where you can get these and other SONGS documents.

As stated earlier, the waste covered by this permit does not include the spent fuel rods from the facility's nuclear power generation activities. These high-level radioactive wastes are regulated by the Nuclear Regulatory Commission. We have no regulatory authority over the operation of nuclear power plants, or their nuclear fuels and radioactive nuclear byproducts.

All the waste covered by the permit is generated at SONGS during normal maintenance activities. None of it is brought in from outside sources. The facility has used these three temporary storage areas since March 1989 under interim authorization from our agency. If approved, this hazardous waste permit would give final authorization to continue the mixed waste storage activities.

## **Facility description**

SONGS, operated by Southern California Edison (SCE), is a nuclear power generating station with two operating reactors. Each of these is rated to generate 1,150 megawatts of electrical power. A third nuclear reactor, Unit #1, was permanently removed from service in November of 1992 and is being dismantled. The 84-acre SONGS site is in San Diego County, two miles south of San Clemente, just west of Interstate Highway 5 along the Pacific Coast. The facility is entirely within the United State Marine Corps Base,

Camp Pendleton. The property is a federal easement from the Department of the Navy to SCE.

## **Description and sources of the mixed waste**

Mixed waste is hazardous waste contaminated with low levels of radioactivity. SONGS produces mixed waste at numerous locations throughout the site during the course of its normal plant operation and maintenance. The hazardous waste portion of the mixed waste is similar to what would be found in any garage, machine shop, or industrial facility.

Regulated mixed wastes generated at SONGS consist of waste oils, paint liquids and sludges, lead, mercury, freon filters, cleaning solvents, asbestos, corrosive liquids and sludges, oxidizers, organic liquids with halogens, metals, and aqueous solutions contaminated with small amounts of radioactivity. Both liquid and solid mixed wastes are stored in sealed containers that conform to Department of Transportation standards. The containers are usually 55-gallon or 30-gallon drums, or metal boxes.

SONGS typically generates less than 500 gallons of mixed waste per month. The permit would allow a maximum of 62,250 gallons to be stored at any one time. This larger capacity could be needed during periodic (every two to three years) major maintenance or equipment overhauls, such as cleaning the steam generators or emptying the waste oil sumps. Some mixed waste comes from the dismantling work on Unit #1.

## **History of the permit action**

In 1989 we granted SONGS interim authorization to temporarily store mixed waste. Following a public review and comment period, we granted SONGS a Class 2 permit modification on December 5,

2000 to allow for the storage of additional waste types and a volume increase from 50,000 gallons to 62,250 gallons.

In August 1999 SONGS submitted a Part A application for the storage of mixed wastes at its facility. In January 2001 SONGS submitted a Part B application. The Part A was revised in July 2002. These applications are the basis for the permit being considered.

### **What the permit would do**

If approved, the permit would allow SONGS to continue temporary storage of mixed waste generated on-site. The term “temporary” means that each container of waste may be stored for no more than one year from the time it is packaged and placed into the hazardous waste storage area. The maximum amount of mixed waste allowed at any one time would be 62,250 gallons. With the submittal of just cause, SONGS can request to store designated mixed waste for more than one year, subject to our approval.

The draft permit does not allow SONGS to receive either mixed or hazardous wastes from outside sources.

### **The purpose of temporary waste storage**

Mixed wastes, once tested and characterized to determine the hazardous constituents and level of radioactivity, are stored in appropriate containers in designated storage areas. The temporary storage allows time for the waste to be consolidated into a full truckload, reducing unnecessary traffic. The temporary storage also provides time to locate final treatment and disposal facilities, such as Envirocare in Utah, Perma-Fix in Tennessee and Florida, and others.

### **Regulatory oversight**

Our agency regulates the generation, storage, and treatment of hazardous waste, including the hazardous waste portion of mixed waste. We regulate the design and operation of hazardous and mixed waste storage facilities such as those at SONGS.

The Nuclear Regulatory Commission regulates the radioactive portion of mixed waste, including the mixed waste covered by this permit. They also license the commercial uses of radioactive materials, such as the operation of nuclear power plants, and regulate the handling of nuclear materials (reactor fuels, radioactive nuclear byproducts, etc.).

The Department of Transportation oversees the packaging and transportation of the mixed waste to the permanent disposal facilities.

### **Description of storage areas**

One of the three designated mixed waste storage areas is located at the South Yard Facility – Batch Plant. The other two are located at the Multi-Purpose Handling Facility. These facilities are within a fenced perimeter with 24-hour security and controlled access. The mixed waste storage areas provide secondary containment, security, segregation, and shielding.

The South Yard Facility–Batch Plant is a bermed pad with a metal framed roof with a storage capacity of up to 46,150 gallons of containerized mixed waste. The Multi-Purpose Handling Facility has two bays designated for storing up to 8,050 gallons of containerized mixed waste in each bay. The Multi-Purpose Handling Facility has additional steel and reinforced concrete shielding to allow for the storage of materials with higher levels of radioactivity than the South Yard Facility–Batch Plant.

## **Facility inspections**

We conduct periodic inspections of the mixed waste storage areas at SONGS. Our last inspection, which was in January 2003, showed that the facility was in compliance with all hazardous waste regulations.

## **We assessed the potential environmental impacts**

We conducted an Initial Study pursuant to the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed permit. In this Initial Study we examined 16 environmental resource categories that could potentially be affected by the temporary storage activities. These included air quality, biological resources, hydrology and water quality, hazards and hazardous materials, etc.

Based on this Initial Study, we determined that mixed waste storage operations at SONGS will not have an adverse effect on any of the resource areas examined. This determination is documented in the Draft Negative Declaration that is available for public review and comment along with the Draft Hazardous Waste Facility Permit.

## **We assessed potential hazards**

To determine whether the temporary storage activities could be a hazard to human health or the environment, we reviewed the specifications for monitoring, handling, and storing the mixed waste at SONGS. We determined that the wastes could not come into contact with the public during normal operation because they are placed in sealed drums at the point of generation and moved to storage areas where the containers remain sealed and are inspected periodically.

We analyzed the effect of a release due to fire or explosion. The storage areas have secondary containment for liquid spills that would prevent liquids from being released,

even with catastrophic damage. For releases into the air, we analyzed the two most toxic chemicals in the mixed waste: hydrazine (a corrosion inhibitor) and trichloroethylene (TCE, a solvent). Because these chemicals are in low concentrations and small quantities, and at low partial pressure, we determined that a release into the air would not pose a risk to public health or the environment. Other wastes in the storage areas are either less toxic than hydrazine and TCE, or in small quantities or low concentrations. They would not pose a risk either.

## **SONGS documents at the library and on our website**

The Draft Hazardous Waste Facility Permit and Draft Negative Declaration, along with the permit application and Initial Study (the environmental study which was the basis for the Negative Declaration), are available for public review at the following locations:

San Clemente Public Library  
242 Avenida Del Mar  
San Clemente, California 92672  
(949) 492-3493

DTSC File Room  
700 Heinz Avenue  
Berkeley, California 94710-2721  
(510) 540-3800

The Draft Hazardous Waste Facility Permit and Draft Negative Declaration documents are also available on our website at [www.dtsc.ca.gov](http://www.dtsc.ca.gov). Click on "Managing Hazardous Waste," then on "Hazardous Waste Management Project Documents," then on "San Onofre Nuclear Generating Station."

## Who to contact for more information

For more information about the site, please call or email Project Manager Walter Bahm at (510) 540-3957; email: [wbahm@dtsc.ca.gov](mailto:wbahm@dtsc.ca.gov). For information about the comment period, meeting, or other public participation activities, please call or email Public Participation Specialist Kim Foreman at (714) 484-5324; email: [kforeman@dtsc.ca.gov](mailto:kforeman@dtsc.ca.gov).

### For Media Inquiries:

Jeanne Garcia, Public Information Officer  
(818) 551-2176

## How to submit comments

You may submit written comments by mail or email, or turn them in at the public hearing. You may also make oral comments at the public hearing. Send written comments, postmarked or emailed **no later than September 23, 2003**, to:

Walter Bahm  
DTSC Project Manager  
700 Heinz Avenue, Suite 200  
Berkeley, CA 94710  
Email: [wbahm@dtsc.ca.gov](mailto:wbahm@dtsc.ca.gov)

Please detach and return

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### Comment And Mailing List Form San Onofre Nuclear Generating Station (SONGS)

If you would like to be added to or taken off the distribution list for mail related to the site, please fill in this form and send it to the address below. You may also use this form to submit questions or comments regarding the Draft Permit or Draft Negative Declaration. Please address all mailings to Walter Bahm, DTSC Project Manager, 700 Heinz Avenue, Suite 200, Berkeley, CA 94710.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Affiliation (if any): \_\_\_\_\_

Comments: \_\_\_\_\_

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*DTSC mailings are solely for the purpose of keeping persons informed of DTSC activities. Mailing lists are not routinely released to outside parties. However, they are considered public records and, if requested, may be subject to release.*



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Kim Foreman  
Dept. of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, CA 90630

***INSIDE:  
Information on  
the San Onofre  
Nuclear  
Generating  
Station***



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## Frequently Asked Questions About The SONGS Hazardous Waste Permit

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*These questions and answers are written in generally non-technical language. For full details and supporting information, please see the Draft Hazardous Waste Facility Permit and Draft Negative Declaration.*

**Q: What is the difference between “hazardous waste” and “mixed waste”?**

A: Mixed waste is hazardous waste contaminated with low levels of radioactivity.

**Q: How “hazardous” is this hazardous waste?**

A: The hazardous wastes covered by this draft permit are similar to what would be found in a garage, machine shop, or just about any industrial manufacturing facility. The most common types of waste are used lubricating oils from machine and equipment maintenance; cleaning solvents; painting wastes including thinners, strippers, and paint chips; and soiled rags used for wiping down equipment. Some of the hazardous waste constituents such as hydrazine, 1,1,2-trichloroethane, trichloroethylene, and methylene chloride may have long-term health effects in high concentrations. Because the chemicals have low concentration or are only stored in small quantities—and all are in sealed containers—the wastes do not pose health risks.

**Q: If they don’t pose a risk, why are the hazardous materials in the mixed waste called “hazardous” waste?**

A: These materials are classified by state and federal regulations as hazardous waste because in high concentrations, with long-term exposure, they can pose a risk to human health and the environment. They must be handled, stored, and disposed of according to strict regulations. The wastes at SONGS, however, pose little risk because of the low concentrations, or small quantities, of hazardous chemicals. The risk to the public from accidental releases of hazardous constituents is negligible. Also, since the waste is stored in approved containers, and the containers must remain closed when in storage, there is very little chance of long term exposure.

**Q: Did you evaluate the possible effect on the environment of the radioactive portion of the waste?**

A: The radioactive portion of the waste is under the jurisdiction of the Nuclear Regulatory Commission (NRC). The handling, storage, and safety practices at the storage facilities comply with all NRC regulations.

**Q: Are the spent fuel rods from the nuclear reactor part of the mixed waste storage?**

A: No. The fuel rods are high-level radioactive substances and are not part of the mixed waste permit. They are under NRC jurisdiction and are handled, stored, and disposed of very differently.

**Q: What happens if the mixed waste is exploded or burned?**

A: The waste is stored in sealed containers and kept in secured buildings designed to prevent such an exposure. If hazardous constituents were released to the air through explosion or fire, these would not cause any health effects because of their small quantities, low concentrations, and/or low levels of toxicity. In the event of any release, emergency plans are already in place to test the surrounding air, soil, and water for any contamination and ensure that there is no threat to human health or the environment.

**Q: What does “temporary storage” mean?**

A: It means that each container of waste may be stored for no more than one year from the time it is packaged and placed into the hazardous waste storage area.

**Q: Will granting this permit open SONGS to becoming a permanent repository for waste from other sites?**

A: No. The permit very specifically prohibits bringing in waste from outside sources. This restriction cannot be changed without a major permit modification, which would require another detailed environmental review by DTSC, and full public review and comment.

**Q: Why does SONGS have to store hazardous waste? Why can't they ship it off site as it is generated?**

A: Temporary storage allows the waste to be sorted, categorized, and safely sealed until it can be shipped off-site to a permitted facility using the fewest possible truck trips. Without the ability to temporarily store the waste on site, SONGS would have to load and transport the waste more frequently.

**Q: Why is there such a difference between the maximum storage capacity allowed by the permit and the actual amount of waste typically stored there?**

A: SONGS typically generates about 500 gallons of waste per month. The amount in the permitted storage areas at any one time is less than 30,000 gallons. The permit allows up to 62,500 gallons to be stored. This is to allow for major maintenance and overhaul activities, which occur every two to three years.

**Q: In the event of an accidental release from the storage area, would surrounding residents have to be evacuated?**

A: As described in previous answers, a release of the hazardous constituents from fire or explosion would not present a hazard to human health or the environment in the surrounding areas because of the low concentrations of hazardous chemicals.

The decision to evacuate or not would be up to the emergency coordinator based on many factors at the time.