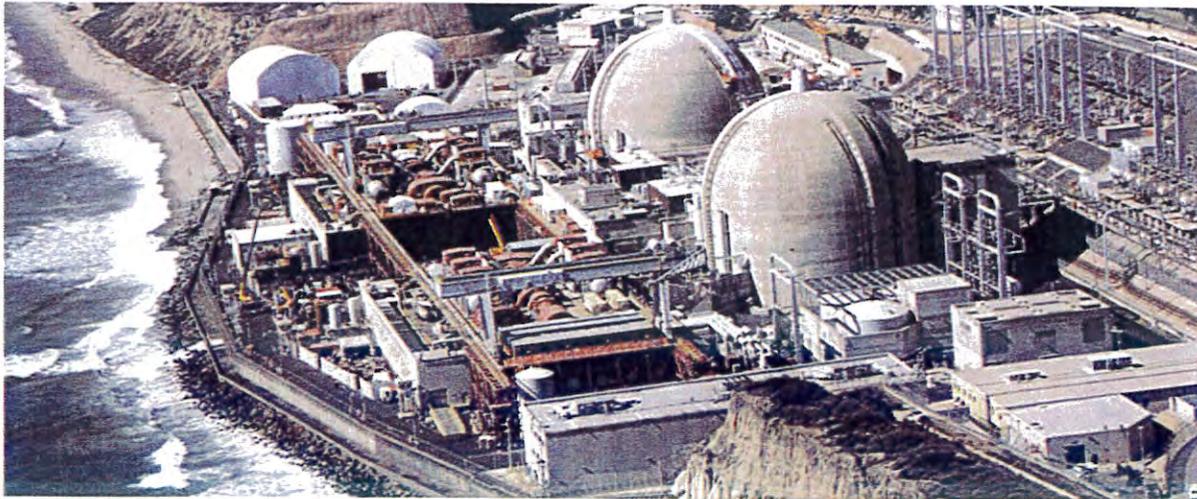


Prepared for Southern California Edison

SAN ONOFRE NUCLEAR GENERATING STATION (SONGS)



RCRA PART C HAZARDOUS WASTE FACILITY

PERMIT RENEWAL – Parts A & B

OCTOBER 2015



Prepared by:

INTRODUCTION

San Onofre Nuclear Generating Station (SONGS) hereby submits to the California Department of Toxic Substances Control (DTSC) a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Facility Permit Renewal Application. This renewal application has been prepared in accordance with the RCRA of 1976 as amended by the Hazardous and Solid Waste Amendments of 1984 and the California Health and Safety Code.

SONGS is an existing facility authorized to store mixed waste pursuant to Interim Status by submittal of a Part A application to the United States Environmental Protection Agency on March 22, 1989. Some hazardous and mixed wastes were, but are no longer treated at the facility under Conditional Authorization and Conditional Exemption under San Diego's Department of Environmental Health (SD DEH) Tiered Permitting Program. SONGS submitted a revised Part A application on March 31, 1998 which identified a portion of the HazMat Area – South Yard Facility and the Multi-Purpose Handling Facility for the storage of mixed wastes. As described in greater detail in the United States Environmental Protection Agency's Policy on Enforcement of RCRA Section 3004(j), Storage Prohibition at Facilities Generating Mixed Radioactive/Hazardous waste dated April 26, 1996 and extended on April 9, 1998, there is a nationwide lack of available treatment, storage, and disposal options for certain types of mixed waste. Thus, the storage of mixed waste is a necessity at SONGS due to the lack of commercial off-site treatment or disposal facilities to accept their mixed wastes.

SONGS submitted a Class 2 Permit Modification Request to DTSC on August 13, 1999 in accordance with Consent Order, docket number HWCA 96/97-2015. The Part A application was revised in the modification request as follows:

- Administrative and informational changes
- Storage design capacity increase
- Additional storage locations
- Additional individual container types
- Additional hazardous waste types
- Deletion of all treatment capability

In January 2001, SONGS submitted a permit renewal application, which included the documentation required for the Part A and Part B Hazardous Waste Facility Permit Application, as identified in Title 22, California Code of Regulations, Section 66264 and 66270. The Application was entitled, *Hazardous Waste Permit Application, Storage of Mixed Waste, San Onofre Nuclear Generating Station*. The SONGS Hazardous Waste Facility Permit (Permit Number 04-BRK-09), was subsequently issued with an effective date of January 31, 2005 and an expiration date of January 30, 2015.

In this December 2013 renewal permit application, SONGS has included, or referenced, all required documents. These include, but are not limited to, several written documents, such as formal operating procedures, waste management practices and activities, training programs, and the Facility Emergency Plan. In the last few months, the decision was made to terminate power generation operations and proceed with decommissioning the SONGS commercial nuclear power facility. As a result, SONGS is in transition with a recently implemented decommissioning organization currently amending the NRC license, governing programs, documents and procedures. As a result, these are in various stages of revision. Specifically, SONGS is transitioning toward scaling back on its in

house capabilities for all functions normally performed by full time utility staff personnel and moving toward establishing agreements, memorandums of understanding with municipalities and contracting licensed, bonded and registered/licensed contractors to perform these functions, as appropriate.

Plant personnel manage all hazardous waste generated at SONGS as radioactive until testing proves otherwise. All mixed waste is managed in accordance with USNRC regulations. The activities related to the lawful, reasonable and customary practices associated with the management of the radioactive component of mixed waste, radioactive materials and radioactive wastes are not included in their entirety in this Operation Plan since DTSC's oversight is limited to the hazardous portion of the mixed waste.

This Part A application renewal includes the following modifications:

- Administrative and informational changes
- Removal of the Unit 1 NPDES permit with discharge rerouted to Unit 2 and 3 outfalls
- Cessation of power generation operations and transition to decommissioning
- Organizational changes, including a new operator and owner contact
- Termination of treatment processes authorized under the tiered permits

As many of the programs and documents are in transition, this permit renewal application only references, and does not include as part of the permit application, station procedures, contingency plans and programs; these are described in the appropriate sections of this submittal. The procedures referenced will remain active, and are being amended to ensure current versions of these are forwarded to the California Department of Toxic Substances Control (DTSC) once issued. When the SONGS Hazardous Waste Facility Permit (Permit Number 04-BRK-09) renewal permit is finalized and issued, SONGS will ensure DTSC is provided with the latest version of these referenced documents.

TERMINOLOGY

The following list of terms and definitions were selected to assist the reader. The sources of information include various regulations and utility research reports prepared by the Electric Power Research Institute (EPRI). This list is not considered an exhaustive list, but simply a list of commonly used terms.

22 CCR, 23 CCR

Sections in Title 22 or Title 23 of the California Code of Regulations (formerly the California Administrative Code) are abbreviated as 22 CCR (section number) or 23 CCR (section number).

40 CFR

Sections in Title 40 of the Code of Federal Regulations are cited as 40 CFR (section number).

DTSC

The DTSC is the California Department of Toxic Substance Control, sometimes referenced as the “Department”.

Facility

The “facility” is the San Onofre Nuclear Generating Station, San Diego County, California and consists of approximately 84 acres.

Hazardous Waste Permit Application

The permit application is for the renewal of an existing RCRA Hazardous Waste Facility Permit for San Onofre Nuclear Generating Station. The application was prepared by Bartlett Nuclear, Inc. and includes Part A and Part B as required by CCR, title 22, Section 66270.10(a). The Part A is generally addressed in Section 1.0 and Attachment 1-3. Part B of this application is addressed in Sections 2.0 through 11.0 and may also be referenced as the Operation Plan.

HSC

Citations to sections in Division 20 of the California Health and Safety Code are abbreviated as HSC (section number).

Permittee

The “Permittee” is Edison International and Southern California Edison, owner and operator of the San Onofre Nuclear Generating Facility (facility).

RCRA

The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, (Title 42, United States Code, Section 6901, et. seq.) and the Hazardous and Solid Waste Amendments of 1984, is referred to in this permit as RCRA.

TERMINOLOGY, continued

Regional Administrator

The Regional Administrator is the Chief, Facility Permitting Branch, of Region 1 of the DTSC. The Branch Chief is an authorized signatory representative of the Director, and the Deputy Director, of DTSC.

Regional Board

The "Regional Board" is the California Regional Water Quality Control Board – San Diego Region, typically abbreviated RWQCB.

State Board

The "State Board" is the California State Water Resources Control Board.

Supervisor, Environmental Services

The position Supervisor, Environmental Services is also synonymous with the position of Environmental specialist under the revised SONGS organizational chart.

ACRONYMS

Acronym	Definition
ACM	Asbestos-Containing Material
BP	Batch Plant (now called South Yard Facility)
CCR	California Code of Regulation
CMIP	Corrective Measures Implementation Plan
CMS/RA	Corrective Measures Study/Risk Assessment
COC	Constituents of Concern
DHS	Department of Health Services (former organization; replaced with DTSC)
DTSC	Department of Toxic Substances Control
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
HSAW	High Specific Activity Waste
HSC	Health and Safety Code - Division 20 of the California Hazardous Waste Control Law
LSAW	Low Specific Activity Waste
MLLW	Mean Low Lower Water
mph	Miles per Hour
MPHF	Multi-Purpose Handling Facility
MWe	Megawatts Electric
NPDES	National Pollutant Discharge Elimination System
OES	California Office of Emergency Services
PCB	Polychlorinated biphenyl
QA/QC	Quality Assurance and Quality Control
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RWQCB	Regional Water Quality Control Board
SIC	Standard Industrial Classification
STLC	Soluble Threshold Limit Concentration
SWMU	Solid Waste Management Unit
SYF	South Yard Facility (historically known as the Batch Plant)
TSD	Treatment, Storage or Disposal
TTLC	Total Threshold Limit Concentration
USGS	U.S. Geological Survey
WDR	Waste Discharge Requirements

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Section 1.0

GENERAL INFORMATION

1.0 GENERAL INFORMATION

1.1 Facility Information

San Onofre Nuclear Generating Station (SONGS) is a nuclear power generating facility owned and operated by Southern California Edison (SCE). SONGS is located in San Diego County approximately five miles south of San Clemente, California on the seaward side of Interstate 5 (I-5). A topographic map that shows the location of the plant is presented as Attachment 1-1 (Location Map).

The SONGS facility consists of three pressurized water reactors (PWRs) (Units 1, 2 and 3) with a total capacity of approximately 2,200 MWe (megawatts electric). Unit 1 was permanently shut down in 1999, has been decommissioned and partially demolished. Units 2 and 3 ceased power operation in September of 2013 and the decommissioning of these units is in the planning phase. The decommissioning organization has been established and has initiated the planning phase for the decommissioning, and updating all licenses, programs and procedures to reflect the site's new status and projected mission. A Site Map is presented as Attachment 1-2 and shows:

1. The area extending at least one mile beyond the boundaries of the San Onofre Nuclear Generating Station.
2. The property boundaries of the plant.
3. The locations of each hazardous waste unit at the plant.
4. The type of waste process in each facility (container storage; S01), and capacity of each.
5. The locations of each intake and discharge structure of the plant.
6. The location of surface water bodies within one quarter mile.

The water in the "primary system" of the SONGS PWRs is maintained at a pressures lower than operating pressures (2,250 pounds per square inch) when shut down, and remains in a liquid state at temperatures lower than operating temperatures (>600 degrees F). This primary water, which contains radioactive materials, is separate from the water that is converted to steam on the "secondary" side of the steam generators (the Secondary System). During operation, the Primary water passes through the tubes of the steam generators, where it transfers heat to the secondary water, which is at a lower pressure (900 pounds per square inch). This secondary water is converted to steam and the steam drives the turbines and generators, producing electricity. With Units 2 and 3 permanently shut down, the primary and secondary water continues to be processed through water purification systems, including ion exchange demineralizers, activated carbon and filtration. As decommissioning continues, this water will be dispensed with in accordance with established Nuclear Regulatory Commission regulations and nuclear industry protocols. Mixed hazardous waste may be generated during different phases of the decommissioning, including the primary system decontamination of both units 2 and 3. Several different proven industry processes are currently under evaluation, with one of the objectives being minimization of hazardous wastes, including mixed hazardous wastes.

1.2 Hazardous Waste Management Facilities Being Permitted

This Hazardous Waste Permit Renewal Application is being submitted specifically for three areas at the plant that are used to store mixed wastes. The primary sources of routine mixed wastes are chemical or mechanical cleaning of the steam generators, condensers, water boxes, turbines, etc. The pumps that circulate the cooling waters contain oil and the overall maintenance and painting of the radioactive components generates various other types of mixed waste. As mentioned earlier, the decommissioning of Units 2 and 3 may generate mixed waste (primarily decontamination agents

including organic and aqueous chemical solvents, asbestos, blast grit and lead). The following list summarizes the three mixed waste storage areas included in this permit application:

- HazMat Area - South Yard Facility (SYF)
- Multi-Purpose Handling Facility (MPHF): Low Specific Activity Waste (LSAW)
- Multi-Purpose Handling Facility (MPHF): High Specific Activity Waste (HSAW)

The design and process information for the storage areas is described in detail in Section 4.0.

1.3 Owner/Operator Information

The name, address, and telephone number of the owner/operator and the facility, EPA identification number, type of facility and Standard Industrial Classification (SIC) code are provided in this section. As discussed more fully in Section 2.0, Public Law 88-82 approved July 30, 1963 authorized the Secretary of the Navy to enter into an easement with SCE for the construction, operation, maintenance and use of a nuclear electric generating station on a parcel of land known as the U. S. Marine Corps Base, Camp Pendleton, California. Upon termination of the easement, SCE must restore the land to certain requirements specified in the easement. The facility is located entirely on Camp Pendleton Property and is not on any Indian lands. Consistent with the NRC license and all other legal and binding documents for the operation of a nuclear power plant, the following information is provided:

Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, CA 91770
Operator:	Southern California Edison Company San Onofre Nuclear Generating Station 5000 Pacific Coast Highway San Clemente, CA 92672 (949) 368-6829
EPA ID No:	CAD 000630921
Type of Facility:	Electric
Services NAIC Code:	221113

1.4 Contact

The contact with regard to the Hazardous Waste Permit Application is:

Paul Elliot, Environmental Specialist
San Onofre Nuclear Generating Station
P.O. Box 128 (W-44)
San Clemente, CA
92674 (949) 368-6829

1.5 Application Preparer

BHI Energy
Bartlett Nuclear, Incorporated.
60 Industrial Park Road
Plymouth, Massachusetts 02360
(508) 591-1299

1.6 Part A Application

The Part A of this hazardous waste facility permit application (EPA Form 8700-23) is presented in Attachment 1-3.

1.7 ENVIRONMENTAL PERMITS

SONGS operates under ~~two~~ permits issued by the San Diego Regional Water Quality Control Board. None of these permits are required for the operation of the storage facilities listed in the Application. The permits are summarized as follows:

NPDES Permit Number CA0108073 (WDR Order No. 99-47)

Adopted August 11, 1999, this NPDES permit allows the use of seawater for once-through cooling water in the operation of Unit 2.

NPDES Permit Number CA0108181 (WDR Order No. 99-48)

Adopted August 11, 1999, this NPDES permit allows the use of seawater for once-through cooling water in the operation of Unit 3.

SONGS operates as an existing facility authorized to store mixed waste pursuant to Hazardous Waste Facility Permit Number 04-BRK-09 issued by DTSC to the San Onofre Nuclear Generation Site (SONGS); effective January 31, 2005, and due to expire January 31, 2015. .

The SONGS operates under individual APCD Permits to operate ancillary equipment used to maintain and operate a power plant. None of these permits are required for the operation of the storage facilities listed in the Application.

1.8 CERTIFICATIONS

The following certification applies to the entire Hazardous Waste Permit Application including those documents included by reference.

The material and data in this Application were prepared under the supervision and direction of the undersigned. This Application was prepared in accordance with good engineering principles and practices and meets the requirements set forth in the California Code of Regulations Title 22, Sections 264 and 270.

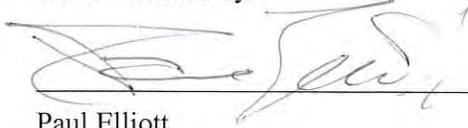
In preparing this application, previous applications and technical reports, prepared by others, were used as the basis for this application. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

The data, opinions, conclusions, and recommendations contained in this report are based on my understanding of the site at this time and, to the best of my knowledge are accurate and complete.

David A. Montt, MS, MSChE, CHP # BHP 03295
Senior Engineer
BHI Energy
Bartlett Nuclear Incorporated
60 Industrial Park Road
Plymouth, Massachusetts 02360

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.”

Recommended by:

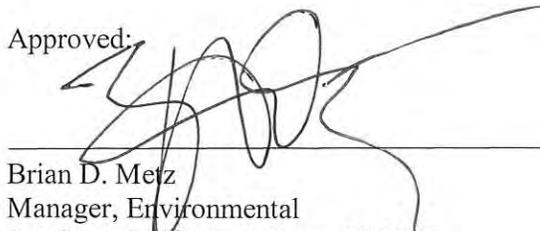


Paul Elliott
Environmental Specialist
Southern California Edison, SONGS

10/13/15

Date

Approved:



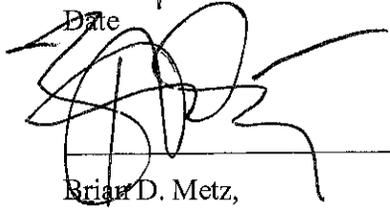
Brian D. Metz
Manager, Environmental
Southern California Edison, SONGS

10/13/15

Date

WASTE MINIMIZATION CERTIFICATION

“I certify that Southern California Edison Company, San Onofre Nuclear Generating Station, has a program in place to reduce the volume and toxicity of mixed waste that Southern California Edison generates to the degree determined by Southern California Edison to be economically practicable; and the proposed method of transfer, treatment and storage is that practicable method currently available to Southern California Edison which minimizes the present and future threat to human health and the environment.”

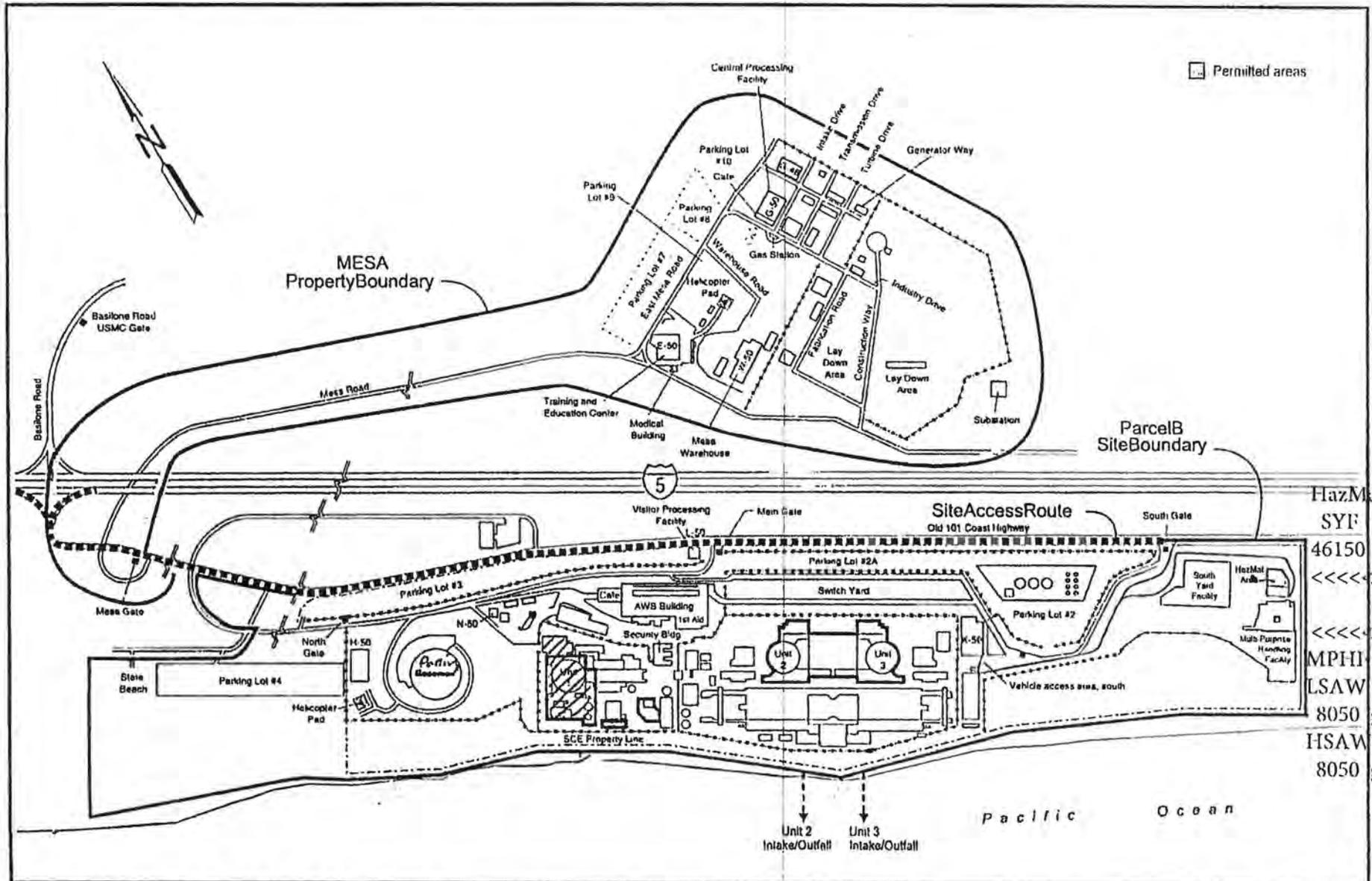
10/13/15
Date

Brian D. Metz,
Manager, Environmental

Attachment 1-1

LOCATION MAP

Attachment 1-2

SITE MAP



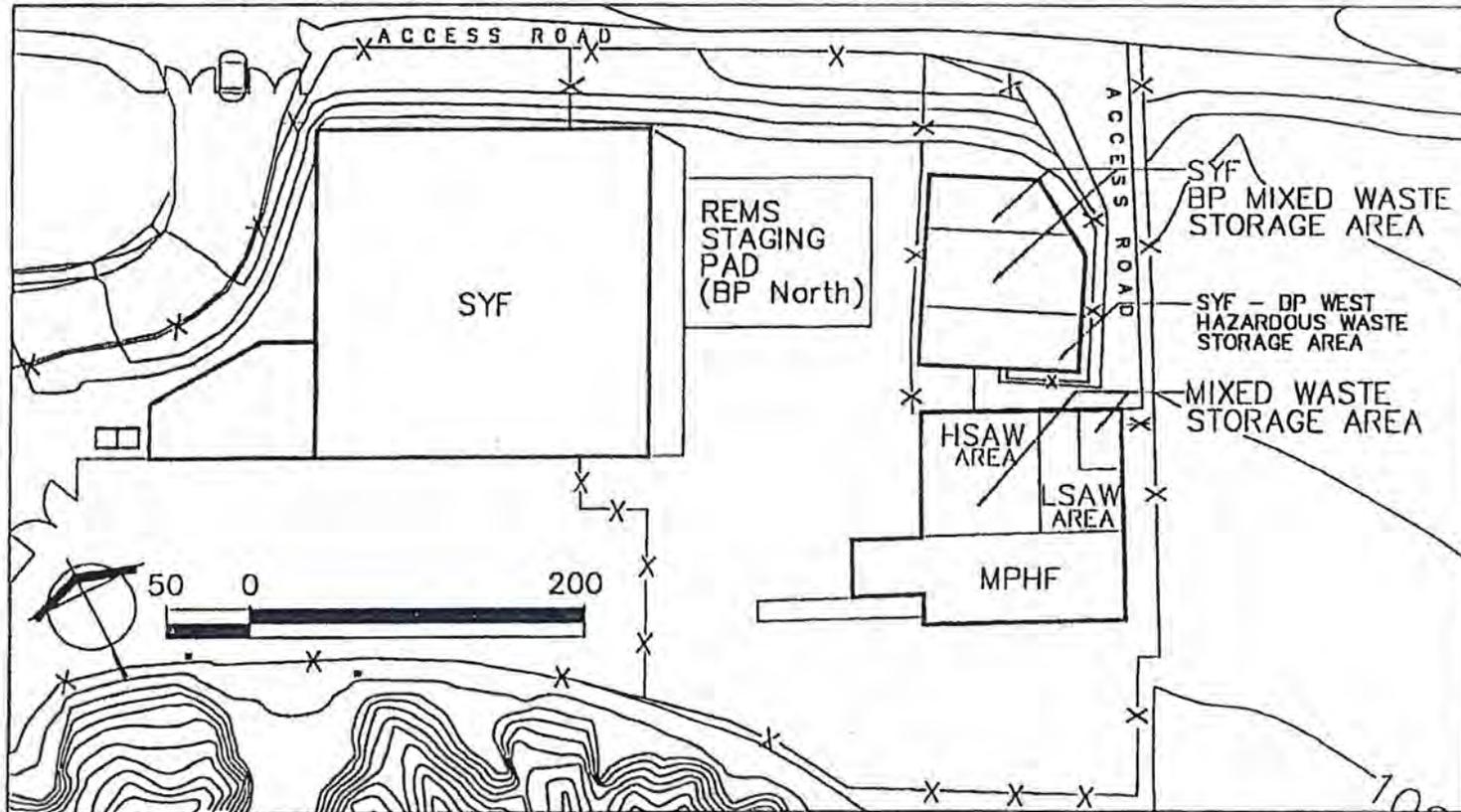
HazMat Area
SYF S01:
46150 gallons
MPHI include
LSAW - S01:
8050 gallons
HSAW - S01:
8050 gallons

NOTE: The Site Plan for the operating plant is shown for reference and does not include changes made for Decommissioning.

SITEMAP
San Onofre Nuclear Generating Station
Southern California Edison, San Diego County, California

Figure
1-2

SCALE: 1" = 100'-0"



REMS = RADIOACTIVE EQUIPMENT MATERIAL STORAGE

HSAW = HIGH SPECIFIC ACTIVITY WASTE

LSAW = LOW SPECIFIC ACTIVITY WASTE

SYF = SOUTH YARD FACILITY

BP = BATCH PLANT (115' X 94')

MPHF - MULTIPURPOSE HANDLING FACILITY (119' X 130')

Attachment 1-3

PART A APPLICATION

<p>SEND COMPLETED FORM TO: The Appropriate State or Regional Office.</p>	<p>United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM</p>		
<p>1. Reason for Submittal</p> <p>MARK ALL BOX(ES) THAT APPLY</p>	<p>Reason for Submittal:</p> <p><input type="checkbox"/> To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location)</p> <p><input checked="" type="checkbox"/> To provide a Subsequent Notification (to update site identification information for this location)</p> <p><input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application</p> <p><input checked="" type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____)</p> <p><input type="checkbox"/> As a component of the Hazardous Waste Report (If marked, see sub-bullet below)</p> <p><input type="checkbox"/> Site was a TSD facility and/or generator of $\geq 1,000$ kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)</p>		
<p>2. Site EPA ID Number</p>	<p>EPA ID Number <u>CAD000630921</u></p>		
<p>3. Site Name</p>	<p>Name: SAN ONOFRE NUCLEAR GENERATING STATION (SONGS)</p>		
<p>4. Site Location Information</p>	<p>Street Address: 5000 PACIFIC COAST HIGHWAY</p> <p>City, Town, or Village: SAN CLEMENTE County: SAN DIEGO</p> <p>State: CALIFORNIA Country: U.S.A. Zip Code: 92672</p>		
<p>5. Site Land Type</p> <p>NAICS Code(s) for the Site (at least 5-digit codes)</p>	<p><input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p> <p>A. <u>221113</u> C. _____</p> <p>B. _____ D. _____</p>		
<p>7. Site Mailing Address</p>	<p>Street or P.O. Box: PO BOX 128 D3C</p> <p>City, Town, or Village: SAN CLEMENTE</p> <p>State: CALIFORNIA Country: SAN DIEGO Zip Code: 92674-0128</p>		
<p>8. Site Contact Person</p>	<p>First Name: PAUL MI: _____ Last: ELLIOT</p> <p>Title: ENVIRONMENTAL SPECIALIST</p> <p>Street or P.O. Box: 5000 PACIFIC COAST HIGHWAY</p> <p>City, Town or Village: SAN CLEMENTE</p> <p>State: CALIFORNIA Country: SAN DIEGO Zip Code: 92672</p> <p>Email: paul.elliott@sce.com</p> <p>Phone: (949) 368-6375 Ext.: DIRECT LINE Fax: (949) 368-9167</p>		
<p>9. Legal Owner and Operator of the Site</p>	<p>A. Name of Site's Legal Owner: UNITED STATES AMERICA Date Became Owner: 03/28/1879</p> <p>Owner Type: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p> <p>Street or P.O. Box: CAMP PENDLETON</p> <p>City, Town, or Village: SAN CLEMENTE Phone: (760) 725-4111</p> <p>State: CALIFORNIA Country: SAN DIEGO Zip Code: 92055-5020</p> <p>B. Name of Site's Operator: SOUTHERN CAL EDISON Date Became Operator: 03/23/1989</p> <p>Operator Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		

Type of Regulated Waste Activity (at your site)

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities; Complete all parts 1-10.

- Y N 1. **Generator of Hazardous Waste**
If "Yes", mark only one of the following - a, b, or c.
- a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs./mo.) or more of hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lbs./mo) of acute hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 100 kg/mo (220 lbs./mo) of acute hazardous spill cleanup material.
- b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo) of non-acute hazardous waste.
- c. CESQG: Less than 100 kg/mo (220 lbs./mo) of non-acute hazardous waste.

If "Yes" above, indicate other generator activities in 2-4.

- Y N 2. **Short-Term Generator** (generate from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section.
- N 3. **United States Importer of Hazardous Waste**
- Y N 4. **Mixed Waste (hazardous and radioactive) Generator**

- Y N 5. **Transporter of Hazardous Waste**
If "Yes", mark all that apply.
- a. Transporter
- b. Transfer Facility (at your site)
- Y N 6. **Treater, Storer, or Disposer of Hazardous Waste** Note: A hazardous waste Part B permit is required for these activities.
- Y N 7. **Recycler of Hazardous Waste**
- Y N 8. **Exempt Boiler and/or Industrial Furnace**
If "Yes", mark all that apply.
- a. Small Quantity On-site Burner Exemption
- b. Smelting, Melting, and Refining Furnace Exemption
- Y N 9. **Underground Injection Control**
- Y N 10. **Receives Hazardous Waste from Off-site**

B. Universal Waste Activities; Complete all parts 1-2.

- Y N 1. **Large Quantity Handler of Universal Waste** (you accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If "Yes", mark all that apply.
- a. Batteries
- b. Pesticides
- c. Mercury containing equipment
- d. Lamps
- e. Other (specify) _____
- f. Other (specify) _____
- g. Other (specify) _____

- Y N 2. **Destination Facility for Universal Waste**
Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities; Complete all parts 1-4.

- Y N 1. **Used Oil Transporter**
If "Yes", mark all that apply.
- a. Transporter
- b. Transfer Facility (at your site)
- Y N 2. **Used Oil Processor and/or Re-refiner**
If "Yes", mark all that apply.
- a. Processor
- b. Re-refiner
- Y N 3. **Off-Specification Used Oil Burner**
- Y N 4. **Used Oil Fuel Marketer**
If "Yes", mark all that apply.
- a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- b. Marketer Who First Claims the Used Oil Meets the Specifications

Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

❖ You can **ONLY** Opt into Subpart K if:

Not Applicable

- you are at least one of the following: a college or university; a teaching hospital that is owned by or has a formal affiliation agreement with a college or university; or a non-profit research institute that is owned by or has a formal affiliation agreement with a college or university; AND
- you have checked with your State to determine if 40 CFR Part 262 Subpart K is effective in your state

Y N 1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories
See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:

- a. College or University
- b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university
- c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

Y N 2. Withdrawing from 40 CFR Part 262 subpart K for the management of hazardous waste in laboratories.

11. Description of Hazardous Waste

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D002, F007, U112). Use an additional page if more spaces are needed.

D001	F001				
D002	F002				
D005	F003				
D006	F005				
D007					
D008					
D009					
D010					
D011					

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

122	214	343	722	751	
123	221	351	723	791	
131	222	352	724	792	
132	223	431	725		
135	241	461	726		
151	341	491	727		
181	342	551	741		

12. Notification of Hazardous Secondary Material (HSM) Activity

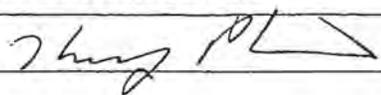
Y N Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?

If "Yes", you must fill out the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material.

13. Comments

Multiple empty horizontal lines for providing comments.

14. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	VICE PRESIDENT DECOMMISSIONING + CHIEF NUCLEAR OFFICER THOMAS J. PALMISANO	07/23/2015

FORM NOT APPLICABLE

PA ID Number C A D 0 0 0 6 3 0 9 1 2 1 1

OMB# 2050-0024; Expires 12/31/2014

ADDENDUM TO THE SITE IDENTIFICATION FORM: NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL ACTIVITY



ONLY fill out this form if: Not Applicable

- ❖ You are located in a State that allows you to manage excluded hazardous secondary material (HSM) under 40 CFR 261.2(a)(2)(ii), 261.4(a)(23), (24), or (25) (or state equivalent). See <http://www.epa.gov/epawaste/hazard/dsw/statesof.htm> for a list of eligible states; AND
- ❖ You are or will be managing excluded HSM in compliance with 40 CFR 261.2(a)(2)(ii), 261.4(a)(23), (24), or (25) (or state equivalent) or you have stopped managing excluded HSM in compliance with the exclusion(s) and do not expect to manage any amount of excluded HSM under the exclusion(s) for at least one year. Do not include any information regarding your hazardous waste activities in this section.

1. Indicate reason for notification. Include dates where requested.

- Facility will begin managing excluded HSM as of _____ (mm/dd/yyyy).
- Facility is still managing excluded HSM/re-notifying as required by March 1 of each even-numbered year.
- Facility has stopped managing excluded HSM as of _____ (mm/dd/yyyy) and is notifying as required.

2. Description of excluded HSM activity. Please list the appropriate codes and quantities in short tons to describe your excluded HSM activity ONLY (do not include any information regarding your hazardous wastes). Use additional pages if more space is needed.

a. Facility code (answer using codes listed in the Code List section of the instructions)	b. Waste code(s) for HSM	c. Estimated short tons of excluded HSM to be managed annually	d. Actual short tons of excluded HSM that was managed during the most recent odd-numbered year	e. Land-based unit code (answer using codes listed in the Code List section of the instructions)

3. Facility has financial assurance pursuant to 40 CFR 261.4(a)(24)(vi). (Financial assurance is required for reclaimers and intermediate facilities managing excluded HSM under 40 CFR 261.4(a)(24) and (25))

N Does this facility have financial assurance pursuant to 40 CFR 261.4(a)(24)(vi)?

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United States Environmental Protection Agency
HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact	First Name: PAUL	Mi:	Last Name: ELLIOT
	Contact Title: ENVIRONMENTAL SPECIALIST		
	Phone: (949) 368-6375	Ext.: NA	Email: paul.elliott@sce.com
2. Facility Permit Contact Mailing Address	Street or P.O. Box: 5000 PACIFIC COAST HIGHWAY		
	City, Town, or Village: SAN CLEMENTE		
	State: CALIFORNIA		
	Country: SAN DIEGO	Zip Code: 92672	
3. Operator Mailing Address and Telephone Number	Street or P.O. Box: PO BOX 128 D3C		
	City, Town, or Village: SAN CLEMENTE		
	State: CALIFORNIA	Phone: (949) 368-6829	
	Country: SAN DIEGO	Zip Code: 92674	
4. Facility Existence Date	Facility Existence Date (mm/dd/yyyy): 03/23/1989		

5. Other Environmental Permits									
A. Facility Type (Enter code)	B. Permit Number							C. Description	
N	CA	0	1	0	8	0	7	3	UNIT 2 NPDES PERMIT
N	CA	0	1	0	8	1	8	1	UNIT 3 NPDES PERMIT

6. Nature of Business:
 ELECTRIC POWER GENERATION

7. Process Codes and Design Capacities – Enter information in the Section on Form Page 3

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 8.

PROCESS DESIGN CAPACITY – For each code entered in Item 7.A; enter the capacity of the process.

- 1. AMOUNT** – Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
- 2. UNIT OF MEASURE** – For each amount entered in Item 7.B(1), enter the code in Item 7.B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS – Enter the total number of units for each corresponding process code.

Process Code	Process	Appropriate Unit of Measure for Process Design Capacity	Process Code	Process	Appropriate Unit of Measure for Process Design Capacity
Disposal			Treatment (Continued)		
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour;
D80	Landfill	Acre-feet; Hectares-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; Liters Per Hour; Kilograms Per Hour; or Million BTU Per Hour
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure Listed Below	T86	Blast Furnace	
Storage			T87	Smelting, Melting, or Refining Furnace	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T89	Methane Reforming Furnace	
S03	Waste Pile	Cubic Yards or Cubic Meters	T90	Pulping Liquor Recovery Furnaces	
S04	Surface Impoundment	Gallons; Liters; Cubic Meters; or Cubic Yards	T91	Combustion Devices Used in the Recovery of Sulfur Values from Spent Sulfuric Acid	
S05	Drip Pad	Gallons; Liters; Cubic Meters; Hectares; or Cubic Yards	T92	Halogen Acid Furnaces	
	Containment Building Storage	Cubic Yards or Cubic Meters	T93	Other Industrial Furnaces Listed in 40 CFR 260.10	
S99	Other Storage	Any Unit of Measure Listed Below	T94	Containment Building Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTU Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million BTU Per Hour
Treatment			Miscellaneous (Subpart X)		
T01	Tank Treatment	Gallons Per Day; Liters Per Day	X01	Open Burning/Open Detonation	Any Unit of Measure Listed Below
T02	Surface Impoundment	Gallons Per Day; Liters Per Day	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Metric Tons Per Hour; or Million BTU Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTUs Per Hour; Gallons Per Day; Liters Per Hour; or Million BTU Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Short Tons Per Day; BTUs Per Hour; Gallons Per Day; Liters Per Hour; or Million BTU Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectares-meter; Gallons; or Liters
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; or Million BTU Per Hour	X99	Other Subpart X	Any Unit of Measure Listed Below
Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code
Gallons	G	Short Tons Per Hour	D	Cubic Yards	Y
Gallons Per Hour	E	Short Tons Per Day	N	Cubic Meters	C
Gallons Per Day	U	Metric Tons Per Hour	W	Acres	B
Liters	L	Metric Tons Per Day	S	Acre-feet	A
Liters Per Hour	H	Pounds Per Hour	J	Hectares	Q
Liters Per Day	V	Kilograms Per Hour	X	Hectares-meter	F
		Million BTU Per Hour	X	BTU Per Hour	I

9. Description of Hazardous Wastes - Enter Information in the Sections on Form Page 5

- A. **EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. **ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in Item 9.A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Item 9.A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. **UNIT OF MEASURE** - For each quantity entered in Item 9.B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all listed hazardous wastes.

For non-listed waste: For each characteristic or toxic contaminant entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. Enter the first two as described above.
2. Enter "000" in the extreme right box of Item 9.D(1).
3. Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 9.E.

2. **PROCESS DESCRIPTION:** If code is not listed for a process that will be used, describe the process in Item 9.D(2) or in Item 9.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in Item 9.A. On the same line complete Items 9.B, 9.C, and 9.D by estimating the total annual quantity of the waste and describing all the processes to be used to store, treat, and/or dispose of the waste.
2. In Item 9.A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Item 9.D.2 on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING Item 9 (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES											
				(1) PROCESS CODES (Enter Code)					(2) PROCESS DESCRIPTION (if code is not entered in 9.D(1))						
X	1 K 0 0 5 4	900	P	T	0	3	D	8	0						
X	2 D 0 0 2	400	P	T	0	3	D	8	0						
X	3 D 0 0 1	100	P	T	0	3	D	8	0						
	4 D 0 0 2														Included With Above

9. Description of Hazardous Wastes (Continued. Use additional sheet(s) as necessary; number pages as 5a, etc.)											
Line Number	A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES				
	(1) PROCESS CODES (Enter Code)						(2) PROCESS DESCRIPTION (if code is not entered in 9.D(1))				
1	D	0	0	1	45	T	S	0	1		paint/liquid/sludge/solid
2	F	0	0	1			S	0	1		included with above (1)
3	F	0	0	2			S	0	1		included with above (1)
4	F	0	0	3			S	0	1		included with above (1)
5	F	0	0	5			S	0	1		included with above (1)
6	D	0	0	6			S	0	1		included with above (1)
7	D	0	0	7			S	0	1		included with above (1)
8	D	0	0	8			S	0	1		included with above (1)
9	D	0	0	8	45	T	S	0	1		lead
10	D	0	0	9	1	T	S	0	1		mercury
11	F	0	0	2	15	T	S	0	1		freon filters
12	F	0	0	2	1	T	S	0	1		oil/trichloroethane
13	D	0	0	2	2.5	T	S	0	1		corrosive liq/solid sludge
14	-	-	-	-	LEFT	BLANK	-	-	-		
15	1	8	1		10	T	S	0	1		Non-RCRA SGCC solid/other inorg solid waste
16	1	8	1		25	T	S	0	1		Non-RCRA paint chips/absorbent/blast grit
17	2	2	1		15	T	S	0	1		Non-RCRA/waste/mixed/oil
18	2	2	2				S	0	1		included with above (17)
19	2	2	3				S	0	1		included with above (17)
20	1	2	3		1	T	S	0	1		unspecified alkaline sln
21	1	3	2		1	T	S	0	1		aqueous sln with metals
22	1	3	5		1	T	S	0	1		unspecified aqueous sln
23	1	5	1		1	T	S	0	1		asbestos containing waste
24	2	1	4		1	T	S	0	1		unspecified solvent mixture
25	2	4	1		1	T	S	0	1		tank bottom waste
26	3	4	1		1	T	S	0	1		organic liquid w/halogen
27	3	4	2		1	T	S	0	1		organic liquids w/metals
28	3	4	3		1	T	S	0	1		unspecified org liq mixture
29	3	5	1		1	T	S	0	1		organic solids w/halogen
30	3	5	2		1	T	S	0	1		other organic solids
31	4	6	1		1	T	S	0	1		paint sludge
32	4	9	1		1	T	S	0	1		unspecified sludge waste
33	D	0	0	5	5	T	S	0	1		aqu metal containing wastes
34	D	0	0	5			S	0	1		included with above (33)
35	D	0	0	5			S	0	1		included with above (33)
36	D	0	0	5			S	0	1		included with above (33)

10. Map

Attach to this application a topographical map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

11. Facility Drawing

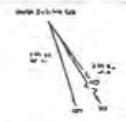
All existing facilities must include a scale drawing of the facility (see instructions for more detail).

12. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas (see instructions for more detail).

13. Comments

SHEET 3 OF 2
 DIVISION OF ENGINEERING
 SAN FRANCISCO, CALIF.

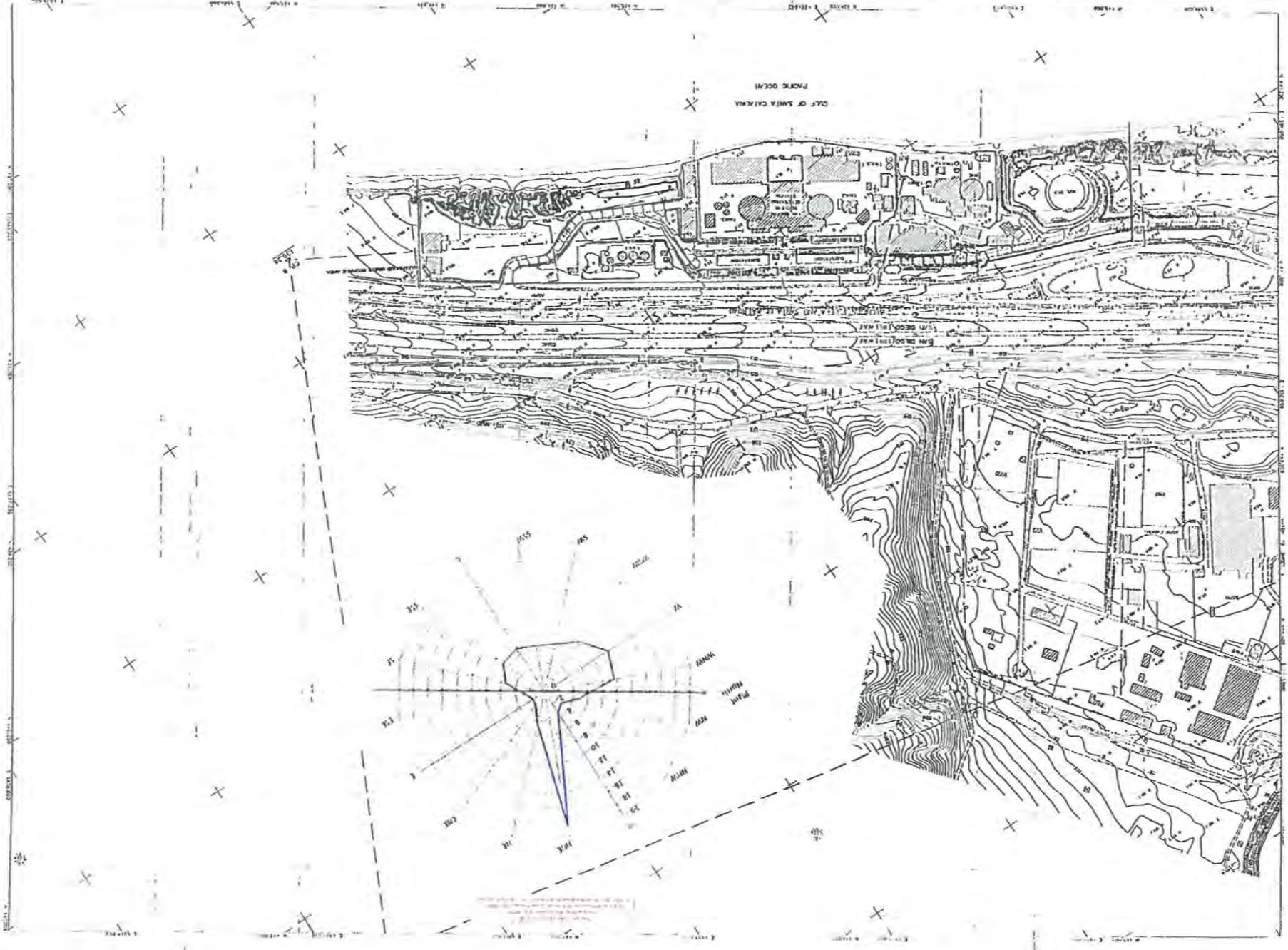


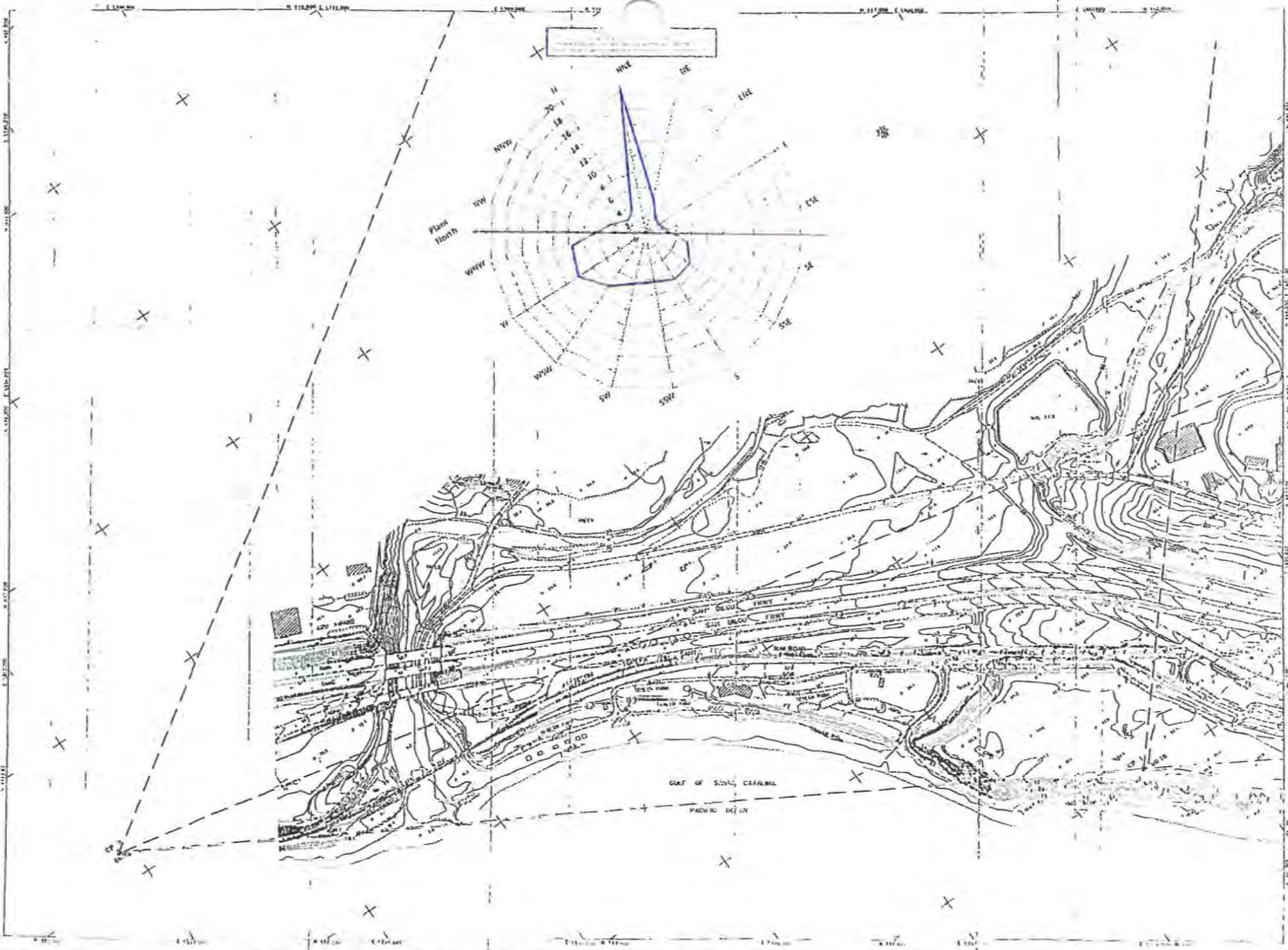
SCALE 1" = 200'

BASED ON ELEVATION
 OF 100 FEET
 (SEE SHEET 1 OF 2)

THIS PLAN AND ELEVATION DRAWING IS THE PROPERTY OF THE ENGINEER AND ARCHITECT AND IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THE ENGINEER AND ARCHITECT.

ANDREWS SYSTEMS, INC.
 ARCHITECTS AND ENGINEERS
 100 CALIFORNIA STREET
 SAN FRANCISCO, CALIF.





PLAN VIEW OF THE TOMB

Plan North

GOLF OF SONG'S TOMB

PAVED ROAD

BBN
 BROWN, BROWN & NICHOLS
 ARCHITECTS, INC.
 1000 P STREET, N.W.
 WASHINGTON, D.C. 20004

THESE PLANS WERE PREPARED BY BBN FOR THE U.S. ARMY CORPS OF ENGINEERS. THEY ARE NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF BBN. THE U.S. ARMY CORPS OF ENGINEERS IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THESE PLANS.

DATE OF DESIGN: 10/15/70

SCALE 1" = 200'
 1" = 200'
 GRAPHIC SCALE BAR

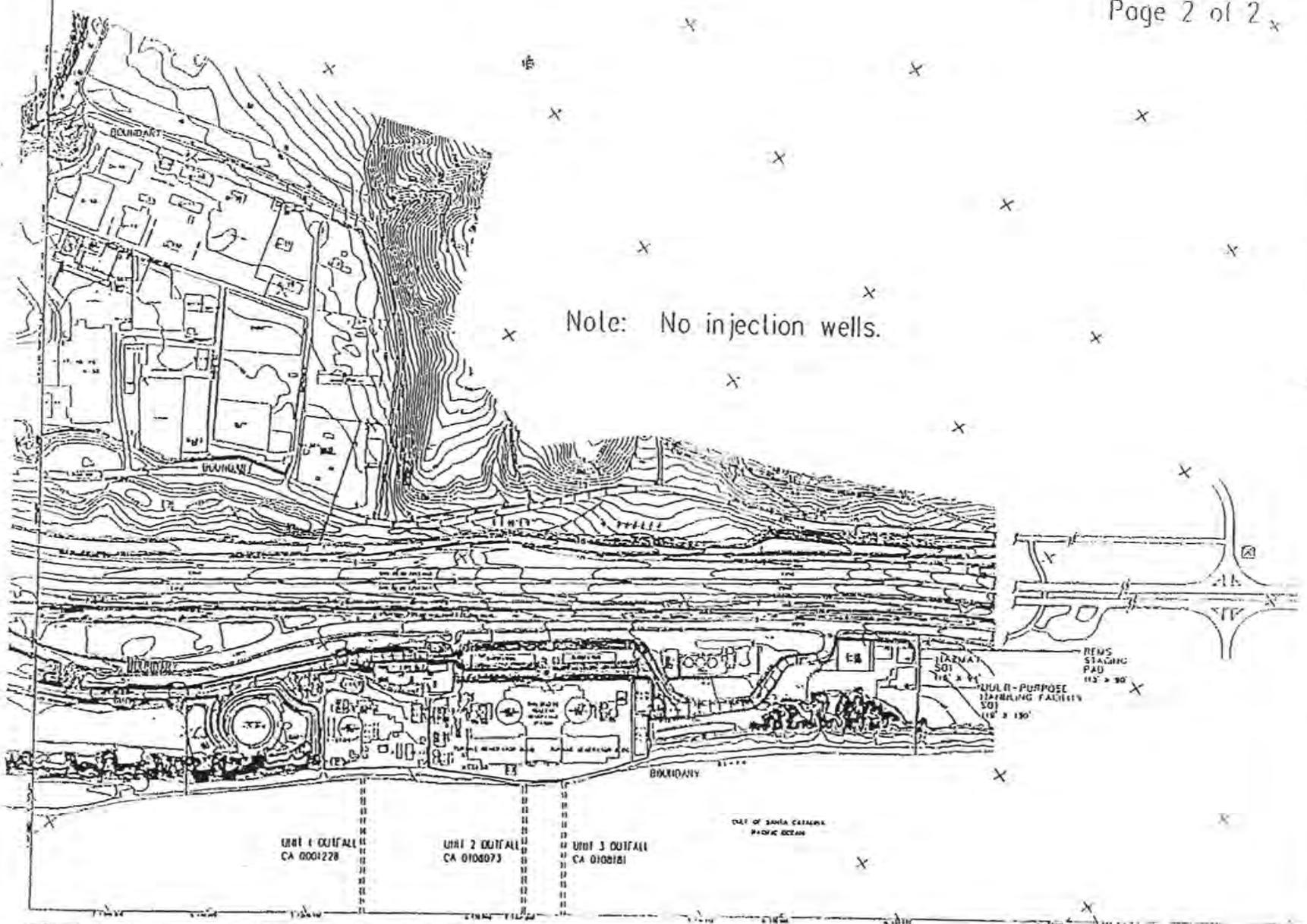


SHEET 1 OF 2



SHEET 2 OF 2
 DATE OF DESIGN: 10/15/70
 DRAWN BY: J. J. [unreadable]
 CHECKED BY: J. J. [unreadable]
 SONG'S TOMB SITE
 SAI CHANG, CAMP UONG
 U.S. ARMY CORPS OF ENGINEERS
 WASHINGTON, D.C.

Note: No injection wells.



NOT

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SCALE

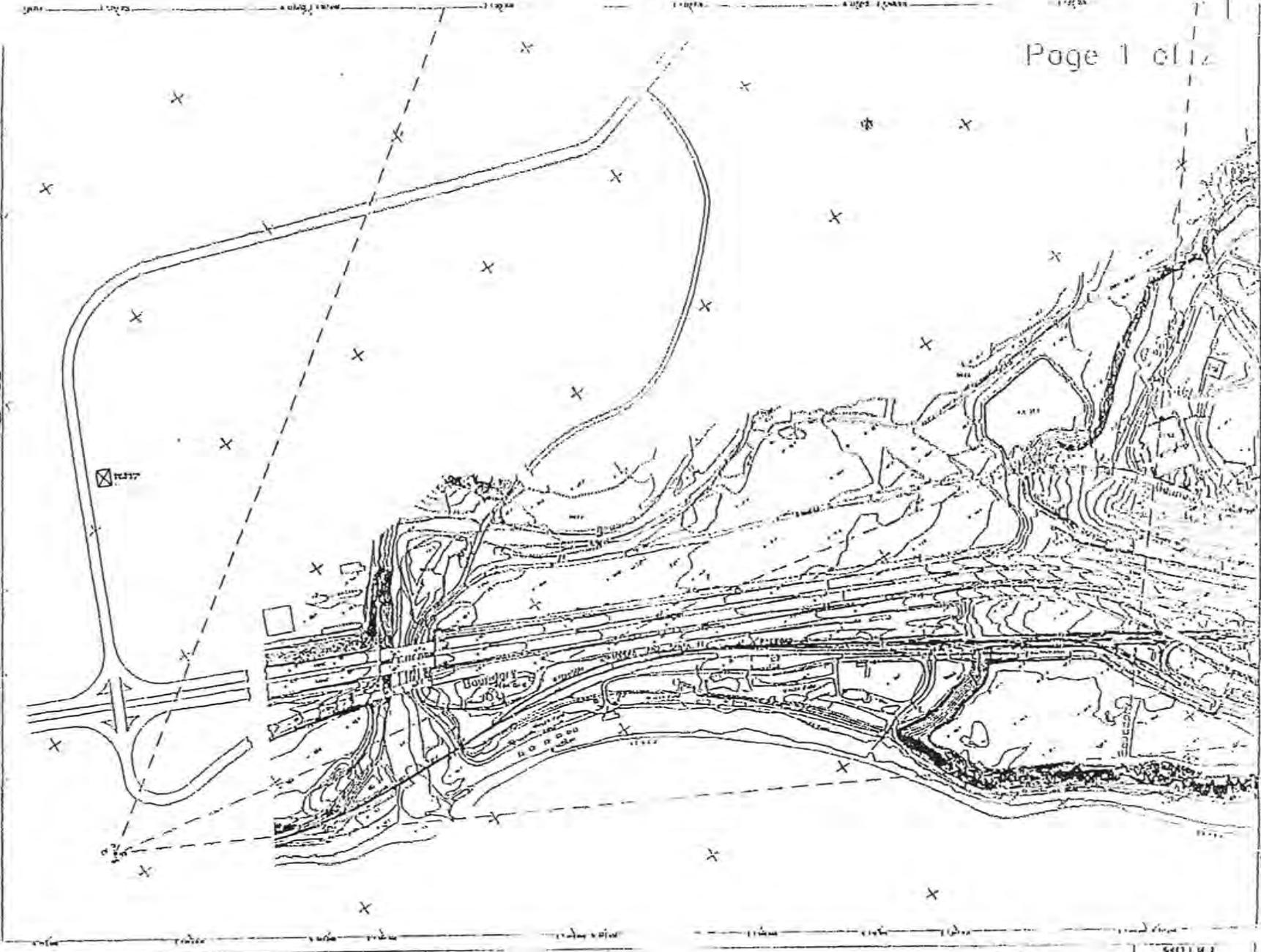
SHEET INDEX

SHEET 2 OF 2

DATE: 10/25/80

BY: JAMES L. SMITH

FOR: SAN DIEGO, CALIFORNIA



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SCALE 1" = 50'

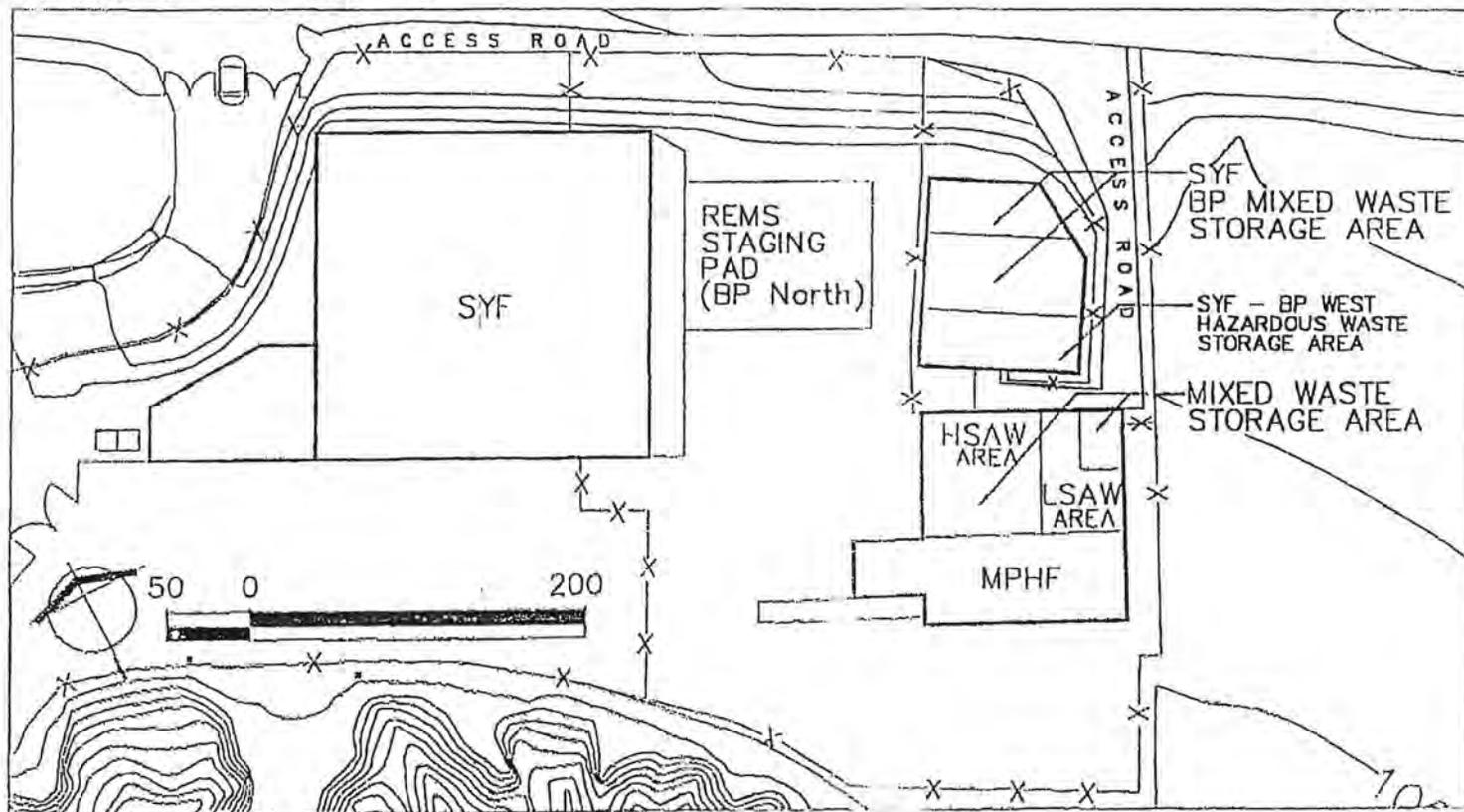


SHEET NO. 1

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SHEET NO. 1
DATE: 10/1/50
BY: [Signature]
PROJECT: [Text]
LOCATION: [Text]
SCALE: [Text]

SCALE: 1" = 100'-0"



REMS = RADIOACTIVE EQUIPMENT MATERIAL STORAGE

HSAW = HIGH SPECIFIC ACTIVITY WASTE

LSAW = LOW SPECIFIC ACTIVITY WASTE

SYF = SOUTH YARD FACILITY

BP = BATCH PLANT (115' X 94')

MPHF = MULTIPURPOSE HANDLING FACILITY (119' X 130')

Section 2.0
FACILITY DESCRIPTION

2.0 FACILITY DESCRIPTION

2.1 General Description

The San Onofre site is located on the coast of southern California in San Diego County approximately 62 miles southeast of Los Angeles and 51 miles northwest of San Diego. The site is located entirely within the boundaries of the United States Marine Corps Base, Camp Pendleton, California, near the northwest end of the 18-mile shoreline. The site is approximately 4500 feet long and 800 feet wide, comprising 84 acres. The decommissioned and partially demolished Unit 1 footprint occupies approximately 16 acres. The permanently shut down Units 2 and 3 occupy 52.8 acres including 27.7 acres for the power block and site switchyard and 25.1 acres for parking, access area and miscellaneous structures. Units 2 and 3 are located southeast of and immediately adjacent to Unit 1.

A permanent concrete seawall is provided along the seaward side of the site to protect the site against sea erosion. This seawall functions as a retaining wall. It is designed to assure that it will withstand, without loss of functional capability, the design basis earthquake followed by a tsunami, with coincident storm wave action. Along the base of the seawall is the public access way, which allows access between the beaches north and south of the station site.

Interstate Highway 5, which is an 8-lane freeway, and the Atchison, Topeka, and Santa Fe Railway pass within 1000 feet of the station site. An off-ramp and road provide access to the site from Interstate Highway 5. A railroad spur track is extended from the Unit 1 spur track to the Units 2 and 3 site.

The population of Camp Pendleton, which surrounds the San Onofre site, is extremely variable. It is expected, however, that the population will not exceed 51,000. No personnel will be quartered closer than 1 1/2 miles from the station site. The principal administrative and main personnel housing areas are located 12 to 15 miles to the southeast. The following population information is based on the SONGS 2014 Land Use Census completed in the fall of 2014: the closest Military Barracks is located 2.62 miles to the Northeast of the center point between units 2 and 3 and the nearest sizable community is San Clemente (population in 2012 is approximately 64,900) located about 2.75 miles to the west-northwest. Oceanside and San Diego are 17 miles and 51 miles to the southeast of the site, respectively. The land uses and zoning extending at least 5 miles from the plant are shown in Attachment 2-1.

2.1.1 Facility Location

Assessor's Parcel Number	101-520-12
Latitude:	33°22'09" N
Longitude:	117°33'16" W
Township:	T9S
Range:	R6W and R7W
Sections:	Section 30 of T9S, R6W and Section 24 of T9S, R7W
Baseline and Meridian:	San Bernardino

2.1.2 Written Legal Description of the Property

The legal description of the property on which the storage areas and the power plant buildings are located is known as Parcel 8 and is described as follows:

That portion of the Rancho Santa Margarita y Las Flores, as described in the Patent from the United States of America, dated March 28, 1879 and recorded in Book 7, page 18 et seq., of Patents in the office of the County Recorder of said County, being also portions of Section 24 in Township 9 South, Range 7 West and Section 30 in Township 9 South, Range 6 West, as shown on Record of Survey Map No. 794 filed January 17, 1940 in the office of said County Recorder.

A copy of Public Law 88-82 approved in Congress on July 30, 1963 and the Grant of Easement signed on May 12, 1964 are included in Attachment 2-2. The lease expires May 12, 2023.

2.1.3 Site Security

Access control for the San Onofre Nuclear Generating Station is provided by ~~security fencing and guarded or locked access gates around all~~ "vital" areas/equipment. Security at the San Onofre Nuclear Generating Station is maintained in accordance with 10 CFR Chapter 1, NRC requirements.

An 8' chain-link fence encloses the HazMat Area - SYF hazardous waste storage area. There are three access gates to the hazardous waste storage area which are double-locked when not in use. The gates are accessible only to the Hazardous Materials Group and the Health Physics Group. To access the hazardous waste storage area, both groups must unlock their portion of the double-lock. The MPH hazardous waste storage areas are in an enclosed building with a key card access.

Warning signs are strategically posted on the perimeter fence of the hazardous waste storage areas to warn trespassers that the area contains hazardous waste. The signs are clearly legible from a distance of 25 feet. Each warning sign is 18"W x 12"H. The lettering on the signs is 0.75" to 1.25" high. The signs clearly state in English and Spanish, "Caution - Hazardous Waste Storage Area - Unauthorized Persons Keep Out" and "Cuidado - Zona De Residuos Peligrosos - Prohibida La Entrada a Personas No Autorizadas".

In addition, mixed waste warning signs are posted in the area, "Mixed Waste Storage Area, Authorized Personnel Only, Contact EP at 86829 and HP at 86176 Prior to Entry", "Caution Radioactive Materials Area Rep Required, Notify Health Physics at 86695 Prior to Entry", and "Warning, This Area Contains Radionuclides Known to the State of California to Cause Cancer, Birth Defects, and/or Other Reproductive Harm, California Health and Safety Code 25249.6".

2.2 Detailed Topographic Map

A detailed topographic map is presented as Attachment 2-3, Sheets 1 and 2. The map's scale is one inch equals 200 feet, and it has five-foot elevation contours and spot elevations to the tenth of a foot. It illustrates the San Onofre Nuclear Generating Station beyond the boundaries of the facility and shows the following:

1. Map scale and date.
2. Surface waters, including intermittent streams.
3. North arrow.
4. Access control; fences; gates; etc.
5. Buildings; locations of storage areas, other structures.
6. Barriers for drainage or flood control. Site grading to provide flood protection and drainage control.

In addition to the detailed topographic map, the following details required in CCR22 are shown in Attachment 1-2, Site Map.

1. Map scale and date.
2. Surface waters, including intermittent streams.
3. North arrow.
4. Legal boundaries of the San Onofre Nuclear Generating Plant.
5. Access control; fences; gates; etc.
6. Buildings, locations of storage areas, other structures.

Other items required by the regulations are shown on maps in other sections of this Hazardous Waste Permit Application. For example, the 100-year floodplain is discussed in Section 2.3.3. The traffic routes are discussed in Section 2.4 and shown on a map in Attachment 2-4. Photographs of the storage areas and two aerial photographs are presented in Attachment 2-5. The Camp Pendleton Natural Resource Map is shown in Attachment 2-6. The location of solid waste management units are discussed in Section 10 and shown on a map in Attachment 10-2.

2.3 Facility Location Information

2.3.1 Site Geology

The site is located in an area classified as Seismic Zone 3 on the Seismic Risk Map of the Uniform Building code (1973). The geology of southern California is dominated by major, northwest trending right-lateral faults related to the San Andres – San Jacinto fault systems. These and other northwest trending faults have a moderate to high degree of activity. The nearest fault to the site is the Christinitos Fault, which is exposed along the seacliff approximately 1 mile southeast of Unit 1.

The site is located on the Southern California coast within the Peninsular Range Province, an area characterized by northwesterly trending elongate mountain ranges and valleys. It is located near the northwest corner of Camp Pendleton Marine Reservation, approximately 2 miles southeast of the mouth of San Mateo Creek. The physiography of the area is typical of the region, with a rather narrow, gently sloping, coastal plain extending seaward

from the uplands. The plain is terminated at the beach and forms a line of seacliffs, which have been straightened over long distances by marine erosion. Seacliffs in the immediate vicinity of the plant site reach a height of 60 to 100 feet above sea level, and are separated from the ocean by a narrow band of beach sand. In places, ephemeral streams are actively eroding gullies into the seaward portions of the coastal plain and several deeply incised barrancas have been formed.

The site is situated on San Mateo Formation of the Pliocene – Pleistocene age, overlying Pleistocene terrace deposits and beach sand. Along the coast, both north and south of the site, Pleistocene wave action has cut an extensive gently seaward sloping bench in the San Mateo Formation.

The San Onofre site contains about 15.5 acres of natural vegetation. A sparse coastal strand of vegetation is situated along the sandy beach at the base of the San Onofre bluffs. The upland terrace supports a mosaic of Coastal Sage Scrub and grassland vegetation. A series of deeply eroded ravines traverse the site perpendicular to the coast. These ravines have a very sparse vegetative covering. Adjacent developed or recently disturbed areas are devoid of vegetation or have a flora consisting of introduced annual weeds.

2.3.2 Seismic Standard

Compliance with the seismic standard is not required since the storage areas are not new hazardous waste management facilities as defined in 22 CCR 66260.10 or facilities undergoing substantial modification as specified in 22 CCR 66270.42(c).

2.3.3 100-Year Floodplain

None of the storage areas are located in the 100-year floodplain. The basis for this determination is presented in the *San Onofre Units 2 and 3 Final Safety Analysis Report* (FSAR) which is a continually updated document utilized by the NRC to maintain a license to operate a nuclear power plant. The power block finish grade elevation is +30.00 mean lower low water (mllw). A subsurface drainage system will carry normal storm drainage flows to the cooling-water intake structure. For consideration of flooding due to the thunderstorm probable maximum precipitation (PMP), all catch basins for the subsurface drainage system were assumed plugged; surface drainage facilities will transmit all thunderstorm drainage flows in the power block over the seawall to the ocean. Drainage areas contributing to the surface drainage flows in the power block area are shown on [figure 2.4-3 FSAR]. Runoff from the coastal hills east of Interstate Highway 5 will be diverted to the San Onofre Creek Basin, as shown in [figure 2.4-4 FSAR].

There are no perennial streams in the general vicinity of the plant site. However, ephemeral streams and watercourses do exist. The major streams are San Mateo Creek located approximately 2 miles to the northwest, and San Onofre Creek located approximately 1 mile to the northwest.

San Mateo Creek has a drainage area of 132 square miles in size. Records from the U.S. Geological Survey recording gage⁽²⁾ at the mouth are available for water years October 1946 to September 1967, at which time management of and

recordkeeping for the gage was discontinued. From an examination of the topography of the area, it was determined that the drainage divide separating San Mateo and San Onofre Creeks would preclude the plant site being influenced by San Mateo Creek.

San Onofre Creek has a drainage area of 43 square miles. A U.S. Geological Survey recording gage is located at the mouth with available records covering a period from October 1946 to September 1967. The drainage basin is presented in [figure 2.4-5 FSAR]. The basin length is approximately 9.7 miles and is 4.7 miles in width.

San Onofre Creek and its watershed lies entirely on U.S. Marine Corps Base, Camp Pendleton. The origin of the basin is in the Santa Margarita Mountains to the northeast of the site. The maximum elevation in the basin is 3187 feet above mllw with the minimum at sea level. Ground slope within the tributary area varies from approximately 3% to 10%.

There are no existing or proposed water control structures within the San Onofre Creek Basin. Camp Pendleton currently uses surface runoff infiltration for purposes of recharging the base well system, otherwise there are no surface water users in the basin.

The foothill drainage basin identified in [figure 2.4-6 FSAR] contributes to the hydrologic factors influencing the plant site. The basin totals 0.86 square miles in area. There are no gaging stations located within the basin and, consequently, stream flow records are not available.

The entire watershed lies within the boundaries of the Marine Corps Base, Camp Pendleton. Elevation in the basin varies between a maximum of 1200 feet and a minimum of 100 feet above msl. Ground slope varies from 8 to 22%. Ground cover is moderate within the basin consisting mainly of chaparral and grassland.

Water control structures consist of the 42-inch and 72-inch diameter concrete culverts under Interstate Highway 5, as shown in [figure 2.4-6 FSAR]. The culverts are maintained by the California State Department of Transportation. The capacity of these culverts is 180 and 520 ft³/s, respectively. In addition to the two culverts identified above, an earthen channel traverses the basin along the east side of Interstate Highway 5 diverting runoff to San Onofre Creek, as shown in [figure 2.4-6 FSAR]. The capacity of the channel is 1850 ft³/s.

For purposes of determining and analyzing potential flood sources, consideration was given to the San Onofre Creek Basin, as shown in [figure 2.4-5 FSAR], and the foothill drainage area east of the site, as defined in [figure 2.4-6 FSAR]. In both cases the probable maximum flood (PMF) was defined as the design basis event. Regulatory guide 1.59, Design Basis Floods for Nuclear Power Plants, and referenced noted therein were employed as standards in the determination of the PMF.

Results of the PMF analysis concluded that the San Onofre Creek Basin exhibits no flooding potential to the site. The maximum flood stage, as a result of the PMF, was determined to be 24.1 feet at the mouth of the creek. Topographical

features of the basin would contain this flow and thereby preclude flooding of the site by this source.

An analysis of the flooding potential of the foothill drainage area was also performed. The results of this analysis produced evidence that the site could be subjected to flooding during the occurrence of the design basis PMF. In order to preclude flooding of the site by this source a diversion structure, as shown in [figure 2.4-4 FSAR], routes the surface runoff from the foothill drainage area to the San Onofre Creek Basin. For purposes of design of the diversion structure, the PMF was used as the design basis event for determining the maximum water elevation.

As discussed in the FSAR, the occurrence of storm surge, storm wave action, and tsunami will not cause flooding of the site.

A federal insurance rate map from the Federal Emergency Management Agency is not available for the site.

2.3.4 Weather and Climatic Conditions

The climate of this coastal site is predominantly characterized as marine and subject to daily land and sea breezes upon which an annual monsoon oscillation is superimposed. During most of the year, daytime heating of the land surface makes it warm relative to the Pacific Ocean. This thermal difference produces an onshore wind (sea breeze) that normally begins shortly after sunrise and lasts until after sunset. At night, as the land cools, the thermal gradient reverses, and an offshore wind (land breeze) develops. This diurnal reversal is most apparent during the spring and fall months.

During the summer, the Pacific anticyclone moves northward to a position off the coast from the site. This high pressure cell combines with the thermal low pressure through over inland southern California to produce a strong onshore pressure gradient, stratus deck, fog, and cool summer days.

In winter months, the anticyclone drifts farther southward, allowing the jet stream and its associated migratory storm tract to reach southward to the site. Between storm passages, the land-sea breeze pattern returns. During this period, the Great Basin high pressure cell frequently builds sufficiently to produce a relatively strong offshore pressure gradient and resulting warm dry Santa Ana winds.

Winds at the site exhibit an onshore component somewhat more than half the time. The most frequent wind is the westerly to west-northwesterly sea breeze, which averages about 5 to 7 miles per hour (mph). Winds associated with frontal passages are generally out of the southwest and relatively stronger, frequently over 10 mph. The strongest winds are associated with the Santa Ana condition and blow out of the northeast, occasionally exceeding 30 to 50 mph.

The Pacific Ocean has a moderating influence over the temperatures in the site region. Climatological data for Los Angeles and San Diego indicate that daily temperature ranges are usually less than 15°F in the spring and summer and

increase to about 20°F during the fall and winter. Temperatures below 40°F are rare. Prior to 1975, temperatures below freezing were recorded only once at both the Los Angeles and San Diego National Weather Service (NWS) stations. Correspondingly, temperatures above 85°F have occurred occasionally in every month of the year when air from the interior reached the coast. At San Diego, there have been only 15 days on which 100°F or higher were reached. The maximum-recorded temperature was 111°F at San Diego. The record minimum was 31°F.

The average relative humidity ranges from about 60% during the day to about 75% at night. Occasionally, however, during Santa Ana conditions, the influx of the dry desert air can drop humidity in the area to less than 10%.

The normal annual precipitation for San Diego and Los Angeles is 9.45 inches and 11.59 inches, respectively. Laguna Beach, 17 miles north of the site, with a surrounding topography similar to San Onofre, has a normal annual precipitation of 11.75 inches. About 85% of the precipitation falls in the winter months of November through March during the passage of the migratory storm systems, with measurable rain falling on an average of 1 day in 4. Occasionally a wet month will occur, such as during one February when 11 inches fell in Los Angeles. A maximum 6.19 inches of rain in 24 hours was recorded in Los Angeles. Measurable snow has never been recorded at a coastal location in Southern California.

2.3.5 Additional Information

There are no hazardous waste disposal or unloading facilities at San Onofre Nuclear Generating Station. Hazardous and mixed waste is generated from plant maintenance and operations activities and, except for the need to store mixed waste, are managed under the "generator" status regulations.

All hazardous wastes are shipped to an approved off-site disposal or recycling facility by a registered hazardous waste hauler accompanied by a Uniform Hazardous Waste Manifest.

Containers of ignitable wastes, incompatible wastes, or reactive wastes, when present, are stored in the separately bermed areas within the storage areas.

A buffer zone is provided for the mixed waste storage areas by their location from the perimeter fence that is at least 50 feet away. Additionally, the closest public access would be from the San Onofre State Park is approximately 3000 feet southeast of the storage areas.

Since the facility is a power generating station, numerous power lines and pipelines exist within the property. However, the power lines and sewer lines in the vicinity of the mixed waste storage areas will not affect or be affected by the operation of the storage areas.

An easement for a railroad spur extends from the northern part of the property southward to Unit 3. The easement is not near the mixed waste storage areas.

2.4 Traffic Information

2.4.1 Characteristics of Permanent Access Roads

All roads at the San Onofre Nuclear Generating Station are either paved or concrete. The roads are adequate to support the gross weight of hazardous waste trucks and vehicles. All roads at the facility are constructed in accordance with HS-20, the truckload design standard. Attachments 1-2, 2-3, and 2-5 illustrate the roads on-site and their locations.

2.4.2 Vehicle Traffic Volume

Approximately 50 shipments of hazardous waste are made each year from the facility. Less than 20 people have routine access to the hazardous waste storage areas. The shipments are made in either drums using a van or flatbed truck. Bulk liquid shipments are made in 100-120 barrel carbon steel, stainless steel, or KYNAR lined vacuum trucks and bulk solid using a roll-off bin.

Traffic control is implemented through traffic signs posted along the roads throughout the facility. The posted speed limit at the facility is 45 mph. The speed limit in the area of the hazardous waste storage areas is limited to approximately 10 mph.

Attachment 2-1

LAND USES/ZONING MAP

Attachment 2-2

**PUBLIC LAW 88-82
AND
GRANT OF EASEMENT**

ew lease # as of 7/26/90
#6871190290084

RECEIVED
TITLE INSURANCE AND TRUST COMPANY
SOUTHERN CALIFORNIA EDISON COMPANY
P. O. BOX 351
LOS ANGELES 53, CALIF.
ATTENTION - R/W & LAND DEPT.
SERIES 8 6015 1964
OFFICIAL RECORDS
SAN DIEGO COUNTY, CALIF.
L.S. CHAYNEBERGER

All correspondence in connection with contract should include reference to No. HOY(R) - 67910

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GRANT OF EASEMENT No. 1

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THIS INDENTURE, made this 12th day of May, 1964, between the United States of America, hereinafter referred to as the Government, acting by and through the Department of the Navy, and Southern California Edison Company, a California corporation, and San Diego Gas & Electric Company, a California corporation, hereinafter referred to as the Grantees.

WHEREAS, the Government is the owner in fee simple of a parcel of land known as the U. S. Marine Corps Base, Camp Pendleton, California, hereinafter referred to as the Reservation; and

WHEREAS, Public Law 88-82, approved July 30, 1963, authorizes the Secretary of the Navy to grant the easement hereinafter set forth in a portion of said land;

NOW, this Indenture witnesseth that, in consideration of the annual use charge hereinafter described to be paid by the Grantees to the Government, the Government, pursuant to the authority aforesaid, hereby grants unto the said Southern California Edison Company and San Diego Gas & Electric Company, their respective successors and assigns, an easement for the construction, operation, maintenance and use of a nuclear electric generating station, consisting of one or more generating units, and appurtenances thereto, including switchyards and substations, hereinafter referred to as the Nuclear Station, on, under, over and upon the following described land, hereinafter referred to as the Premises, described in Exhibit "A" attached hereto and made a part hereof; to have and to hold as tenants in common, Southern California Edison Company, its successors and assigns, to have an undivided 4/5 interest therein, and San Diego Gas & Electric Company, its successors and assigns, to have an undivided 1/5 interest therein.

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ORIGINAL 10/25/64

1 An operating agreement and evacuation plan shall be entered
2 into between the officer commanding the Reservation and Grantees.
3 Such agreement and plan together with any amendments will be bind-
4 ing upon the Grantees, their successors and assigns.

5 7. That title to all improvements constructed by or on be-
6 half of Grantees shall be in Grantees, their Contractors, in the
7 trustees of Grantees under the terms of Grantees' respective trust
8 indentures, or in the respective successors and assigns thereof,
9 ~~and shall not be in the Government; and the respective interests~~
10 ~~therein of Southern California Edison Company and San Diego Gas &~~
11 ~~Electric Company, their respective successors and assigns, shall~~
12 ~~be as they may agree from time to time.~~

13 8. Grantees shall have the right to excavate, grade and re-
14 move earth and other spoil material necessary in the construction
15 and operation of the Nuclear Station. Spoil material shall be de-
16 posited within the Reservation unless otherwise directed by the
17 Government. The officer commanding the Reservation shall approve
18 spoil disposition areas and method of spoil disposition within the
19 Reservation.

20 9. That in the event of a nuclear incident or accident at
21 the Nuclear Station, to protect the public health and safety, the
22 Grantees may regulate the activities in and remove any and all
23 persons from such portion of the exclusion area located outside of
24 the Nuclear Station, as is established from time to time, by, or
25 with the approval of, the United States Atomic Energy Commission,
26 and as is located within the lands described in Exhibit B. Such
27 portion of the exclusion area may be used by the Government, its
28 successors or assigns, only for military operations (provided same
29 do not endanger operation of the Nuclear Station), agricultural,
30 recreational, and such other uses as may be permitted by the
31 United States Atomic Energy Commission. Until the Nuclear Station
32 has been developed to its maximum planned capacity, or the Grantees
have determined that no further development will be effected,

1 but in no event beyond 25 years from the date hereof, the lands
2 described in Exhibit "B" which are outside of the exclusion area
3 shall be used by the Government, its successors or assigns, only
4 for such uses as are permitted in the exclusion area.

5 10. Except as to liability arising out of or resulting
6 from a "nuclear incident", as defined in the Atomic Energy Act
7 of 1954, as amended, the Grantees shall hold the Government
8 harmless from liability arising from Grantees' negligent or
9 unlawful use of the Premises and negligent or unlawful activities
10 of the Grantees in connection with this Grant of Easement.

11 11. Grantees agree to secure and to maintain in force,
12 protection against liability arising out of or resulting from a
13 "nuclear incident", as defined in the Atomic Energy Act of 1954,
14 as amended, in the form of financial protection as required by
15 Section 170(b), and a contract of indemnification with the United
16 States Atomic Energy Commission as required by Section 170(c),
17 of the Atomic Energy Act of 1954, as amended.

18 12. That upon the termination of the easement granted
19 herein, the Grantees at their expense may remove, and if desired
20 by the Government, shall remove, any and all improvements in-
21 stalled or constructed hereunder and shall restore the Premises
22 to a condition satisfactory to the Director, Southwest Division,
23 Bureau of Yards and Docks; except that the Grantees shall not be
24 obligated to restore any natural material cut or filled in the
25 necessary excavation and grading of the Premises. Upon termina-
26 tion of the easement, the Grantees shall also, if required by the
27 Government, decontaminate the Premises and such surrounding area
28 within the Reservation as may have been contaminated by the
29 operation of the Nuclear Station.

30 13. That all or any part of the easement herein granted
31 may be terminated for failure on the part of the Grantees to
32 comply with any of the terms and conditions of this grant, if

15708

1 such failure is not cured within ninety (90) days after written
 2 notice from the Government to the Grantees thereof, unless such
 3 failure, or any delay in curing such failure, results from a
 4 cause beyond the reasonable control of the Grantees. Such written
 5 notice, until Grantees shall be advised in writing to the con-
 6 trary, shall be made by the Chief, Bureau of Yards and Docks,
 7 Department of the Navy. This easement may be terminated upon
 8 abandonment or upon nonuse of such easement for a period of two
 9 consecutive years, unless such nonuse is caused by or results
 10 from decrees of Government, failure on the part of the United
 11 States Atomic Energy Commission or any Federal, State or local
 12 authority having jurisdiction to issue required permits or
 13 licenses, acts of God, war or a national emergency declared by
 14 the President or the Congress.

15 14. That the easement herein granted shall terminate
 16 at the expiration of sixty (60) years from the date hereof,
 17 provided, however, that by mutual agreement of the parties, the
 18 Government may extend this easement for such period and upon the
 19 same or such other terms and conditions as the Government may
 20 require.

21 IN WITNESS WHEREOF, the Government, acting by and
 22 through the Department of the Navy, and the Grantees, have caused
 23 this instrument to be executed the day and year first above written.

APPROVED AS TO FORM:
 ROLLIN E. WOODBURY
 General Counsel
 BY: Assistant Counsel
 1947

UNITED STATES OF AMERICA

By: [Signature]
 By direction of the Chief of the
 Bureau of Yards and Docks, acting
 under the direction of the Secretary
 of the Navy

SOUTHERN CALIFORNIA EDISON COMPANY

By: [Signature]

By: [Signature]

SAN DIEGO GAS & ELECTRIC COMPANY

By: [Signature]

By: [Signature]

ACKNOWLEDGMENT

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STATE OF CALIFORNIA }
COUNTY OF SAN DIEGO }

On this 12th day of May, in the year
1964, before me MARIE H. WENDT, a Notary Public in and for
said County and State, personally appeared L. C. COXE,

known to me to be the person whose name is subscribed to the with-
in instrument, and acknowledged that he executed the same by
direction of the Chief of the Bureau of Yards and Docks, acting
under the direction of the Secretary of the Navy, U. S. A.

Marie H. Wendt
Notary Public in and for the
County of San Diego
State of California
My Commission Expires June 5, 1965



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ACKNOWLEDGMENT

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STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO } SS.

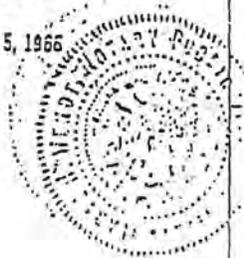
on this 12th day of May, 1964, before
me, the undersigned, a Notary Public in and for said County and
State, personally appeared William R. Gould,

known to me to be a Vice President, and
M. V. Riley, known to me to be an Assistant Secretary
of SOUTHERN CALIFORNIA EDISON COMPANY, the corporation that
executed the within instrument, and known to me to be the persons
who executed the within instrument on behalf of the said
corporation, and acknowledged to me that such corporation executed
the same pursuant to its By-Laws or a resolution of its Board of
Directors.

WITNESS my hand and official seal.

Marie H. Wandt
Notary Public in and for said
County and State

My Commission Expires June 5, 1966



215081

ACKNOWLEDGMENT

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STATE OF CALIFORNIA }
COUNTY OF San Diego } SS.

On this 12th day of May, 1964, before me, the undersigned, a Notary Public in and for said County and State, personally appeared George M. L. H. known to me to be a VICE-PRESIDENT, and W. J. K... known to me to be SECRETARY, of SAN DIEGO GAS & ELECTRIC COMPANY, the corporation that executed the within instrument, and known to me to be the persons who executed the within instrument on behalf of the said corporation, and acknowledged to me that such corporation executed the same pursuant to its By-Laws or a resolution of its Board of Directors.

WITNESS my hand and official seal.

Maria H. Wendt
Notary Public in and for said

County and State
My Commission Expires June 5, 1966



7, 1964

1 That certain real property in the County of San
2 Diego, State of California, described as follows:

3 That portion of the Rancho Santa Margarita y
4 Las Flores, as described in the Patent from the
5 United States of America, dated March 28, 1879 and
6 recorded in Book 7, page 18 et seq., of Patents in
7 the office of the County Recorder of said County,
8 being also portions of Section 24 in Township 9
9 South, Range 7 West and Section 30 in Township 9
10 South, Range 6 West, as shown on Record of Survey
11 Map No. 794 filed January 17, 1940 in the office of
12 said County Recorder, described as follows:

13 Beginning at a 6 inch by 6 inch concrete high-
14 way monument, set in the Southwesterly line of U. S.
15 Highway 101, said monument being North 56° 12' 04"
16 West 2123.77 feet, measured along said Southwesterly
17 line, from a 6 inch by 6 inch concrete highway
18 monument, said first above mentioned concrete high-
19 way monument bears South 02° 52' 15" East 4207.25
20 feet from a 1½ inch iron pipe, with brass cap, set
21 for the Northeast corner of Section 24 in Township 9
22 South, Range 7 West, as shown on said Record of
23 Survey Map, said first above mentioned concrete
24 highway monument being also at the beginning of a
25 tangent curve, concave Southwesterly and having a
26 radius of 4940 feet; thence Northwesterly along
27 said curve, through an angle of 12° 00', a distance
28 of 1034.63 feet; thence continuing along said South-
29 westerly line and tangent to said last mentioned
30 curve, North 68° 12' 04" West, 503.81 feet to the
31 beginning of a tangent curve, concave to the North-
32 east and having a radius of 2060 feet; thence
Northwesterly, along said last mentioned curve,
through an angle of 04° 54' 28" a distance of
176.47 feet to a point, a radial line of said last
mentioned curve passing through said last mentioned
point bears South 26° 42' 24" West; thence South
33° 00' 00" West, 785.32 feet to the Mean High Tide
Line of the Pacific Ocean; thence Southeasterly,
along said Mean High Tide Line of the Pacific Ocean
to a line that is parallel with and 4500 feet South-
easterly, measured at right angles, from the course
hereinabove described as having a bearing of South
33° 00' 00" West and a length of 785.32 feet; thence
North 33° 00' 00" East, along said parallel line,
663.39 feet to a point in said Southwesterly line of
U. S. Highway 101, said last mentioned point being
in a curve in said Southwesterly line, said curve
being concave Southwesterly and having a radius of
11440 feet and being also tangent to the course
hereinabove described as having a bearing of North
56° 12' 04" West and a length of 2123.77 feet, a
radial line to said curve passing through said last
mentioned point bears North 37° 12' 19" East; thence
Northwesterly, along said curve, through an angle of
03° 24' 23", a distance of 680.14 feet to the second
above mentioned 6 inch by 6 inch concrete highway
monument; thence North 56° 12' 04" West, 2123.77
feet to the point of beginning.

Notes: - Same Survey # 30006 A.
As Amended (Serial 00, 5976)
(At Time of Execution) 4-13-64
D.H.

That certain real property in the County of San Diego, State of California, described as follows:

That portion of the Rancho Santa Margarita y Las Flores, as described in the Patent from the United States of America, dated March 28, 1879, and recorded in Book 7, page 18 et seq., of Patents, in the office of the County Recorder of said County and being also portions of Sections 19 and 30 in Township 9 South, Range 6 West, and Section 24 in Township 9 South, Range 7 West, as shown on a Record of Survey Map No. 794 filed January 17, 1940 in the office of said County Recorder, described as follows:

Beginning at a point in that certain course in the Southwesterly boundary line of said Section 24, said certain course is shown on said Record of Survey Map No. 794 as having a bearing of "N 49° 56' 37" W" and a length of "1140.51 feet," said point being South 49° 56' 37" East, 125.97 feet, measured along said certain course, from the Northwesterly terminus thereof; thence North 33° 00' 00" East 334.53 feet to the beginning of a tangent curve concave Southerly and having a radius of 2640 feet; thence Northerly and Easterly along said curve, through an angle of 90°, a distance of 4146.90 feet; thence tangent to said curve South 57° 00' 00" East 2500.00 feet to the beginning of a tangent curve concave Westerly and having a radius of 2640 feet; thence Easterly and Southerly along said last mentioned curve, through an angle of 90°, a distance of 4146.90 feet; thence tangent to said last mentioned curve South 33° 00' 00" West 297.15 feet to that certain course in the Southwesterly boundary line of said Section 30, said certain course is shown on said Record of Survey Map No. 794, as having a bearing of "N 46° 51' 42" W" and a length of "3099.73 feet"; thence North 46° 51' 42" West along said Southwesterly boundary line 1080.83 feet; thence continuing along said Southwesterly boundary line North 60° 31' 51" West 577.15 feet to the Southeasterly boundary line of the 83.63 Acre parcel of land, shown on the Licensed Surveyor's Map filed on June 13, 1963, as Map No. 6242 of Records of Survey in the office of said County Recorder; thence Northeasterly along said Southeasterly boundary line to the Northeasterly corner of said 83.63 Acre parcel; thence Northwesterly along the Northeasterly boundary line of said 83.63 Acre parcel to the Northwesterly corner thereof; thence Southwesterly along the Northwesterly boundary line of said 83.63 Acre parcel to its intersection with that certain course in the Southwesterly boundary line of said Section 24, said certain course is shown on said Record of Survey Map No. 794 as having a bearing of "N 60° 31' 51" W" and a length of "2576.84 feet"; thence North 60° 31' 51" West along said last mentioned Southwesterly boundary line, a distance of 634.35 feet; thence continuing along said Southwesterly boundary line North 49° 56' 37" West 1014.54 feet to the Point of Beginning.

Divide #30006A
#13.64 RA

1207



Public Law 88-82
88th Congress, S. 546
July 30, 1963

All Act

77 STAT, 115.

To authorize the Secretary of the Navy to grant easements for the use of lands in the Camp Joseph H. Pendleton Naval Reservation, California, for a nuclear electric generating station.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Navy be and he hereby is authorized and empowered to grant to Southern California Edison Company, a California corporation, and to San Diego Gas and Electric Company, a California corporation, and to each of them, their respective successors and assigns, upon such terms and conditions as the Secretary deems necessary to protect the interests of the United States, an easement in, over, under and upon lands of the United States of America, approximately ninety acres in area, within the Camp Joseph H. Pendleton Naval Reservation, California, for the construction, operation, maintenance, and use of a nuclear electric generating station, consisting of one or more generating units, and appurtenances thereto; and easements in, under, over, and upon such additional lands of the United States of America within the Camp Joseph H. Pendleton Naval Reservation, California, as are necessary or desirable for the purpose of constructing, operating, maintaining, and using electric transmission and communication lines, switchyards and substations, cooling water conduits, pipelines for water, gas and sewage, railroad spur tracks, access roads and other appurtenances to said facilities and to said nuclear electric generating station.

Sec. 2. Upon such terms and conditions as he deems necessary to protect the interests of the United States and within the scope set forth in Section 1, the Secretary or his successors in interest, may amend any such easement by mutual agreement of the parties thereto, or their successors in interest, in such manner as to change the lands affected thereby, either by substitution, addition or deletion, as well as to change the terms and conditions of the grant.

Sec. 3. A reasonable charge, which may be paid in installments or in a lump sum or in a combination thereof, as determined by the Secretary, or his successor in interest, based upon the fair value of each easement granted pursuant to the authority herein contained, shall be payable by the grantee or grantees thereof, their respective successors and assigns.

Approved July 30, 1963.

LEGISLATIVE HISTORY:

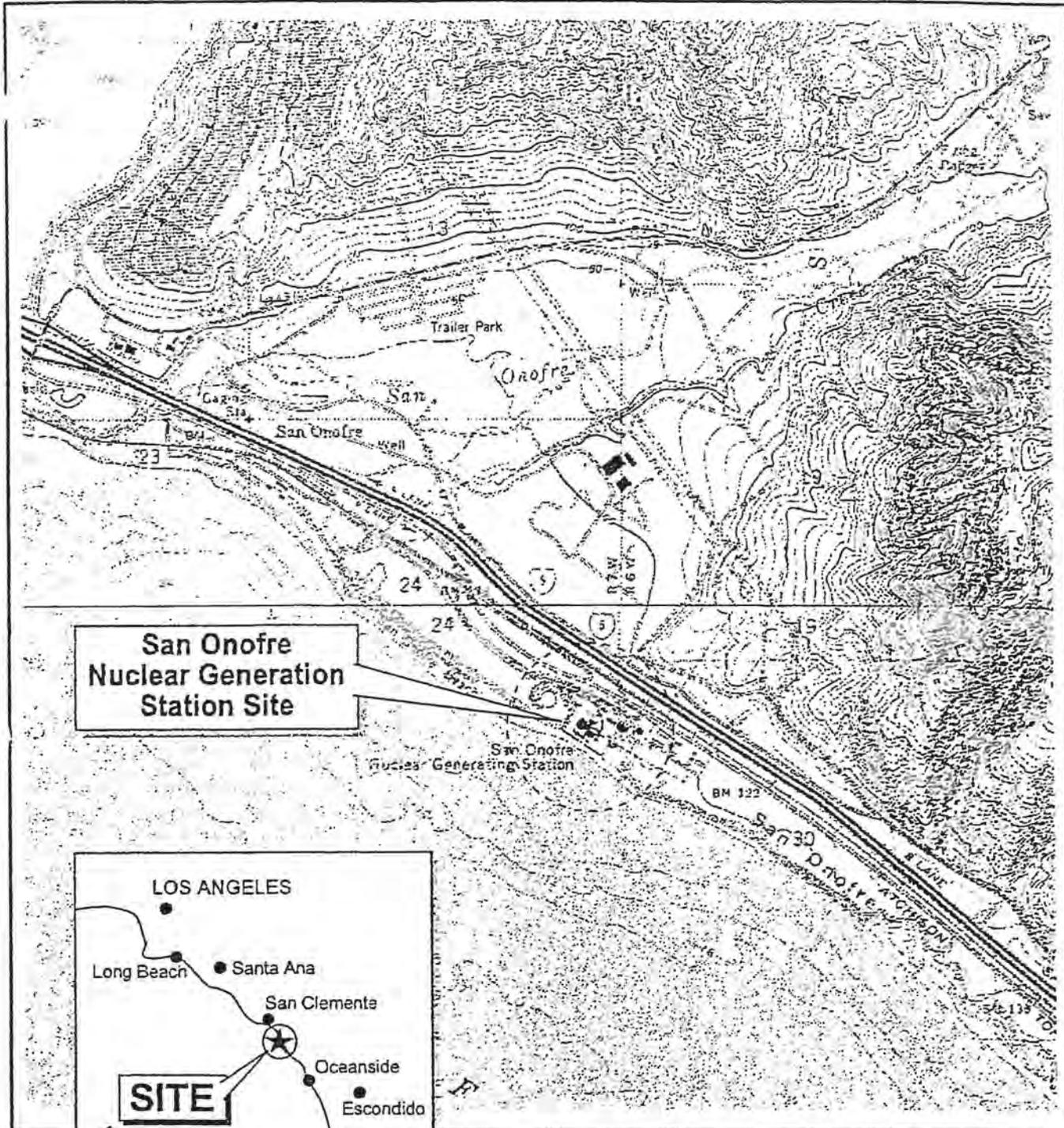
HOUSE REPORT No. 509 (Comm. on Armed Services).
SENATE REPORT No. 315 (Comm. on Armed Services).
CONGRESSIONAL RECORD, Vol. 109 (1963):
June 20: Considered and passed Senate.
July 15: Considered and passed House, amended.
July 16: Senate agreed to House amendment.

Plant site only
83.63 acres

ACT OF
CONGRESS
AUTHORIZING
SONGS

Attachment 2-3

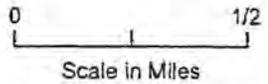
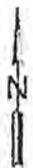
**DETAILED TOPOGRAPHIC MAP
(2 sheets)**



**San Onofre
Nuclear Generation
Station Site**



Source: USGS 7.5 minute series (topographic) map, San Onofre Bluff and San Clemente Quadrangles

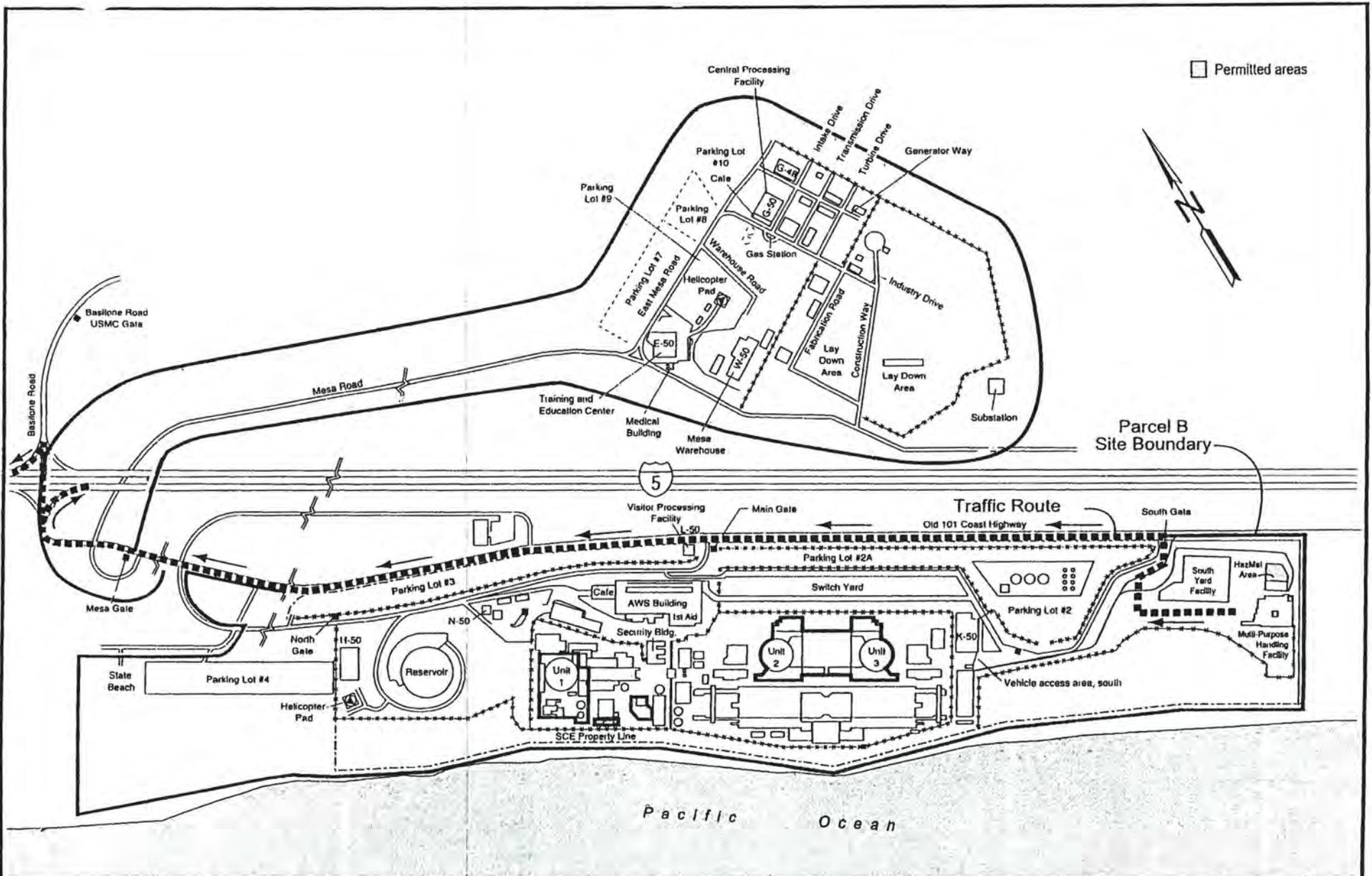


SITE LOCATION MAP
San Onofre Nuclear Generating Station
 Southern California Edison, San Diego County, California

Figure
1-1

Attachment 2-4

TRAFFIC ROUTES



TRAFFIC ROUTES

San Onofre Nuclear Generating Station
 Southern California Edison, San Diego County, California

Figure
 2-4

Attachment 2-5

AERIAL AND SURFACE PHOTOGRAPHS



Photo 1: Shows the roof over the HazMat Area – South Yard Facility. The Multi-Purpose Handling Facility building is in the background.

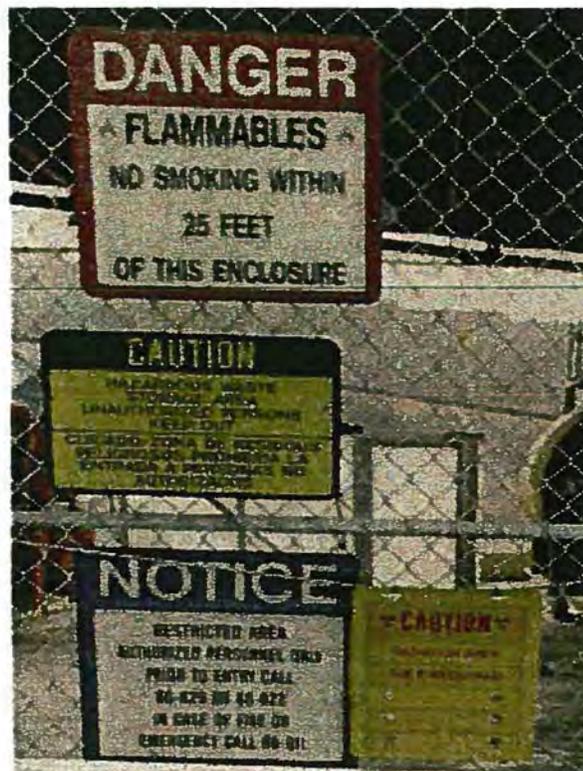


Photo 2: Sample signs at the HazMat Area – South Yard Facility.



Photo 3: Drums in the HazMat Area are stored on pallets. This picture shows the berm around the perimeter of the storage area compared to the berm for incompatible wastes inside the storage area.



Photo 4: Shows an eyewash station and shower in the center section of the HazMat Area. Picture also shows the solid brick wall separating the center section and the north section, and one of the sumps is shown in the lower part of the photo.

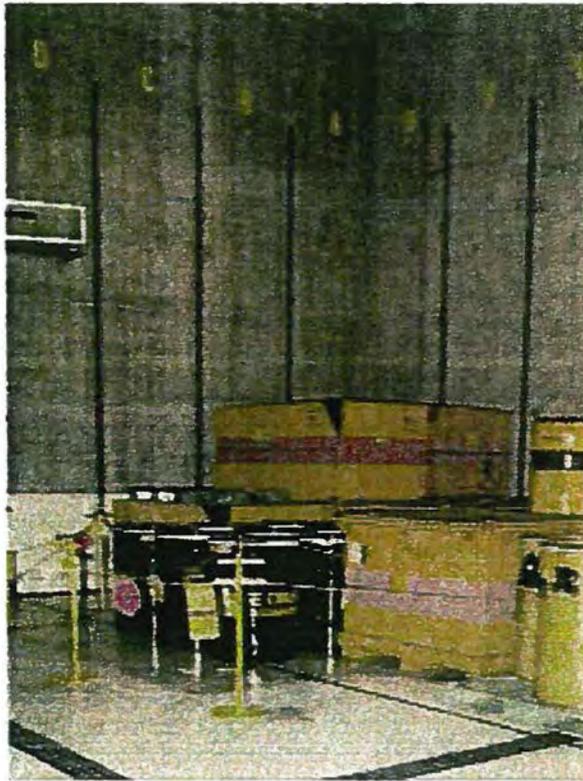


Photo 5: Low Specific Activity Waste Storage Area in the MPH. The lower part of the picture shows the floor drain system.



Photo 6: View of the High Specific Activity Waste Area in the MPH through the leaded glass.

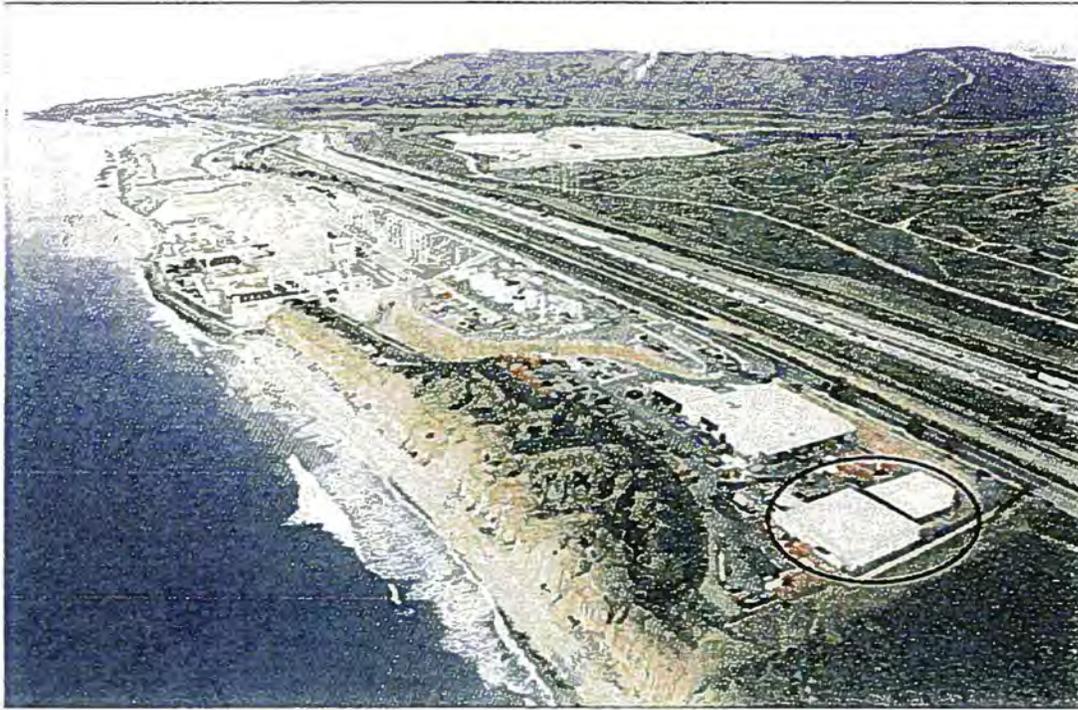


Photo 7: Aerial View of the RCRA and Mixed Waste Storage Facilities at SONGS (circled) ^



Photo 8: Aerial View from Directly Overhead of the RCRA and Mixed Waste Storage Buildings

Aerial photographs were taken in 2010 (top) and 2014 (bottom)

Attachment 2-6

**CAMP PENDLETON NATURAL
RESOURCE MAP**

CAMP PENDLETON

NATURAL RESOURCE MAP

Atlas Version 2.0

Legend

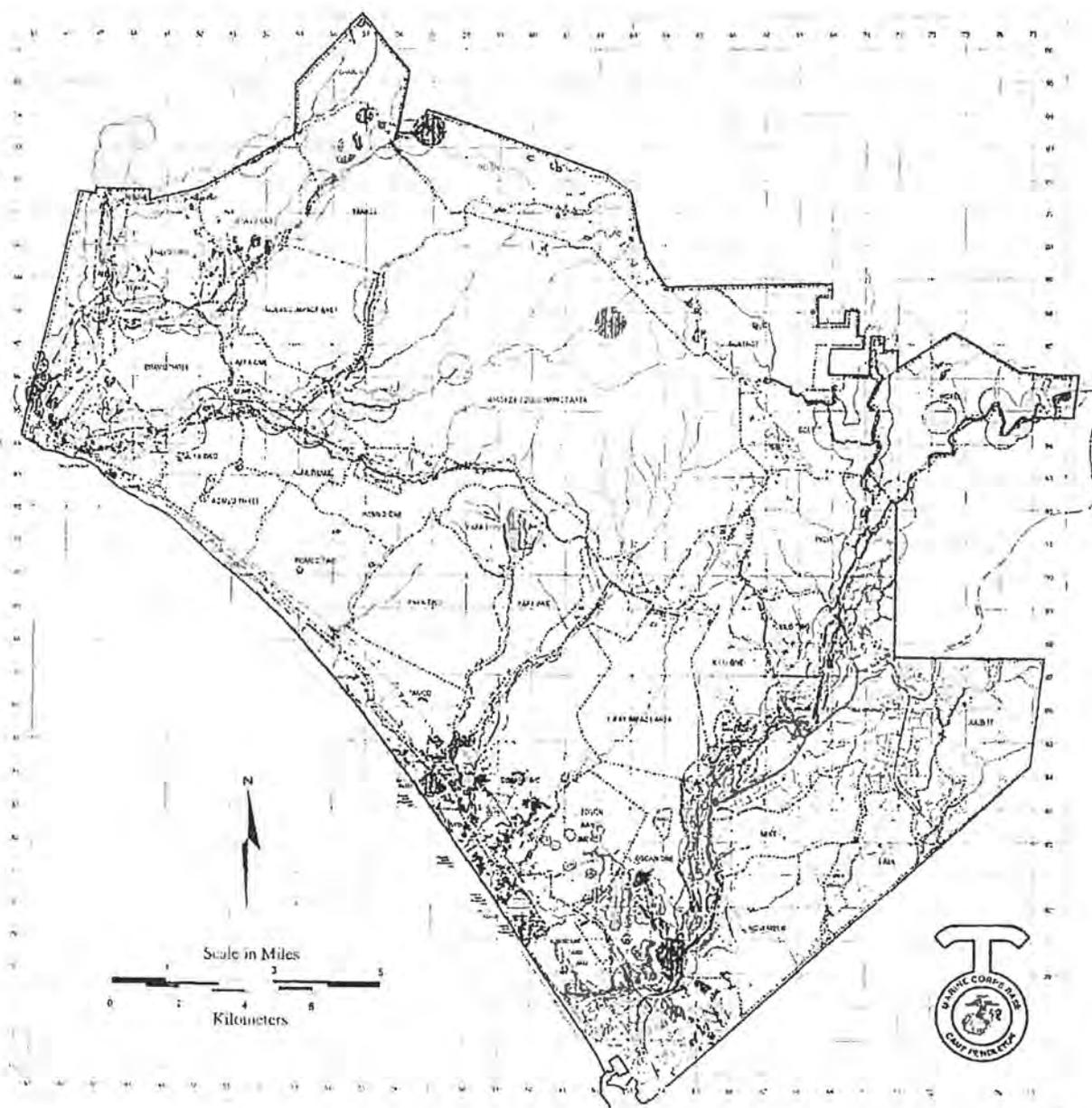
-  ESTUARINE HABITAT OCCUPIED BY AT LEAST ONE OF THE FOLLOWING: CALIFORNIA LEAST TERN, WESTERN SHOVY PLOVER, LIGHT-FRONTED CLAPPER PAK, TIDEWATER GOBY
-  RIPARIAN HABITAT OCCUPIED BY AT LEAST ONE OF THE FOLLOWING: LEAST BELLS WREN, SOUTHWESTERN WILLOW FLYCATCHER, ARROYO SOUTHWESTERN TOAD
-  ARROYO SOUTHWESTERN TOAD 500 M BUFFER (SURVEY ON-GOING)
-  STEPHENS KINGBIRD NEST HABITAT
-  CALIFORNIA QUATCATCHER 100 M (DJI FFA (1993))
-  PACIFIC POCKET MOUSE 150 M BUFFER (SURVEY ON-GOING)
-  VERNAL POOL COMPLEX
-  RARE PLANT AREAS (1980/1993/1997) AND OTHER ENVIRONMENTALLY SENSITIVE AREAS REQUIRING SIMILAR PROTECTION METHODS
-  RARE PLANT SITE (1993, 1997)
-  CREEKS, DRAINAGES, LAGOONS AND ASSOCIATED WETLANDS (National Wetlands Inventory 1985)
-  BASE BOUNDARY
-  TRAINING AREA BOUNDARY
-  I-5 FREEWAY
-  SECONDARY ROAD
-  LIGHT DUTY ROAD (PAYC)
-  DRY WEATHER ROAD (DRST)

NOTE: FOR GENERAL PLANNING PURPOSES ONLY

THIS INFORMATION DOES NOT DEPICT ALL POSSIBLE SITES, NATURAL RESOURCES, BUT RATHER, ONLY THOSE RESOURCES CURRENTLY KNOWN TO US. THE INFORMATION OF ALL DATA IS RELAYED FROM SITE SPECIFIC PHOTO ETC. THIS INFORMATION IS DEEMED RELIABLE, BUT NOT GUARANTEED.

SOURCE: INTERMEDIATE CAMP OF STAFF, ENVIRONMENTAL SECURITY DIVISION, PACIFIC COMMANDER SYSTEMS AND BRANCH, PEARL HARBOR, HI 96354-6112, FAX 17801/20 8720

DATE: April 2000, IMPACT SCHEDULED UPDATE: September 2000



ORNL V116112471

Section 3.0

WASTE CHARACTERISTICS

3.0 WASTE CHARACTERISTICS

3.1 Waste Analysis Plan

The Waste Analysis Plan (WAP) is presented in Attachment 3-1 and includes: 1) a description of the analytes for which each hazardous waste is analyzed; 2) sampling and analytical methods which are used; and 3) the frequencies of analyses. The WAP is reviewed periodically by plant personnel and amended if plant operations or applicable regulations change. The WAP is kept on file for use by the environmental coordinator and other plant personnel.

3.2 Waste Identification

The primary sources of routine mixed wastes are generated from chemical and/or mechanical cleaning of the steam generators, condensers, water boxes, turbines, etc. The pumps that circulate the cooling waters contain oil and the overall maintenance and painting of the radioactive components generates various other types of mixed waste. Unit 1 was decommissioned and partially disassembled with major plant and building components shipped offsite. Units 2 and 3 were shut down permanently in 2013 and the decommissioning of these units has started. In addition to the decommissioning mixed wastes generated from Unit 1 (primarily asbestos, blast grit and lead), it is anticipated that additional mixed wastes in the form of miscellaneous aqueous solutions and organic solvents with metals, sludges and solids may be generated from decontamination of systems and components. Attachment 3-2, Summary of Mixed Waste Generated, identifies the waste name, hazardous properties, processes that produced the waste, and estimated annual quantities.

The identification and characterization of new wastes are done in accordance with SONGS Operating Procedure S0123-XV-17, Hazardous Waste Management Program and the S0123-XV-18, Mixed Waste Guidelines.

3.3 Additional Requirements for Ignitable, Reactive, or Incompatible Wastes

Wastes are stored (and only stored: no wastes are treated at this facility) in separate areas (according to each waste type's chemical properties) to preclude uncontrolled reactions. During handling operations, facility personnel wear appropriate personal protective equipment. A list of potentially incompatible wastes generated at SONGS is updated in Attachment 5 of Operating Procedure S0123-XV-17, Hazardous Waste Management Program. The wastes that are not compatible with each other are acids and caustics (e.g., sulfuric acid with sodium hydroxide, sodium hypochlorite, or ammonium hydroxide). Section 4 describes how incompatible wastes are stored in separately bermed areas.

Waste Compatibility with Containers

Upon receipt of containers at the hazardous waste storage areas, the containers are inspected by Hazardous Material personnel for integrity and compatibility with the listed contents. Each container must be able to withstand internal corrosion based on the chemical compatibility of the hazardous material/waste and the container. HazMat personnel use Operating Procedure SO123-IX-2.201, Hazardous Material/Waste/Mixed Waste Storage areas, Section 6.5, to determine container adequacy, the adequacy of waste compatibility measures taken and in use. If, during this inspection, it is determined that the container is unsuitable or damaged, the appropriate container is placed in a recovery drum (overpack).

Spilled or leaked wastes will be removed from the sumps immediately upon identification of the spill (or as soon as it is safe to do so). Any collected spills/leaks will be managed

as a hazardous waste. The spill/leaked material will be traced to the source of the spill. The spilled material will not be analyzed if the source of the spill is known. The HazMat Area -SYF is covered by a roof and the MPHf is an enclosed building which will prevent the accumulation of precipitation in the containment areas.

Procedures for analyzing ignitable and reactive wastes are presented in the Waste Analysis Plan, Attachment 3-1.

Compatibility of Wastes to be placed in the Same Container

Wastes are generated at accumulation areas. In general, each container accommodates waste from a single waste generating source. If it is necessary for contents of several containers to be combined, the operation will take place under the supervision/direction of a hazardous materials personnel/designee. Under no circumstances will incompatible wastes be placed in the same container.

All containers that are reused are either: 1) properly decontaminated or 2) used to store waste from the same source as the previously stored waste.

Incompatible wastes are stored in separate areas with appropriate containment (e.g., dikes, berms, and walls) to prevent the potential for adverse reactions. Compatibility of the waste types generated at the facility is known by all HazMat personnel.

3.4 Waste Analysis Requirements Pertaining to Land Disposal Restrictions

The determination of "land ban" requirements is based on known characteristics of the wastes and/or testing in accordance with 40 CFR 268.7 and Title 22 CCR. Test results and known hazardous constituent concentrations are compared to the applicable treatment standards and land disposal prohibitions to determine if a waste meets or exceeds the standard or is a prohibited waste.

Waste Characterization

A list of the wastes which are handled in the mixed waste storage areas are presented in Attachment 3-2.

Solvent wastes handled at the storage areas include: 1,1,1-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, oil/trichloroethane, and other miscellaneous solvents such as paints and thinners. No dioxin-containing wastes are handled in the mixed waste storage areas.

The following wastes are subject to 22 CCR 66268.32 (the California Land Ban List): corrosive liquid hazardous wastes (pH \leq 2.0)

- aqueous mixture of 1,1,1-trichloroethane (if concentration > 1000 mg/l)
- aqueous mixture of 1,1,2-trichloro-1,2,2-trifluoroethane (if concentration > 1000 mg/l)
- aqueous mixture of oil/trichloroethane (if concentration > 1000 mg/l)
- aqueous mixture of flammable liquids (if HOC are > 1000 mg/l)

Under this provision, these wastes are banned from or require specific treatment standards before land disposal. All other remaining hazardous wastes are to be treated prior to land disposal following the requirements specified in 66268.41, 66268.42, or 66268.43. With each shipment of restricted waste, the treatment facility will be notified in writing of the appropriate treatment standards. This notification will include 1) the EPA Hazardous Waste Number and California

Waste Code; 2) the corresponding treatment standard; 3) the manifest number associated with the shipment of the waste; and 4) the waste analysis data, where available. All supporting data/documentation, used to determine if the wastes are prohibited, will be kept on file at the San Onofre Nuclear Generating Station. All notices, certifications, demonstrations, waste analysis data and other documentation produced pursuant the Land Disposal Restrictions regulations will be retained for at least 5 years from the date that the waste that is the subject of such documentation was last sent to offsite treatment, storage, or disposal.

3.5 Procedure for Mixed Waste

Attachment 3-1 describes the methods used to sample, identify, and document the hazardous constituents of waste streams. The radiological component of mixed waste is characterized to comply with the requirements of the USNRC and 10CFR20, 10CFR50 and 10CFR61. The potential hazardous waste characteristics of mixed waste streams are represented in Attachment 3-2. Typically, hazardous wastes collected inside the radiologically controlled areas of the plant will be analyzed as follows:

3.5.1 Hazardous Waste Analyses

1. Organic Wastes -EPA8240 or EPA8260 (volatiles) and EPA8270 (semi volatiles) plus 1, 1, 2 trichloro-1, 2, 2-trifluoroethane will be performed for each new waste stream.
2. Inorganic Wastes -TCLP metals, STLC metals, TTLC metals.
3. Other standard analyses as necessary to properly characterize the waste stream.
4. Contaminated soil will be analyzed as described above plus Total Residual Petroleum Hydrocarbons (TRPH) per EPA 8015M or equivalent.

3.5.2 Radiological Analyses

- I. Gamma Spectroscopy
 1. Beta Scintillation Counting
 2. Gross beta/ gamma count rate
 3. External gamma exposure rate
 4. Total activity
 5. Alpha activity
 6. Surface Contamination

3.5.3 Waste (Fuel) Blending Analyses

- I. Total Halides
 1. Metals
 2. Sulfur
 3. Particulates
 4. Energy Content (BTU determinations)
 5. PH
 6. Nitrogen
 7. Phosphorus
 8. Physical Properties
 9. Percent water

Attachment 3-1

WASTE ANALYSIS AND SAMPLING PLAN

Revi 7/20/15 *FR*

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REVI 7/20/15 BTA

I INTRODUCTION

This Waste Analysis Plan applies to mixed waste stored in designated areas at Southern California Edison Company's San Onofre Nuclear Generating Station in San Clemente, California. The Waste Analysis Plan satisfies Title 22 of the California Code of Regulations (CCR), Section 66264.13(6) for the mixed waste storage operations at the site. It is also based on the guidelines for sampling plans in EPA's "Test Methods for Evaluating Solid Waste, Physical / Chemical Methods," third edition, SW-846 (SW-846) as required by 22 CCR ~~66261~~ 20(c). The plan will be reviewed annually or whenever there is a change in the wastes handled that is not adequately addressed in the plan. If warranted by the review, the waste analysis plan will be updated.

Generally, a waste analysis plan must describe sampling and analytical procedures that provide information required to transfer, treat, store, or dispose of a waste in accordance with applicable regulations. The waste analysis plan for a permitted facility shall specify the following information:

1. The analytes for each waste and the rationale for selection of the analytes
2. The analytical methods that will be used
3. The sampling procedures for obtaining representative samples and the sample management methods
4. The sampling and analysis frequency and the frequency at which the analytical data will be reviewed

II SAMPLING OBJECTIVE

The purpose of sampling and analysis of wastes is to obtain sufficient data to determine the chemical and physical characteristics, if such data are not already available. This information is necessary to transfer, treat, store, or dispose of each waste in accordance with applicable regulations.

A. STORAGE WASTES

A waste analysis plan must provide sufficient waste characterization information to transfer, treat, store, or dispose of each waste in accordance with applicable regulations. However, the majority of the required waste characterization information for stored wastes is available from past analyses or from knowledge of the waste generating processes. For example, many of the containerized wastes sent to the mixed waste storage areas come from a single commercial product, such as freon, that is contaminated by use. It is not necessary to analyze most of the wastes stored in these mixed waste storage areas to be able to properly transfer, treat, store, or dispose of them.

Occasionally, wastes are generated for which there are not sufficient past analytical data or process knowledge to transfer, treat, store, or dispose of the waste. This may be true for a new waste, a waste generated by a new or changed process, a waste that will be disposed of in a new way, or a waste for which new regulations apply. When this type of waste is generated, it will be characterized as necessary as described in this plan.

B. SURROGATE SAMPLING

Occasionally, waste are generated that are too high in radioactivity or a lab is unable to perform the specific test(s) because the lab is unable to handle radioactivity (ex. 96 hr acute toxicity). In either case, a surrogate sample can be created (a like sample without the radioactivity) and sent to the lab. The lab results can be used to disposition the waste. The waste will be identified as a surrogate on the paperwork for the specific drum(s) number(s).

III. RATIONALE FOR SELECTION OF ANALYTES

A. STORAGE WASTES

Analytes will be selected based on suspected waste constituents, new disposal or treatment requirements, or new regulatory requirements. General guidelines for selecting analytes are presented here but selection of analytes for future situations will rely largely on professional judgement. Sample preparation and analytical methods, references, and waste types for each analytical method are listed in Table 1, the sample analysis request sheet.

If a liquid waste is suspected of containing volatile organics, samples should be analyzed for flashpoint. Solids or liquids that might contain halogenated organics, such as solvents, thinners, and paints, should be analyzed for halogenated volatile organics. The pH should be measured in solids or liquids that are suspected of containing strong acids or bases. Insulation or other sources of friable asbestos should be analyzed for asbestos. Finally, used oil, used coolant, acid or base etchants, or solids containing these wastes should be analyzed for appropriate metals. Sandblast grit, paint waste, and sludges should also be analyzed for metals.

IV. RATIONALE FOR LOCATION, NUMBER, AND FREQUENCY OF SAMPLES

A. STORAGE WASTES

Most of the currently generated storage wastes are adequately characterized based on chemical analysis and/or knowledge of the waste generating processes. Precise guidelines for the location, number, and frequency of sampling future wastes cannot be given. However, at least one representative sample will be collected of each new waste, a waste generated by a new or changed process, a waste that will be disposed of or treated in a new way, or a waste for which new regulations apply. Such samples will be collected

from the waste container in the mixed waste storage areas whenever the waste characteristics, disposal or treatment method, or applicable regulations change significantly

V GENERAL SAMPLING PROCEDURES

Sampling for most foreseeable types of samples are described in this section. Occasionally, samples may be necessary that must be collected in a different manner. If such unusual samples must be collected, SCE personnel will review relevant guidance in 22 CCR, Appendix I, "Representative Sampling Methods," SW-846, and applicable SCE procedures.

All samples are collected by SCE ~~Environmental/Chemistry~~ personnel within the containment structure of the mixed waste storage areas. Quality Control samples will be taken, as appropriate.

A. PRESAMPLING ACTIVITIES

The Supervisor of Environmental Services (or designee) will be present and supervise sampling operations. Prior to sampling events, he or she will: 1) ensure the emergency eyewash/shower is present in the area and is operational; 2) ensure sampling personnel have completed appropriate training; 3) ensure personnel performing the sampling have read and understood the information on labels and material safety data sheets; and 4) ensure appropriate protective clothing/equipment is provided to perform the sampling. While collecting samples, personnel are required to don personal protective equipment (PPE) that is appropriate for the waste to be sampled. Prior to use, all PPE is inspected in accordance with good safety practices.

B. SAMPLING PROCEDURES FOR DRUMS

Liquid wastes in drums are sampled with coliwasa, which is described in SW-846. The coliwasa with the stopper open is slowly lowered to the bottom of the drum or tank so the sample is representative of the entire depth of liquid. The stopper is closed by pulling up on the inner rod and the coliwasa is slowly removed. The bottom of the coliwasa is inserted into the sample container and the stopper is pushed down to drain the contents.

Sample containers appropriate for the analytical methods will be provided by the laboratory. If volatile or semi-volatile organics are to be analyzed, three 40 milliliter (ml) volatile organic analysis (VOA) vials will be filled completely to exclude headspace.

C. SAMPLING PROCEDURES FOR SOLIDS

Representative samples of solids are collected with a thief, trowel, or equivalent, depending on the physical properties of the solid and dimensions of the drum and/or container. Alternative sampling devices and procedures that may be used are described in SW-846. If possible, a core of a representative cross-section of the solid will be collected with a thief. If a core cannot be collected, four or more discrete samples will be collected

from different locations in the drum and/or container using a trowel or equivalent. The goal of collecting four or more discrete samples is to obtain samples of different portions of solids in the drum and/or container that are representative of the entire contents of the drum and/or container. The core or grab samples will be placed in an appropriate sample container provided by the laboratory and thoroughly mixed.

D. SAMPLING EQUIPMENT DECONTAMINATION

Sampling equipment will be cleaned before it comes into contact with another sample or new disposable sampling equipment will be used. To remove all visible residues, sampling equipment will be cleaned first with an appropriate solvent, if needed, and then with a brush in an Alconox solution or an appropriate solvent. The equipment will be rinsed with tap water and rinsed again with distilled or deionized water. All spent solvents/rinse water will be collected in a drum.

VI SAMPLE MANAGEMENT AND CUSTODY

A. SAMPLE MANAGEMENT

Sample management procedures are followed to ensure that sufficient sample collection information is recorded and sample custody is tracked.

1. Field Log Book

Sampling personnel will record general information about each sampling event and specific information about each sample in a field log book at the time of sampling. General sampling information will be recorded in sufficient detail so that such information can be reconstructed at a later time.

Where applicable, the following general sampling information will be recorded in the field log book:

- Facility Name
- Purpose of Sampling
- Location of Sampling Site
- Description of Sampling Procedures
- Date and Time of Collection
- Weather and other pertinent conditions at time of sample collection photos, if any
- Names of Sampling Personnel and Signature of Person Responsible for Sampling

2. Field Sample Log

A field sample log will also be kept in the field log book as a record of specific sample information. The following information will be recorded for each sample:

- Sample Number
- Sample Location
- Date
- Time
- Sample Types (e.g., solid, liquid, sludge)
- Preservatives
- Sizes and Types of Containers

This information will be arranged in columns and a separate page will be prepared for each batch of samples. The field sample log will be prepared as the samples are collected and before they are transported from the site. The information in the field sample log will then be used to fill out the chain of custody record. Section VI.B provides information about completing the chain of custody record. The field sample log will serve as a checklist to verify the information on the sample labels before sealing the sample cooler and transporting the samples to the laboratory

3. Sample Labels and Seals

Each sample container will be labeled with the following information at the time of sampling:

- Sample Number
- Sample Date
- Sample Time
- Sample Type
- Bottle (or Container) Designation (A, B, C, if more than one container per sample)
- Handling Precautions
- Analytes
- Laboratory
- Initials of Sampling Personnel

If the samples are not under the custody of sampling or laboratory personnel, for example, if they are transported by a commercial courier, a custody seal will be placed over the lid of the cooler or other shipping container to fulfill the requirement in SW-846 for sample seals.

B. SAMPLE TRANSPORTATION AND CUSTODY

After labeling, all samples will be placed in a cooler for transportation to the laboratory. In accordance with SW-846, a chain of custody record will document sample possession from the time of collection until the samples are analyzed. The record also serves as a sample inventory and analysis order form.

The chain of custody record will be completed with a waterproof pen. When possession of the samples is transferred from sampling personnel to a courier or to the laboratory, the chain of custody will be signed by both parties. The chain of custody record and the sample analysis request sheet will be placed in a large Ziploc bag inside the cooler. The sample analysis request sheet, Table 1, specifies sample preparation and analytical methods for the laboratory, for closure of the mixed waste storage area(s).

Samples will be transported to the laboratory by sampling personnel, a courier, a laboratory representative, or a commercial carrier. The time for transportation must be short enough to allow the laboratory to start the analyses before the sample holding time expires. (See Table 3)

VII LABORATORY

Samples will be analyzed by a commercial laboratory with current accreditation for the analytical methods that are to be followed.

A. LABORATORY PROCEDURES

The laboratory will be responsible to follow all specified sample preparation and analytical methods unless deviations from the published methods are described in the laboratory report. The laboratory is required to maintain documentation that laboratory equipment is inspected, maintained, and serviced periodically. All laboratory personnel that are responsible for analysis must be trained under the laboratory's training program. The laboratory must also provide clean, appropriate sample containers; maintain the chain of custody documentation after the samples are received at the laboratory; properly dispose of samples and extracts after analysis; and submit the laboratory report to the SCE designee in accordance with section VII.B.

B. LABORATORY REPORT

At a minimum, the laboratory report will indicate the laboratory name, accreditation number, the accreditation expiration date, and a statement that it is accredited for the constituents that were analyzed; sample preparation and analytical method numbers; sample numbers, and analytical results. The analytical results must include detection or reporting limits. The laboratory report should also include quality control data for each sample batch and a description of any deviations from the published sample preparation or analytical method.

C QUALITY ASSURANCE / QUALITY CONTROL PROCEDURES

The laboratory will be required to prepare and analyze a matrix spike, a matrix spike duplicate, and a blank spike for five percent of the samples it receives.

Relative percent differences will be calculated by the laboratory for duplicates, and percent recoveries will be calculated for the duplicate spikes. If the relative percent differences or percent recoveries fall outside the ranges specified in the methods in SW-846 or the laboratory's acceptable ranges, the laboratory will investigate the reason for the discrepancy. The investigation may include checking calculations, verifying analytical procedures, recalibrating instruments, preparing new reference standards, or re-analyzing samples.

To ensure that the holding times are not exceeded, the laboratory will be instructed to extract and analyze the samples within the holding times.

VIII DATA EVALUATION

SCE will maintain the laboratory reports and the corresponding chain of custody forms and sample analysis request sheets at the San Onofre Nuclear Generating Station. SCE will also maintain documentation of its evaluation of the analytical data and the hazardous waste determination.

As described in Section V, samples will generally be representative of the entire contents of each waste container. A coliwasa sample includes each stratum from a drum, for example, and if the sample is well mixed before an aliquot is removed for analysis, the analytical results will reflect the contents of the entire drum. Therefore, one sample per container will sufficiently characterize the contents of the container and statistical analysis of the analytical data will not be necessary. The analytical results for the storage samples will be directly compared to applicable federal and state hazardous waste concentration criteria to determine if the contents of the waste container are mixed waste.

TABLE 1
SAMPLE ANALYSIS REQUEST SHEET

NOTE FOR LABORATORY: The purpose of this Sample Analysis Request Sheet is to specify the sample processing, sample preparation or extraction, and analytical methods and detection limits that are requested for the attached samples. The analysis numbers on the chain-of-custody record refer to the item numbers listed below

If there are any questions, please call the person whose name is listed on the top of the chain of custody record.

I SAMPLING SUMMARY

The samples are from closure of a permitted mixed waste storage area(s) at a nuclear power generating facility. There are samples of wash water, concrete, soil, and wipe samples. (See Table 2)

II SAMPLE PROCESSING

A SOLID SAMPLES

Process each concrete and soil sample as described below prior to sample preparation or extraction. Aliquots for volatiles and semi-volatiles analysis should be removed before milling, viewing, or mixing the sample.

1. Pass the entire sample through a No 10 sieve.
2. Carefully remove non-friable solid particles that are extraneous and irrelevant as hazardous constituents, such as rocks and elemental metals, by hand from the portion that did not pass through the sieve.
3. Mill the remainder of the portion that did not pass through the sieve and then pass the milled material through the sieve.
4. Combine and thoroughly mix all of the sample that passes through the sieve.
5. Remove the aliquot of mixed sample for sample preparation in accordance with the prescribed analytical method.

For wipe samples, digest all the filter paper or gauze pad and liquid in the sample container. Report the analytical results as milligrams per sample.

B. AQUEOUS SAMPLES

In accordance with 22 CCR, a liquid sample with less than 0.5 percent solids shall be analyzed directly for total concentrations. If the total concentration exceeds a STLC but is less than a TTLC, the sample shall be filtered and the filtrate analyzed for dissolved constituents

III SAMPLE PREPARATION AND ANALYSIS

A. SOLID SAMPLES

	ANALYTES	SAMPLE PREPARATION METHOD ^a	ANALYTICAL METHOD ^a
1	Halogenated Volatile Organics	5030	8010
2	Soil pH	-	9045
3	Left Blank	-	-
4	Residual Chlorine	-	330.1 ^b
5	Asbestos	-	^c
6	Total Metals Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Lead Mercury Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc	3050	6010 7060 6010 6010 6010 6010 6010 6010 7420 7470 6010 6010 7740 6010 7841 6010 6010
7	WET Metals Same as #4	WET ^d	-
8	TCLP Metals Same as #4	1311	-

NOTES

- ^a All methods except asbestos, the WET, and residual chlorine are described in the following reference. "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," SW-846, third edition, U.S. Environmental Protection Agency (EPA), 1987. References for the other methods are listed in b, c, d and e.
- ^b "Methods for Chemical Analysis of Water and Wastes," EPA-600/4-79-020, U.S. EPA, March 1983.
- ^c "Interim Method for the Determination of Asbestos in Bulk Insulation Samples," 40CFR763. Subpart F, Appendix A.
- ^d Title 22, California Code of Regulations, Section 66261, Appendix II.

B AQUEOUS SAMPLES

	ANALYTES	SAMPLE PREPARATION METHOD ^a	ANALYTICAL METHOD ^a
1	Halogenated Volatile Organics	5030	8010
2	pH	-	9040 / 9041
3	Left Blank	-	-
4	Residual Chlorine	-	330.1 ^b
5	Asbestos	-	^c
6	Total Metals Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Lead Mercury Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc	3050	6010 7060 6010 6010 6010 6010 6010 6010 7420 7470 6010 6010 7740 6010 7841 6010 6010
7	Dissolved Metals Same as #5	Filter, 3005	-

NOTES

- ^a All methods except asbestos, the WET, , and residual chlorine are described in the following reference. "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," SW-846, third edition, U.S. Environmental Protection Agency (EPA), 1987. References for the other methods are listed in b, c, d and e.
- ^b "Methods for Chemical Analysis of Water and Wastes," EPA-600/4-79-020, U.S. EPA, March 1983.
- ^c "Interim Method for the Determination of Asbestos in Bulk Insulation Samples," 40CFR763, Subpart F, Appendix A.

TABLE 2

SAMPLE SUMMARY

SAMPLE TYPE	BACKGROUND TYPE	CONFIRMATION SAMPLES	TOTAL NUMBER OF SAMPLES
Wipe	1	4	5
Concrete	4	7	11
Soil	4	21 ^a	25
Rinse Water	1	1	2

NOTES:

- ^a Initially, seven soil samples will be analyzed and the remaining 14 will be archived. Additional samples may be collected and analyzed if soil contamination is extensive.

TABLE 3

SAMPLE PRESERVATION, CONTAINERS, AND HOLDING TIMES

Analytes	Sample Preparation / Analytical Method	Preservation Method ^a	Container / Sample Volume for Solid Samples	Container / Sample Volume for Water Samples	Holding Time ^b
Halogenated Volatile Organics	5030/8010	HCl to pH <2, cool 4°C	4oz wide mouth glass jar or 3" sleeve; 200g	3-40ml VOA vials w/ Teflon septum caps	14 days
pH	9040, 9045	Cool, 4°C	same as metals, 25g	same as metals, 50ml	ASAP
-	-	-	-	-	-
Residual Chlorine	330.1	Cool, 4°C	-	250 ml glass	ASAP
Asbestos		None	same as metals, 10g	-	none
Metals except Mercury	3005, 3050, WET, TCLP/ 6010, 7060, 7420, 7740, 7841	HNO ₃ to pH <2, cool, 4°C	4 oz wide mouth glass or plastic jar, 3" sleeve, or Ziploc bag; 250g	500 ml glass	6 months
Mercury	7470	HNO ₃ to pH <2, cool, 4°C	same as metals	same as metals	38 days ^b

NOTES.

^a Solid samples should be preserved solely by cooling to 4°C.

^b The holding time for mercury is 13 days in plastic containers and 38 days in glass containers

REFERENCES

"Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," SW-846, third edition, U.S. EPA, 1987

"Methods for Chemical Analysis of Water and Wastes," EPA-600/4-82-020, U.S. EPA, revised March 1983

Attachment 3-2

SUMMARY OF MIXED WASTES GENERATED

REV 1 7/20/15 BA

Attachment 3-2: Summary of Mixed Wastes Generated
San Onofre Nuclear Generating Station

Process Description	Waste Name	Estimated Annual Quantities	Units of Measure	EPA Waste Code	California Waste Code	Hazardous Properties of the Waste
Water Chemistry, Resin Regeneration, Acid / Caustic Cleanups	Corrosive Liquid	12.5	T	D002	135, 791, 792	Corrosivity
	Corrosive Solid			D002	241, 431	Corrosivity
	Sodium Hydroxide			D002, D007, D008	122	Corrosivity
	Sodium Hypochlorite			D002	131	Corrosivity
	Sulfuric Acid			D002	791	Corrosivity
	Aqueous Metal Containing Wastes			D005, D006, D007, D008, D009, D010, D011	132, 135, 722, 723, 724, 725, 726, 727	Toxicity
LEFT BLANK	—	—	—	—	—	—
	Ammonium Hydroxide			Non-RCRA	123	
Generator Sludge, Inorganic Solid Wastes	Steam Generator Sludge	10	T	Non-RCRA	181	Toxicity
Lead Brick, Chips, Cable, Powder, Computers, Etc.	Lead / Absorbent	45	T	D008	181	Toxicity
Insulation / Demolition	Asbestos	1	T	Non-RCRA	151	Toxicity
Cooling Systems	Ethylene Glycol	1	T	Non-RCRA	135	Toxicity

The Federal RCRA Part A application and the DTSC permit designate authorized Federal and State Waste Codes, respectively. EPA waste codes (if utilized) may have different California Waste Code (CWC) numbers other than those depicted in the Part A. If the waste is a California Only (non-RCRA), the CWC must be one that is listed in the DTSC Permit.

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Attachment 3-2: Summary of Mixed Wastes Generated
San Onofre Nuclear Generating Station

Process Description	Waste Name	Estimated Annual Quantities	Units of Measure	EPA Waste Code	California Waste Code	Hazardous Properties of the Waste
Painting / Laboratory	1, 1, 1-Trichlorethane	95	T	F001	741, 551	Toxicity
	Flammable Liquids /Solvents			D001, D006, D007, D008, F001, F002, F003, F005	214, 343, 551	Ignitability
	Flammable Solid			D001, D006, D007, D008, F001, F002, F003, F005	461	Ignitability
	Paint Chips / Absorbent			Non-RCRA	181	Toxicity
	Paint Sludge / Solid			D001, F001, F003, F005	214	Toxicity
Inorganic Sandblast Grit	Sandblast Grit	25	T	Non-RCRA	181	Toxicity
Pumps, Motors, Lubricating, Oil Rags	Combustible Liquid (Oil)	20	T	Non-RCRA	221	Toxicity
	Combustible Solid			Non-RCRA	222, 241, 351, 352	Toxicity
	Grease			Non-RCRA	181	Toxicity
	Oil/Solvent			D001, D008, F001, F002, F005	214, 221	Toxicity
	Oil/Water/Sludge, Haz Waste Liquid			D006, D007, D008, D010, F001	222, 341, 342, 491	Toxicity
	Oil / Trichloroethane			D001, F001, F002	221, 741	Toxicity
	Oil, Synthetic			Non-RCRA	221, 223	Toxicity
Laboratory, Freon Filter, Rags	1,1,2-Trichloro-1, 2, 2-trifluoroethane (Freon)	15	T	F002	551, 741	Toxicity
	Freon Filters / Sludge / Water			D007, D008, F001, F002, F003	741, 751	Ignitability, Toxicity

The Federal RCRA Part A application and the DTSC permit designate authorized Federal and State Waste Codes, respectively. EPA waste codes (if utilized) may have different California Waste Code (CWC) numbers other than those depicted in the Part A. If the waste is a California Only (non-RCRA), the CWC must be one that is listed in the DTSC Permit.

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Section 4.0

Design and Process Information

4.0 DESIGN AND PROCESS INFORMATION

San Onofre Nuclear Generating Station is a nuclear power plant licensed to operate by the Nuclear Regulatory Commission. The Mixed Waste Storage Areas are within the SONGS site boundary property located in accordance with 10 CFR requirements for siting nuclear power plants. The design of SONGS is governed strictly by criteria set forth by the NRC in accordance with 10 CFR Part 50.

SONGS stores mixed waste (hazardous waste with low-levels or high-levels of radioactivity). Estimated quantities and types of mixed waste generated are summarized in Attachment 3-2. The facility does not dispose of hazardous waste or mixed waste on-site or receive waste generated outside of the facility's property boundary. Hazardous/mixed waste is shipped off-site to an approved recycling, treatment or disposal facility. Wastes may be stored for several years as long as the annual report to DTSC documents that commercial facilities to treat or dispose of the waste are not available.

The following sections describe the storage areas only, as waste is no longer treated on site at SONGS, and the treatment activities that were performed under Conditional Authorization and most Conditional Exemptions under DTSC's Tiered Permitting Program were terminated in 2014; notifications forwarded to DTSC may be found in attachment 4-3, DTSC Tiered Permits. The majority of hazardous waste and mixed waste treatment activities performed were limited to the HazMat – SYF and the Auxiliary Control Building when treatment was performed.

A design certification was prepared for each mixed waste storage area and is presented in Attachments 4-1 and 4-2.

In general, mixed wastes generated at SONGS contain only trace amounts of radioactivity and pose little exposure hazard (maximum 50 mR per hour, typically less). Typical radioactive contaminants consist of radioisotopes of cobalt and cesium. Other radioactive constituents may be present in much lower activity levels. Mixed wastes that exceed 50 mR per hour are managed separately as further described in this section.

The Mixed Waste Storage Areas at SONGS include:

1. HazMat Area - South Yard Facility (SYF)
2. Multi-Purpose Handling Facility -LSAW Area
3. Multi-Purpose Handling Facility -HSAW Area

4.1 Description of Storage Areas

HazMat Area - South Yard Facility

Location:

The HazMat Area - South Yard Facility (SYF) is located on the southeast portion of the property, adjacent to the Multi-Purpose Handling Facility building.

Physical Description and Secondary Containment:

The SYF storage area is an approximately 9,700 square foot reinforced concrete pad with a structural steel supported canopy roof. The concrete pad is a minimum 6 inches thick with a

perimeter curb a minimum of 12 inches high. The canopy roof was added in 1985. A detailed drawing is provided in Attachment 4-1. The area has been subdivided into three sections: Section A and B for storage of mixed waste containers and Section C for the storage of hazardous waste for less than 90 days in accordance with generator rules.

The construction of the SYF, combined with an enclosed floor collection system, provides secondary containment in accordance with CCR 66264.175. The concrete base is free of cracks and gaps and is sufficiently impervious to contain leaks or spills. Each section of the concrete floor is sloped at 1/8" per foot to its own drainage collection sump. Section A provides approximately 13,400 gallons of secondary containment and the combined capacity of Section B and C provide approximately 47,000 gallons of secondary containment. Both sections are more than adequate to contain 10 percent of the aggregate volume of the containers or the largest container, whichever is greater.

Section A is approximately 30' wide and varies from 60' long on the east end to nearly 80' long on the west end. The outside perimeter of the concrete pad is contained by a 12" curb. Section A is separated from Section B by a 6' high brick wall. The sump in section A has a capacity of 800 gallons.

Section B is approximately 50' wide and varies from 80' long on the east end to nearly 90' long on the west end. The outside perimeter of the concrete pad is contained by a 12" curb. Section B is separated from Section A by a 6' high brick wall and is separated from Section C by a 2" high concrete berm with an 8' chain link fence. The sump in section B has a capacity of 800 gallons.

Section C is approximately 35' wide and 90' long. The outside perimeter of the concrete pad is contained by a 12" curb. Section C is separated from Section B by a 2" high concrete berm with an 8' chain link fence. The sump in section C has a capacity of 450 gallons.

Operational Considerations

Spilled or leaked waste and any accumulated wind blown precipitation are removed from the sumps in a timely manner to prevent overflow and to return the containment to its original capacity. This activity is performed using an air operated diaphragm pump and a 1,200-gallon portable tank to collect the material pumped out. The waste is characterized as a hazardous or mixed waste and managed accordingly.

Wastes stored in the SYF do not exceed 50 mR/hr.

Waste Management Activities:

- Receive waste
- Accumulate waste in drums
- Sorting (consolidation of waste)

Design Capacity

The combined capacity of the SYF for storing mixed waste in drums and other approved containers is:

- 800 drums at 55-gallon capacity, can be stacked two high;
- 30 drums at 30-gallon capacity, can be stacked two high;
- 30 drums at 5-gallon capacity, can be stacked two high.
- boxes at 3.5 cu yd. capacity, maximum 220 gallons liquid;

Note: Other types of containers, including 40 cu yd. roll-offs may be used, although total capacity must not be exceeded. Additional boxes may be used as long as the equivalent drums (4) are reduced per additional box.

Certification

Attachment 4-1 is a statement by an independent qualified professional engineer registered in the state of California certifying that the HazMat Area - SYF is adequately designed and constructed for its intended use. This certification was performed in 2003 and is scheduled for a periodic review in 2014 to determine if updates or revisions are necessary when compared to current standards.

Multi-Purpose Handling Facility -Low Specific Activity Waste (MPHF-LSAW)

Location:

The Multi-Purpose Handling Facility - Low Specific Activity Waste (MPHF-LSAW) Mixed Waste Storage Area is located on the southeast portion of the property, in the southeast corner of the Multi-Purpose Handling Facility building.

Physical Description and Secondary Containment:

The MPHF building is an approximately 15,470 square foot reinforced concrete foundation with 2 foot thick reinforced concrete walls. The LSAW storage area is a section approximately 30 feet by 30 feet located in the southeast corner of the building. A detailed drawing is provided in Attachment 4-2.

The construction of the MPHF building, combined with an enclosed floor collection system, provides secondary containment in accordance with CCR 66264.175. The concrete base is free of cracks and gaps and is sufficiently impervious to contain leaks or spills. The floor is painted to improve the impervious nature of the concrete to the hazardous and mixed wastes generated. The building sump provides approximately 40,500 gallons of secondary containment, which is more than adequate to contain 10 percent of the aggregate volume of the containers or the largest container, whichever is greater.

Operational Considerations

Spilled or leaked waste is removed from the sump in a timely manner to prevent overflow and to return the containment to its original capacity. This activity is performed using an air operated diaphragm pump and a 1,200-gallon portable tank to collect the material pumped out. The waste is characterized as a hazardous or mixed waste and managed accordingly.

Wastes stored in the MPHF-LSAW typically are less than 100 mR/hr but can be up to 1 R/hr if Hi-rad postings are made and it is approved by the Health Physics Technician and other Supervisors.

Waste Management Activities:

- Receive waste
- Accumulate waste in drums
- Sorting (consolidation of waste)

Design Capacity

The combined capacity of the MPHf-LSAW for storing mixed waste in drums and other approved containers is:

- 100 drums at 55-gallon capacity, can be stacked two high;
- 10 drums at 30-gallon capacity, can be stacked two high;
- 10 drums at 5-gallon capacity, can be stacked two high;
- 10 boxes at 3.5 cu yd. capacity, maximum 220 gallons liquid.

Certification

Attachment 4-2 is a statement by an independent qualified professional engineer registered in the state of California certifying that the MPHf-LSA W is adequately designed and constructed for its intended use. This certification was performed in 2003 and is scheduled for a periodic review in 2014 to determine if updates or revisions are necessary when compared to current standards.

Multi-Purpose Handling Facility -High Specific Activity Waste (MPHF-HSAW)

Location:

The Multi-Purpose Handling Facility – High Specific Activity Waste (MPHF-HSAW) is located on the southeast portion of the property, near the center of the Multi-Purpose Handling Facility building.

Physical Description and Secondary Containment:

The MPHf building is an approximately 15,470 square foot reinforced concrete foundation with 2 foot thick reinforced concrete walls. The HSAW Mixed Waste storage area is a section approximately 20 feet by 20 feet located near the center of the building. A detailed drawing is provided in Attachment 4-2.

The construction of the MPHf building, combined with an enclosed floor collection system, provides secondary containment in accordance with CCR 66264.175. The concrete base is free of cracks and gaps and is sufficiently impervious to contain leaks or spills. The floor is painted to improve the impervious nature of the concrete to the hazardous and mixed wastes generated. The building sump provides approximately 40,500 gallons of secondary containment, which is more than adequate to contain 10 percent of the aggregate volume of the containers or the largest container, whichever is greater.

Operational Considerations

Spilled or leaked waste is removed from the sump in a timely manner to prevent overflow and to return the containment to its original capacity. This activity is performed using an air operated diaphragm pump and a 1,200-gallon portable tank to collect the material pumped out. The waste is characterized as a hazardous or mixed waste and managed

accordingly. Wastes stored in the MPHf-HSAW can be as high as 20,000 mR/hr.

Permitted Waste Management Activities:

- Receive waste
- Accumulate waste in drums
- Sorting (consolidation of

waste) Design Capacity

The combined capacity of the MPHf-HSAW for storing mixed waste in drums and other approved containers is:

- 100 drums at 55-gallon capacity, can be stacked two high;
- 10 drums at 30-gallon capacity, can be stacked two high;
- 10 drums at 5-gallon capacity, can be stacked two high;
- 10 boxes at 3.5 cu yd. capacity, maximum 220 gallons liquid.

Certification

Attachment 4-2 is a statement by an independent qualified professional engineer registered in the state of California certifying that the MPHf-HSAW is adequately designed and constructed for its intended use. This certification was performed in 2003 and is scheduled for a periodic review in 2014 to determine if updates or revisions are necessary when compared to current standards.

4.2 Operational Procedures

All mixed wastes generated at San Onofre Nuclear Generating Station are stored only in areas designated for mixed waste storage. The storage location of a mixed waste will be selected based on its radioactivity level and whether or not it is identified as a flammable or incompatible waste. Wastes are accumulated at various locations within the facility in accordance with the requirements of CRC 66262.34.

Operating and maintenance personnel contact the Environmental Protection Group (EPG) for drums and labels prior to generating a hazardous or mixed waste. Prior to moving mixed waste into one of the three designated storage areas, the EPG will be contacted and a tracking number will be assigned to that drum/container. Before any waste is moved to a storage area, the supervisor of Environmental Services and the Supervisor of Health Physics, or their designees, is notified.

Personnel are not permitted to handle any hazardous waste unsupervised, until completion of the specific training requirement for the task (see Section 7.0, Personnel Training). All personnel involved with hazardous wastes at the hazardous waste storage areas are provided with protective equipment including environmental monitoring and sampling devices, respirators, self-contained breathing apparatus (SCBA), goggles, boots, coveralls, gloves, hard hats, and face shields, as needed.

Container integrity is a key component to prevent the release of material to the environment. Containers with hazardous waste are inspected upon receipt and on a minimum of once a week for integrity and suitability. When activities occur at the hazardous waste storage areas, the inspection will be performed on a daily basis. Adequate aisle spaces between containers within the storage areas are maintained to allow unobstructed movement of personnel and equipment. Containers are placed on pallets to elevate them above possible spills/leaks and transported

with forklifts and drum dollies. Containers remain closed except when waste is being added, removed, sampled or repackaged. Containers will not be opened, handled or stored in a manner that may cause the container to leak or spill.

4.2.1 Hazardous and Mixed Waste Management, Treatment and Storage Activities:

4.2.1.1 Receive Wastes

Wastes were, but are no longer, received for treatment under the DTSC Tiered Permitting rules at the HazMat Area - South Yard Facility. A Mixed Waste Inventory Log and a Treatment Log were kept to track these activities: See Attachment 4-3, DTSC Tiered Permits for termination notifications to DTSC submitted in December 2014..

Mixed wastes are received for storage at any of the three permitted storage areas discussed in Section 4.1.

4.2.1.2 Accumulate Waste in Drums (Not requiring a permit)

Workplace Accumulation Areas (WPAA's) have been established to encourage the proper management of all hazardous waste without disrupting normal workplace routines. WPAA's serve numerous workers from nearby work locations and are under the control of the hazardous waste generator. The designated WPAA may be within a building or outside and, where appropriate, are protected from weather. The operating record identifies the location of each WPAA at SONGS. WPAA's for hazardous waste are managed in accordance with applicable 22 CCR requirements. WPAA's or mixed waste is managed in accordance with applicable requirement for both 22 CCR and 10 CFR. Where appropriate, "Radioactive Material" labels are provided as required by USNRC and USDOT regulations.

Hazardous wastes which are not radioactively contaminated are accumulated in waste accumulation containers until the containers become full or reach one year in accumulation time. Containers are then radiologically surveyed and transported to the appropriate storage area and prepared for shipment to a permitted recycling or disposal facility. Radioactively contaminated hazardous wastes are accumulated in a separate set of accumulation containers. When an accumulation container becomes full or reaches one year in accumulation, the container is then relocated to the appropriate storage area.

4.2.1.3 Sorting (Consolidation)

Similar and compatible wastes may be consolidated into fewer containers to reduce the total volume of hazardous and mixed wastes generated. This process segregates non-hazardous, hazardous and radioactive materials from wastes generated inside radioactively controlled areas.

4.2.2 Previous Treatment Activities

Some hazardous and mixed wastes were treated on-site under Conditional Authorization or Conditional Exemption under DTSC's Tiered Permitting Program. A copy of the permit is included in Attachment 4-3, with updates to San Diego Department of Environmental Health (SDDEH) terminating treatment and most exemptions. The following is the current status of permitted and exempted operations.:

Previous SDDEH Conditional Authorization:

- OCA-6: Oil Process - MWU; Terminated 12-17-2015

SDDEH Conditional Exemption:

- OCA-1: Batch Plant Drum Crusher: Active
- OCA-2: Batch Plant Aerosol Puncturing Device: Terminated 12-2-2014
- U2-5: Reactor Lab - Units 2/3: Active
- U2-6: Turbine Lab - Units 2/3: Active

4.2.2.1 Operational Procedures Used in Minimizing a Chance of Fire or Explosion

Any waste to be stored in a mixed waste storage area is screened by the EPG for compatibility with the presently stored waste. Incompatible wastes are segregated to minimize the possibility of fire or explosion. Likewise, ignitable and reactive wastes are segregated in storage. Segregating incompatible wastes during storage minimizes the production of gases, mists, and vapors. Volatile wastes are transferred in a manner that will minimize production of emissions. These actions minimize the potential for fire or explosions and protect employees from exposure.

SONGS has established written procedures and training programs to assure that incompatible wastes and materials are not placed in the same containers or in unwashed containers that previously held waste that could be incompatible. Empty containers are labeled to identify their previous contents.

The mixed waste storage areas are all located at least 50 feet from the facility's property line.

4.2.2.2 Segregation of Hazardous Waste (Nonradioactive) From Radioactive Waste

This section describes the operational controls used at San Onofre Nuclear Generating Station to assure that hazardous waste is not mixed with radioactive waste.

The area at SONGS in which an individual may be exposed to radiation and radioactive materials is called the Radiologically Controlled Area (RCA). Control of personnel access into the RCA for work or inspection is based on the issuance of a written authorization or permit. Permits describe the work to be done and the conditions under which the work can be performed. These permits also control the spread of radioactive contamination.

The physical boundaries of the RCA and the personnel monitoring at the entrance of the RCA ensure that radioactive materials are not inadvertently released from

the RCA. In addition, radiation surveys are performed to augment the control of radioactive materials. Radioactive materials and contaminated materials are controlled, contained, handled, used and transferred in accordance with applicable Nuclear Regulatory Commission (NRC) guidelines and plant implementing procedures. The NRC in conjunction with the EPA also regulates low level radioactive hazardous waste known as mixed waste.

SONGS has a comprehensive radiation protection monitoring program with trained technicians performing surveys and analyses. Analytical instrumentation is used to detect very low levels of radioactive contamination. All hazardous waste inside the RCA is routinely sampled and analyzed for radioactive contamination. Nonradioactive hazardous waste is segregated from radwaste and free released from the RCA for proper storage and disposal.

4.2.2.3 Decontamination Procedures

Equipment contaminated waste is decontaminated before being serviced. If equipment is required to be removed from the hazardous waste areas, it will be decontaminated, as appropriate. All decontamination activities are performed in a controlled area and the resulting rinsate is collected in an appropriate container. All hazardous and mixed wastes shipped to an approved off-site disposal facility are packaged and labeled in accordance with the DOT 49 CFR requirements. Disposable equipment is used as appropriate, thus eliminating rinsate disposal. All hazardous material, clean up material and decontamination liquids are disposed off-site according to Federal, State and Local Regulations.

4.3 Use of Containers

Containers for storage of Hazardous Waste and Mixed Waste must meet the specifications in 22 CCR and 49 CFR. A summary of the wastes generated at SONGS and the DOT packing requirements is presented in Attachment 4-3. SONGS typically uses, but is not limited to the following storage containers that may be new, reconditioned, or used:

- 55 Gallon steel or plastic drums
- 30 Gallon steel or plastic drums
- 5 Gallon steel or plastic drums
- 3.5 cubic yard Steel Boxes with plastic liners (220 gallons maximum liquid capacity per box)
- 20/40 Cubic Yard Bins

The containers used are chemically compatible with the hazardous waste that will be stored in them. Any used drums will be inspected prior to use to assure no residue of incompatible material inside has been left that might react with any hazardous waste to be added. SONGS relies on the specific DOT and UN specifications that indicate that the drums used are compatible with the wastes to be contained. Additionally, most wastes generated are consistent and follow existing protocol.

Overpacking will be used for bad drums, to lower radioactive dose for ALARA, and packaging prior to shipment. If a drum is put into an overpack drum for containment, no absorbent is added. Absorbents used to prepare overpack drums for shipment include, but are not limited to, clay,

sphagsorb (peat moss), or vermiculite.

Hazardous waste drums are labeled clearly with the words "Hazardous Waste" and the following information:

- EPA and container identification Number;
- Composition and physical state of the wastes;
- Storage start date;
- Statements which call attention to the particular hazardous properties of the waste (e.g. flammable, reactive, etc.);
- Name and address of the facility (San Onofre Nuclear Generating Station, P.O. Box 128, Pacific Coast Highway, San Clemente, California, 92674).

4.4 Container Management Practices

All marking and labeling of hazardous waste containers is placed on the top one-third of the container side and remain legible until final disposal.

- Containers are kept closed except when waste is added or removed.
- Containers are not opened, handled, transferred or stored in a manner that may rupture the containers or cause them to leak. Containers in good condition may be reused.
- Accumulation or storage containers in poor condition (indicated by bulges, large dents, holes, leaks, severe rust, or any other defects) will be placed in recovery, overpack, or salvage drums and/or have their contents transferred to another container.
- If necessary, waste in damaged containers is transferred into a container in good condition.
- Drums are placed with an adequate aisle space between them to allow the free movement of equipment and persons. In general, drums may be stacked up to two tiers high.
- Containers or their liners are compatible with the wastes contained. Incompatible wastes are not placed in the same container and are segregated from each other.
- Ignitable wastes are stored in such a manner that they are protected from any material or conditions which may cause them to ignite. Storage must be in non-leaking containers which are carefully handled in a manner to avoid heat, sparks, rupture, or any other condition that may cause ignition of the waste.

SONGS operations comply with NFPA 30 and the uniform fire code. The MPH building and the SYF are equipped with sprinklers and there is adequate ventilation to preclude accumulation of flammable and/or ignitable gases. If welding is performed, it is done by permit per established procedures.

Administratively, the hazardous waste handlers are trained to operate tools and equipment in a manner that minimizes potential for ignition of wastes. Ignitable wastes are adequately segregated to minimize reactions that may result in ignition of waste.

- Empty containers are defined according to CCR 66261.7. This section defines a container or an inner liner as empty if they were triple rinsed using a solvent capable of removing the waste and/or all pourable residues. Once a container is deemed to be empty, it is crushed, landfilled and/or recycled.
- Stored waste containers and associated containment are inspected weekly for evidence of leakage and deterioration.
- Liquids containing polychlorinated biphenyls at concentrations greater than or equal to 50

ppm will be collected in drums and stored in a unit that meets the requirements of 40 CFR Section 761.65(b).

- Containers are placed in areas protected against deterioration from the weather through a metal roof and or building covering the whole extent of the hazardous waste storage areas where the containers are placed. Containers are placed on pallets to elevate them above possible spills or leaks, and transported with forklifts and drum dollies.

4.4.5 Compliance with Air Emission Controls for containers (CCR section 66270.27)

Air emission controls for containers include the following, and are implemented and utilized routinely when containers are opened for inspection, sampling, transfers and shipment preparations.

- All containers holding mixed or hazardous wastes are DOT approved and all covers are sealed and secured when in storage, relocated or shipped off site for treatment, disposal or recycling.
- All covers are equipped with threaded plugs which are removed to permit sampling and transfers with minimal evaporative losses.
- Water traps are utilized for vent exhaust when during certain transfer operations to minimize evaporative losses from the containers being filled..
- Portable HEPA exhaust ventilation units, that can be equipped with charcoal filters when organic vapors are anticipated, are utilized when appropriate.

4.5 Shipments of Hazardous and Mixed Waste

All shipments of hazardous and mixed waste to an off-site treatment or disposal site are accompanied by a Uniform Hazardous Waste Manifest. The preparation for shipment and completion of a manifest is done in accordance with SONGS Operating Procedure S0123-IX-2.202, Hazardous/Mixed Waste/Material Shipments.

Attachment 4-1

**DESIGN CERTIFICATION
HAZMAT AREA - SOUTH YARD FACILITY**

Design Certification

HazMat Area – South Yard Facility

San Onofre Nuclear Generating Station
EPA I.D. No. CAD 000630921

The HazMat Area - SYF is an approximately 9,700 square foot reinforced concrete pad with a structural steel supported canopy roof. The concrete pad is a minimum 6 inches thick with a perimeter curb a minimum of 12 inches high. The canopy roof was added in 1985. A detailed drawing is attached as Figure 4-1. The area has been subdivided into three sections: Section A and B for storage of mixed waste containers and Section C for the storage of hazardous waste for less than 90 days in accordance with generator rules.

The construction of the HazMat Area - SYF, combined with an enclosed floor collection system, provides secondary containment in accordance with CCR 66264.175. The concrete base is free of cracks and gaps and is sufficiently impervious to contain leaks or spills. Each section of the concrete floor is sloped at 1/8" per foot to its own drainage collection sump. Section A provides approximately 13,400 gallons of secondary containment and the combined capacity of Section B and C provide approximately 47,000 gallons of secondary containment (Section B provides only 825 gallons capacity before spilling over the 2 inch berm into Section C).

The 24-hour, 25-year storm event is 5 inches (*Source: Rainfall Analysis for Drainage Design, State of California Department of Water Resources*). Since the area is approximately 9,700 square feet, the design volume of water from precipitation could be as high as 30,230 gallons. However, assuming the roof reduces the effects of precipitation by at least 50%, the design precipitation will be 15,100 gallons (rounded). Proportionately, this is about:

- > 3,600 gallons for Section A
- > 11,500 gallons for Section B + C

The permitted capacity of containers is:

No. of Containers	Volume of Containers (gallons)	Capacity (gallons)	10% of Capacity (gallons)
800 Drums	55 gallons	44,000	4,400
30 Drums	30 gallons	900	90
30 Drums	5 gallons	150	15
5 Boxes	220 gallons	1,100	110
		46,150	4,615

Thus, the design capacity exceeds the criteria for both areas as follows:

- > Section A: $13,400 > 3,600 + 4,615$
- > Sections B+C: $47,000 > 11,500 + 4,615$

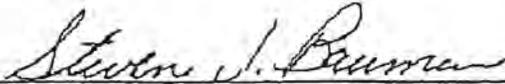
However, an operational limit of 300,000 gallons of hazardous waste should be imposed on the storage capacity of Section C in order to assure the design capacity of Section B is always available.

Based on my review of operating records and site drawings, interviews with plant personnel, and a site visit on December 22, 2000, I hereby certify that the HazMat Area - South Yard Facility has been suitably designed to meet the requirements of the applicable sections of Title 22 of the California Code of Regulations and Title 40 Code of Federal Regulations. A separate certification addresses compliance with the International Building Code (IBC 2000). Based on my site visit, I further certify that the subject mixed waste storage area was constructed in compliance with the above referenced regulations, and, to the best of my knowledge and belief, was being operated in a safe manner at the time of my visit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

1-18-01

Date



Steven J. Bauman
Vice President and Principal Engineer
Kintr Environmental, Inc.
California Registered Civil Engineer No. C 34324



Attachment: Figure 4-1



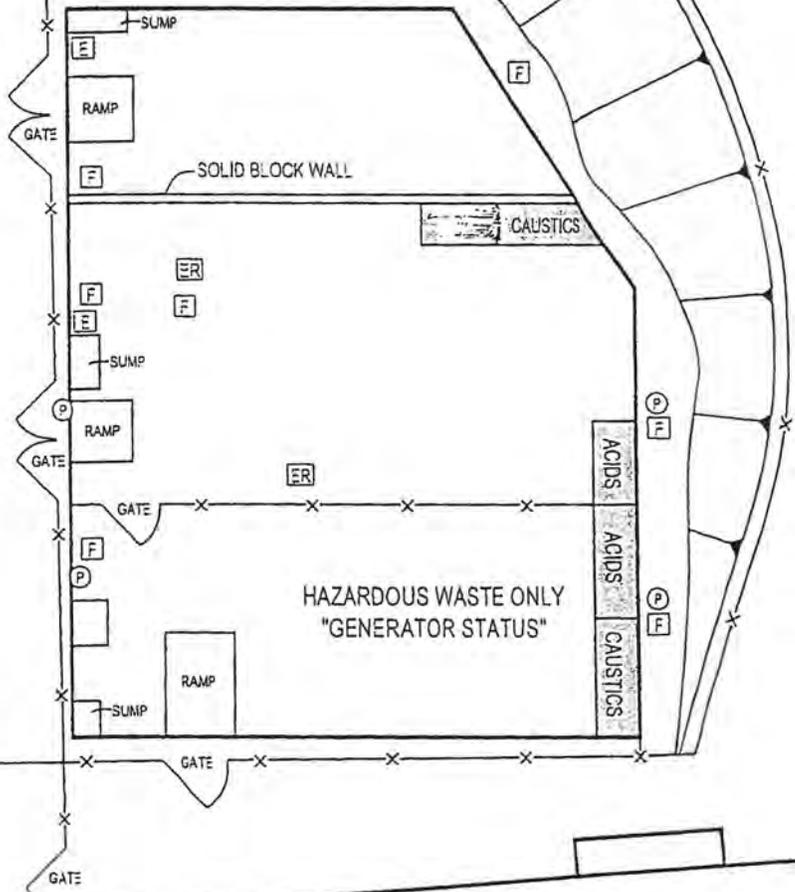
SERVICE ROAD

BLOCK WALL AT PROPERTY LINE

LEGEND

- (P) Phones
- (ER) Emer. Response Equipt.
- (F) Fire Extinguisher
- (E) Eyewash Station
- [] Incompatible Wastes Bermed

0 30 Feet
Approximate Scale



HAZMAT AREA - SOUTH YARD FACILITY
 San Onofre Nuclear Generating Station
 Southern California Edison, San Diego County, California

Figure 4-1

January 2001



January 18, 2001

M.J. JOHNSON

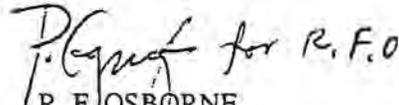
Subject: South Yard Facility Hazardous Waste Batch Plant
Canopy Seismic Evaluation
San Onofre Nuclear Generating Station, Units 2 & 3

References: 1. Draft Calculation C-274-07, Rev. 0, "SYF Batch Plant Hazardous Waste Storage Structural Evaluation"

The Nuclear Engineering Design Organization has prepared a draft analysis (Ref. 1.) that examines the seismic capacity of the canopy covering the Hazardous Waste Batch Plant at the South Yard Facility. The analysis has been prepared using the response spectra and seismic design provisions of the International Building Code, 2000 edition (IBC 2000). Our preliminary conclusion is that the canopy's design satisfies the IBC 2000's seismic design provisions.

The analysis has determined spectra in the critical lateral direction and combined these loads with traditional dead and live loads to examine the structural frame. Structural evaluation results of the steel frame have determined that the resultant stresses and deflections are within the material limits defined by the AISC. The evaluation has also examined the roof structure for the appropriate loading. Results for this component also meet AISC limits.

We expect to issue the final calculation by the end of January 2001. Please call me at PAX 82340 if you have any questions.


R. F. OSBORNE
Civil Group Supervisor

cc: J. Summy
B. Metz
CDM

Attachment 4-2

**DESIGN CERTIFICATIONS –
MULTI-PURPOSE HANDLING FACILITY**

- **MPHF-LSAW**
- **MPHF-HSAW**

Design Certification
Multi-Purpose Handling Facility
➤ *Low Specific Activity Waste*
➤ *High Specific Activity Waste*
San Onofre Nuclear Generating Station
EPA I.D. No. CAD 000630921

The MPHf building is an approximately 15,470 square foot reinforced concrete foundation with 2-foot thick reinforced concrete walls. The LSAW storage area is a section approximately 30 feet by 30 feet located in the southeast corner of the building. The HSAW storage area is a section approximately 20 feet by 20 feet located near the center of the building. A detailed drawing is provided in Attachment 4-2.

The construction of the MPHf building, combined with an enclosed floor collection system, provides secondary containment in accordance with CCR 66264.175. The concrete base is free of cracks and gaps and is sufficiently impervious to contain leaks or spills. The floor is painted to improve the impervious nature of the concrete to the hazardous and mixed wastes generated. The building sump provides approximately 40,500 gallons of secondary containment for both areas.

The precipitation criterion does not affect the containment calculation because the areas are completely enclosed within a building structure.

The permitted capacity of containers in the LSAW area is:

No. of Containers	Volume of Containers (gallons)	Capacity (gallons)	10% of Capacity (gallons)
100 Drums	55 gallons	5,500	550
10 Drums	30 gallons	300	30
10 Drums	5 gallons	50	5
10 Boxes	220 gallons	2,200	220
		8,050	805

The permitted capacity of containers in the HSAW area is:

No. of Containers	Volume of Containers (gallons)	Capacity (gallons)	10% of Capacity (gallons)
100 Drums	55 gallons	5,500	550
10 Drums	30 gallons	300	30
10 Drums	5 gallons	50	5
10 Boxes	220 gallons	2,200	220
		8,050	805

Thus, the design capacity exceeds the criteria for both areas as follows:

➤ $40,500 > 805 + 805$

Based on my review of operating records and site drawings, interviews with plant personnel, and a site visit on December 22, 2000, I hereby certify that the Multi-Purpose Handling Facility has been suitably designed to meet the requirements of the applicable sections of Title 22 of the California Code of Regulations and Title 40 Code of Federal Regulations. A separate certification addresses compliance with the International Building Code (IBC 2000). Based on my site visit, I further certify that the subject mixed waste storage area was constructed in compliance with the above referenced regulations, and, to the best of my knowledge and belief, was being operated in a safe manner at the time of my visit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

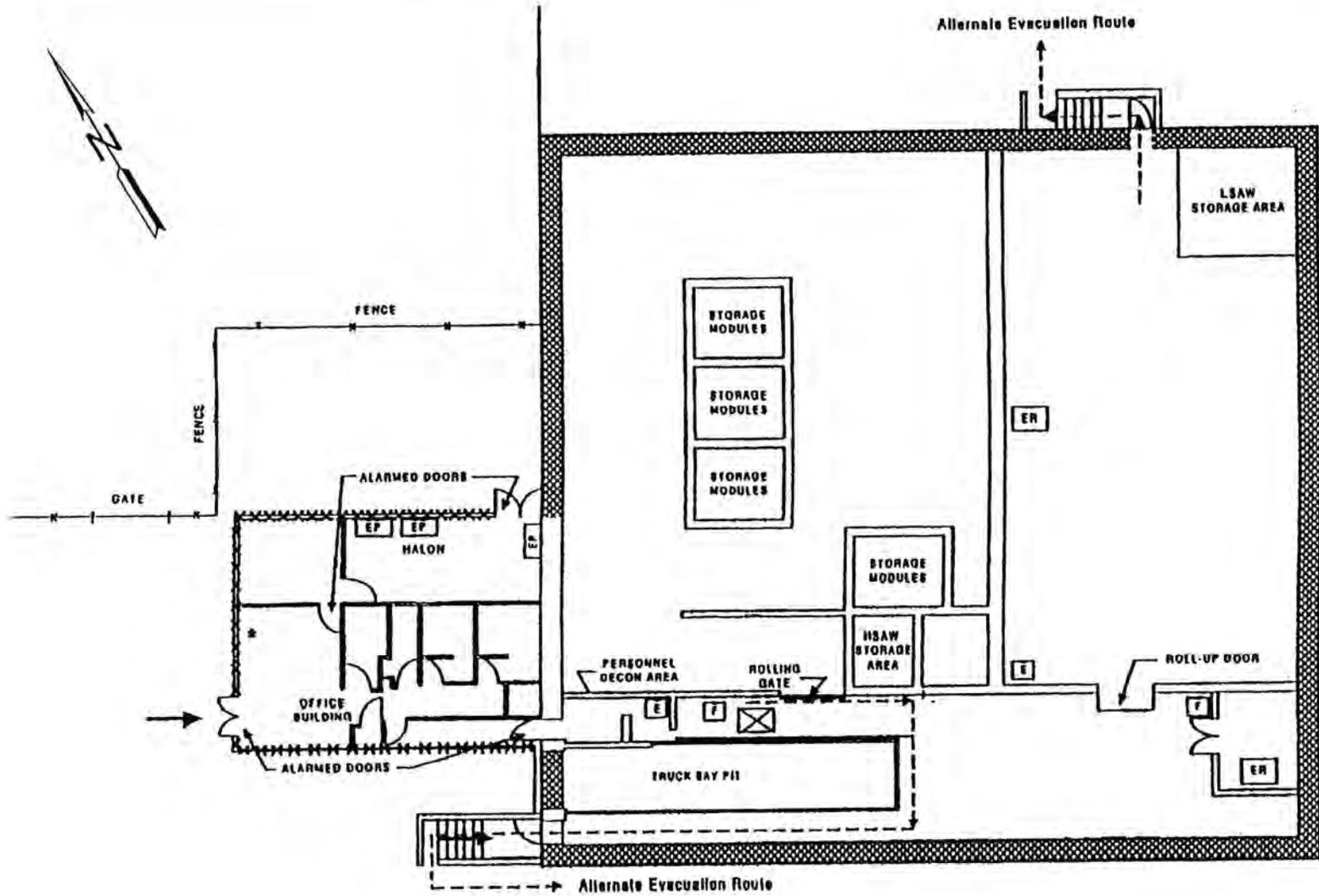
7/30/02
Date

Steven J. Bauman

Steven J. Bauman
Vice President and Principal Engineer
Kintr Environmental, Inc.
California Registered Civil Engineer No. C 34324



Attachment: Figure 4-2



MULTIPURPOSE HANDLING FACILITY
San Onofre Nuclear Generating Station
 Southern California Edison, San Diego County, California

Figure
4-2
 December 2000

January 18, 2001

M.J. JOHNSON

Subject: Seismic Evaluation of the Multi-Purpose Holding Facility
San Onofre Nuclear Generating Station, Units 2 & 3

- References:
1. SOC/F-210-3-143, Rev. 0, "Low Level Radioactive Waste Storage Building Multipurpose Holding Facility"
 2. Calculation C-275-01, Rev. 0, "Multi-Purpose Holding Facility Operating Basis Earthquake (OBE) Evaluation"

The Nuclear Engineering Design Organization has reviewed the seismic design of the Multi-Purpose Holding Facility compared to the seismic design provisions of the International Building Code, 2000 edition (IBC 2000). We have concluded that the building's design satisfies seismic design provisions of the IBC 2000.

Our conclusion is based on a qualitative review of two previously performed structural analyses of the building. We found that the original structural design of the building (Reference 1) employed the Uniform Building Code, 1982 edition (UBC 1982). The design requirements of this code are somewhat less stringent than the IBC 2000. After the construction of the building, an additional evaluation was performed (Reference 2) that considered the plant's Operating Basis Earthquake (OBE) spectra. OBE earthquake loads are two to three times as severe as those used in the original structural design and significantly higher than those specified by IBC 2000. The structural capacity was evaluated in a manner that is comparable to IBC 2000 design requirements. The re-evaluation concluded that the structure was capable of withstanding these higher earthquake loads.

Please call me at PAX 82340 if you have any questions.



R. F. OSBORNE
Civil Group Supervisor

cc: J. Summy
B. Metz
CDM

Attachment 4-3

DTSC TIERED PERMITS



December 17, 2014

Michelle Chairs
San Diego Department of Environmental Health
P.O. Box 129261
San Diego, CA 92112-9261

Subject: Closure Notification for one (1) Conditionally Authorized Tier Permit Unit, #OCA-6

Dear Ms. Chairs:

The following Tier Permit Unit located on SONGS has permanently ceased operations. Pursuant to Health and Safety Code, the following information is provided for your information. Enclosed is a copy of the hazardous waste tank closure certificate. At closure, all hazardous wastes and hazardous waste residues were removed from the treatment unit and associate component. The entire unit will be shipped as a radioactive material.

Company Name: Southern California Edison
Address: 5000 Pacific Coast Highway
San Onofre, CA 92674
EPA ID Number: CAD000630921
Unit Number: OCA -6 (Date of Closure, 12/1/14)
Tier of Authorization: Conditionally Authorized

The above information will be updated in CERS, once you approve of the closure and disposal method.

Should you have any questions or require additional information, please do not hesitate to call me at (949) 368-7311.



Brian D. Metz
Manager, Environmental

Attachments

cc: R. Brabec
K. Gallion
S. Hoque
P. Elliott
CDM/IDB



SAN DIEGO COUNTY CUPA
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(619) 338-2222 FAX (619) 338-2377
1-800-253-9933

HAZARDOUS WASTE TANK CLOSURE CERTIFICATION

Page 1 of 1

I. FACILITY IDENTIFICATION

BUSINESS NAME (OR TRADING NAME) (OR DBA) (OR BUSINESS AKA) FACILITY ID# 3 7 0 0 0 1 0 4 6 9 2
SOUTHERN CALIF. EDISON - SONGS
TANK OWNER NAME
SAN ONOFRE NUCLEAR GENERATING STATION
ATTN BRIAN D. METZ
TANK OWNER ADDRESS
5000 PACIFIC COAST HIGHWAY; PO BOX 128 D4E
SAN CLEMENTE, CA. 92672
TANK OWNER CITY SAN CLEMENTE (UNICORP. SANDIEGO) STATE CA ZIP CODE 92672

II. TANK CLOSURE INFORMATION

TANK IDENTIFICATION	Tank ID #	Concentration of Flammable Vapor			Concentration of Oxygen		
		Top	Center	Bottom	Top	Center	Bottom
INTERIOR ATMOSPHERE TESTING	SCA-6	0	0	0	20.9	20.9	20.9

III. CERTIFICATION

On examination of the tank, I certify the tank is visually free from product, sludge, scale, thin, lumpy residual of tank contents, corrosion and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF CERTIFIER

NAJMA SHIREEN BASHAR

NAME OF CERTIFIER (PRINT)

NAJMA SHIREEN BASHAR

TITLE OF CERTIFIER

TECHNICAL SPECIALIST - SAFETY

ADDRESS

PO Box 128

CITY

SAN CLEMENTE, CA 92672

PHONE

714-837-7139

DATE

12 3 14

CERTIFICATION TIME

13:15

STATUS OR AFFILIATION OF CERTIFYING PERSON

Certifier is a representative of the CUPA, authorized agency, or LIA

Yes No

Name of CUPA, authorized agency, or LIA

SAN DIEGO DEPT. OF ENV. HEALTH

If certifier is other than CUPA / LIA check appropriate box below:

a. Certified Industrial Hygienist (CIH)

b. Certified Safety Professional (CSP)

c. Certified Marine Chemist (CMC)

d. Registered Environmental Health Specialist (REHS)

e. Professional Engineer (PE)

f. Class II Registered Environmental Assessor

g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS

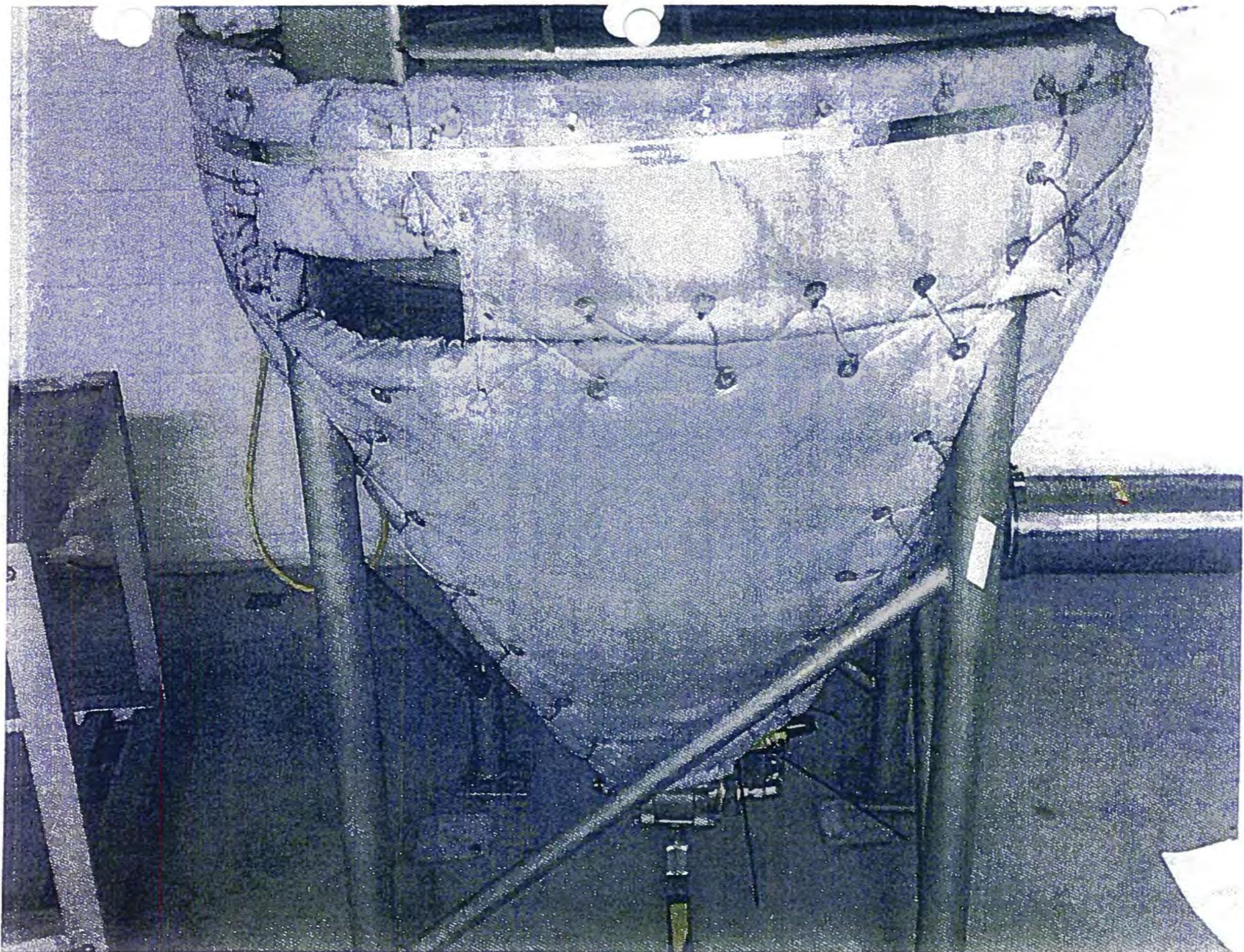
DIL ONLY

(If yes, the tank interior atmosphere shall be re-checked with a combustible gas indicator prior to work being conducted on the tank.)

Yes No

CERTIFIER'S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC.

NONE





December 2, 2014

Michelle Chairs
San Diego Department of Environmental Health
P.O. Box 129261
San Diego, CA 92112-9261

SUBJECT: Closure Notification to 5 Tier Permit Units

Dear Ms. Chairs,

The following Tier Permit Units located on SONGS Mesa have permanently ceased operation. Pursuant to Health and Safety Code section 25201.5(d)(8), the following information is provided for your information.

Company Name: Southern California Edison
Address: 5000 Pacific Coast Highway
San Onofre, CA 92674
EPA ID Number: CAD983629650
Unit Numbers: M1 – Mesa, Drum Crusher (Date of Closure – 10/15/14); Salvaged
M2 – Mesa, Filter Crusher (Date of Closure – 10/15/14); Salvaged
M3 – Mesa, Garage Filter Crusher (Date of Closure – 10/15/14);
Sold to Coastline Automotive, San Clemente, CA
M4 – Mesa, Aerosol Puncturing Device (Date of Closure – 10/15/14); Salvaged
EPA ID Number: CAD00630921
Unit Number: OCA2 – Batch Plant Aerosol Puncturing Device (Date of Closure – 12/2/14; Salvaged
Tier of Authorization: Conditionally Exempt – Specified Waste Stream

The above information will be updated in CERS.

Should you have any questions, please do not hesitate to call me at (949)368-7311.

A handwritten signature in black ink, appearing to read "Brian D. Metz".

Brian D. Metz
Manager, Environmental

cc: CDM/IDB
Syef Hoque
Paul Elliott
Kelli Gallion

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

400 P STREET, 4TH FLOOR

7. BOX 808

AMENDMENT 95-5871



December 5, 1995

EPA ID: CAD000630921

SO CAL EDISON CO/SAN ONOFRE NJC GEN STA
E W NEWTON
#1,2&3/PO BOX 128 (W-44)
SAN CLEMENTE, CA 92674

Initial Authorization: 12/15/93
Amendment Date: 11/16/95

For facility located at:
PACIFIC COAST HWY #2 & 3
SAN CLEMENTE, CA 92674

Dear Onsite Treatment Facility:

The Department of Toxic Substances Control (DTSC) has received your facility specific Amended notification (form DTSC 1772). Your notification is administratively complete, but has not been reviewed for technical adequacy. A technical review of your notification will be conducted when an inspection is performed. At any time, you may be inspected and will be subject to penalty if violations of laws or regulations are found.

The Department acknowledges receipt of your completed Amended notification for the treatment unit(s) listed on the last page of this letter. These units are authorized by California law without additional Department action. Your authorization to operate continues until you notify DTSC that you have stopped treating waste and have fully closed the unit(s). DTSC has revised its database records to reflect your status and has notified the Board of Equalization (BOE). You will be billed annual fees by BOE calculated on a calendar year basis for each year you operate and/or have not notified DTSC that the units have been closed.

If you have any questions regarding this letter, or have questions on operating requirements for your facility, please contact the nearest DTSC regional office, or this office at the letterhead address or telephone number.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sangat Kals".

Sangat Kals, Ph.D., Chief
Tiered Permitting Compliance Section
State Regulatory Program Division

cc: See next page.



DEPARTMENT OF TOXIC SUBSTANCES CONTROL

400 P STREET 4TH FLOOR
BOX 806
SACRAMENTO, CA 95812-0806



SO CAL EDISON CO/SAN ONOFRE NUC GEN STA EPA ID: CAD000630921
Page 2

cc:

SONIA LOW
DTSC REGION 4 OFFICE
SURVEILLANCE & ENFORCEMENT BR.
245 WEST BROADWAY, SUITE 350
LONG BEACH, CA 90802

GARY STEPHANY
SAN DIEGO COUNTY
ENVIRONMENTAL HEALTH SERVICES
1255 IMPERIAL AVENUE, 4TH FLR.
P.O. BOX 85261
SAN DIEGO, CA 92186

STATE BOARD OF EQUALIZATION
STEPHEN R. RUDD, ADMINISTRATOR
ENVIRONMENTAL FEES DIVISION
P.O. BOX 942879
SACRAMENTO, CA 94279-0001

Units authorized to operate at this location:

UNDER CONDITIONAL AUTHORIZATION: OCA-6
UNDER CONDITIONAL EXEMPTION: OCA-1
UNDER CONDITIONAL EXEMPTION: OCA-2
UNDER CONDITIONAL EXEMPTION: OCA-4
UNDER CONDITIONAL EXEMPTION: U2-5
UNDER CONDITIONAL EXEMPTION: U2-6

December 29, 1999

Mr. John Misleh
Department of Environmental Health
Hazardous Materials Division
P.O. Box 12961
San Diego, CA 92112-9261

SUBJECT: Closure Notification for Conditionally Exempt-Specified Wastestream,
Units M6 and OCA-4 located at Southern California Edison,
San Onofre Nuclear Generating Station.

Dear Mr. Misleh;

This is the closure notification for two Conditionally Exempt-Specified Wastestream, Tiered Permit Unit ID numbers M6 (Silver Recovery Unit - Medical), under EPA ID #CAD983629650 and OCA-4 (Silver Recovery Unit - CDM), under EPA ID #CAD000630921. Both units are for silver recovery treatment, which are exempt from Tiered Permitting pursuant to Senate Bill (SB) 2111.

If you should have any questions, please call Brian Metz at (949) 368-6829.

Sincerely,



H.W. Newton
Manager, Site Support Services

cc: Mike Dorsey (DEH)
MJJohnson
DJEnsminger
BDMetz
IDB-Hazmat
CDM

Attachment 4-4

DOT PACKING REQUIREMENTS

DOT PACKING REQUIREMENTS¹

Waste	Group	Hazard Class / Division	ID#	Packaging Group	Label(s) Required	Packaging Authorizations ²		
						Exceptions	Non-Bulk Pkg	Bulk Pkg
Flammable Liquid	Unspecified Organic Liquid Mixture	3	UN1993	I	Flammable Liquid	150 150 150	201 202 203	243 242 242
Sulfuric Acid ²	Acids	8	UN1830	II	Corrosive	154	202	242
Sodium Hypochlorite ²	Halogenated Inorganic Chemical	8	UN1791	III	Corrosive	154	203	241
Sodium Hydroxide Solid	Caustic Solids	8	UN1823	II	Corrosive	154	212	240
Sodium Hydroxide Solution	Caustic Liquids	8	UN1824	II	Corrosive	154	202	242
Hydrazine ²	Oxidizers	8	UN2030	II	Corrosive, Poison	None	202	243
Ammonium Hydroxide	Ammonia Solutions	8	UN2672	III	Corrosive	154	203	241
1, 1, 1-Trichloroethane	Halogenated Hydrocarbon	6.1	UN2831	III	Keep Away from Food	153	203	241
1, 1, 2-Trichloro-1, 2, 2-trifluoroethane (Freon)	Liquid Refrigerants	6.1	NA1993	III	Keep Away from Food	174	174	None
Combustible Liquid (Oil) ¹	Waste Oil / Mixed Oil	-	NA1993	III	None	150	203	241
Asbestos	Asbestos	9	UN2590	III	Class 9	155	216	240
Combustible Solid	Oil / Absorbent Rags	4.1	UN1325	II or III	Flammable Solid	151	212/213	240
Corrosive Solid ²	Acid / Caustic Clean-ups	8	UN1759	I II III	Corrosive	None 154 154	211 212 213	242 240 240
Corrosive Liquid ²	Acid / Caustic Clean-ups	8	UN1760	I II III	Corrosive	None 154 154	201 202 203	243 242 241
Flammable Solid	Paint Sludge	4.1	UN1325	II III	Flammable Solid	151 151	212 213	240 240
Sandblast Grit	Inorganic Solid Waste	6.1	N/A	III	Keep Away from Food	151	213	240
Synthetic Oil	Waste Oil / Mixed Oil	6.1	N/A	III	Keep Away from Food	151	213	240
Ethylene Glycol	Glycol Aqueous Solutions	6.1	UN2369	III	Keep Away from Food	153	203	241
Steam Generator Sludge	Inorganic Solid Waste	6.1	N/A	III	Keep Away from Food	151	213	240
Oil/Trichloroethane	Halogenated Hydrocarbon	6.1	UN2831	III	Keep Away from Food	153	203	241

Notes: ¹
²

Source: 49 CFR Part 172, 173, 178, 179.

Refer to the specific 49 CFR Parts 173, * * * for DOT packaging authorization.

Section 5.0

PROCEDURES TO PREVENT HAZARDS

5.0 PROCEDURES TO PREVENT HAZARDS

5.1 Security

As discussed in Section 2.1.3, access control for the San Onofre Nuclear Generating Station is provided by security fencing and guarded or locked access gates around all "vital" areas/equipment. Security at the San Onofre Nuclear Generating Station is maintained in accordance with 10 CFR Chapter 1, NRC requirements.

An 8' chain-link fence encloses the HazMat Area - SYF. There are three access gates to the hazardous waste storage area which are double-locked when not in use. The gates are accessible only to the Hazardous Materials Group and the Health Physics Group. To access the hazardous waste storage area, both groups must unlock their portion of the double-lock. The MPHF hazardous waste storage areas are in an enclosed building with a key card access.

Warning signs are strategically posted on the perimeter fence of the hazardous waste storage areas to warn trespassers that the area contains hazardous waste. The signs are clearly legible from a distance of 25 feet. Each warning sign is 18"W x 12"H. The lettering on the signs is 0.75" to 1.25" high. The signs clearly state, in English and Spanish, "Caution - Hazardous Waste Storage Area - Unauthorized Persons Keep Out" and "Cuidado - Zona De Residuos Peligrosos - Prohibida La Entrada a Personas No Autorizadas".

In addition, mixed waste warning signs are posted in the area, "Mixed Waste Storage Area, Authorized Personnel Only, Contact EP at 86829 and HP at 86176 Prior to Entry", "Caution Radioactive Materials Area Rep Required, Notify Health Physics at 86695 Prior to Entry", and "Warning, This Area Contains Radionuclides Known to the State of California to Cause Cancer, Birth Defects, and/or Other Reproductive Harm, California Health and Safety Code 25249.6".

Emergency Response: The requirements of CCR Title 22 section 66264.37 require that attempts be made to make arrangements, *as appropriate*, to utilize State emergency response personnel, contractor personnel, local fire department and police, and to familiarize local hospitals with the types of hazardous wastes handled at the facility. As the property, SONGS, is constructed and operated on an easement from the Department of the Navy, it was appropriate and expedient to make these arrangements for emergency response services with military personnel stationed at Camp Pendleton to assure the shortest response times for fire, hazardous waste and personnel medical emergencies.

A copy of the Memorandum of Agreement with Camp Pendleton is attached with this permit renewal application in Attachment 5-3. Camp Pendleton emergency response personnel and organizations have been familiarized with the hazardous material handled on site, the storage areas, on site capabilities (which are now minimal) and have trained with SONGS Emergency Response personnel to maximize their familiarization with personnel, facilities on site and coordination of efforts in an emergency to mitigate consequences

5.2 General Inspection Requirements

All hazardous waste storage unit areas are inspected weekly (and daily if accessed) for the following:

- Visible signs of leakage and areas of potential leakage.
- Signs of deteriorating equipment.
- Berm/dike integrity.
- Condition and dates of containers stored at the hazardous waste areas.
- Any other unusual conditions.

The equipment and areas to be inspected in the hazardous waste areas as well as inspection procedures and frequencies are performed in accordance with SONGS Environmental Procedure S0123-IX-2.206, Hazardous Material/Waste/Mixed Waste Inspections. Attachment 5-1 includes a Storage Area Inspection Checklist and sample inspection forms.

5.3 Inspection Procedures

If any equipment needs repair or maintenance, a trouble call, action request and/or maintenance order will be written or the equipment will be repaired in the field by a qualified individual trained in repairing such equipment. If any containers are not in good condition, it will be placed in recovery, overpack, or salvage drums and/or have its contents transferred to another container immediately upon discovery. All repairs performed will be recorded in the inspection procedure.

Responsibilities of the inspector include filling out the appropriate inspection forms as part of an effort to avoid the release of hazardous materials/waste to the environment or any problem that could lead to a threat to human health. This form includes any corrective action that has been taken or problems that have been followed up on.

Procedures for a permit modification (22 CCR 66270.42 and as further defined in Appendix I) will be followed if changes are made to the content or frequency of items (or criteria) being inspected. Most inspection logs are on a one or two page sheet.

Other inspection checklists for safety, fire protection, and personal protective equipment are performed in accordance with the schedules described above. However, these checklists can be quite lengthy since there may be hundreds of these pieces of equipment throughout the plant. Consequently, they are referenced here and are available for inspection, but not included herein.

The Environmental Specialist or designee reviews completed inspection forms.

Copies of the inspection forms are retained in the Environmental Protection Office of the facility for a minimum of three years. Information such as date and time of inspection, name of inspector, observations made, dates and nature of any repairs or remedies is included in the above mentioned document. Inspection forms are transmitted by the Environmental Protection Office Clerk to the Corporate Documentation Management (CDM) Office of the San Onofre Nuclear Generating Station for retention.

5.4 Preparedness and Prevention Requirements

5.4.1 Waste Handling Equipment

The waste handling equipment associated with the mixed waste storage areas are described in this section. In general, the equipment is necessary to move containers, typically 55-gallon drums, on pallets. Any spilled liquids are absorbed (small quantities) or pumped from the recessed area and floor sump into drums. Equipment used for transfer of hazardous waste is decontaminated after use. The pumps and associated hoses are kept at the hazardous waste storage area when not in use. Procedures requiring personal protective equipment, such as face shields, gloves, goggles, and disposable coveralls, are required during waste transfer.

Attachment 5-2 identifies all waste handling equipment utilized in the hazardous waste storage areas and the associated safety features of each piece of equipment.

5.4.2 Equipment for Unloading and Handling Hazardous Waste Containers

SONGS utilizes manual and motorized fork lifts for handling of hazardous waste containers. The containers are stored on storage pallets to facilitate leak detection and transport. The hazardous waste storage unit is provided with a ramp to allow access. Other equipment that may be used to unload hazardous wastes from trucks includes:

- Pumps
- Hoses
- Ramps
- Portable, lightweight slings
- Drum, non-sparking, rollers and kickstands
- Drum grab mounts for forklifts

Trucks containing bulk wastes are unloaded by pumping the liquid contents through hoses into the designated storage containers. Forklifts are used to unload and handle containers and miscellaneous material at the hazardous waste storage areas. Ramps are provided for forklift access into the containment areas. As shown in Attachment 5-2, the forklifts are equipped with roll-over protection devices and seat belts, if so equipped.

5.4.3 Safety and Emergency Equipment

SONGS has safety equipment located throughout the facility. This equipment is for general plant emergencies as well as emergencies that may occur at the Mixed Waste Storage Areas.

General plant safety equipment includes:

- First aid supplies
- Barricade tape, warning signs, other physical barriers
- Safety showers/eyewash stations
- Personal protective equipment (including respirators, hard hats, face shields, goggles, hearing protection, coveralls, gloves, as needed)
- Flashlights, radios, and batteries
- Fire extinguishers
- Hand tools, shovels, etc.
- Diking material and absorbent
- Recovery drums for collecting spilled materials or holding a leaking drum
- Neutralizing agents

Safety information is also provided by Material Safety Data Sheets (MSDS), or equivalent, for hazardous materials and is available to all hazardous waste workers. SONGS has developed an industrial safety training program for all employees that includes instruction on the use of Material Safety Data Sheets.

Detailed plot plans which identify locations of emergency response equipment such as telephones, fire extinguishers, eyewash stations, spill equipment, personal protective equipment, and fire hydrants are included in the Hazardous Materials Business Plan. The following safety and emergency equipment are available to hazardous waste workers:

Fire Extinguishing	The hazardous waste storage areas are equipped with fire
--------------------	--

System:	extinguishers located at strategic positions throughout the hazardous waste storage areas.
Spill Control Equipment:	The hazardous waste storage areas have been designed to contain spills. In the event of a spill, the spilled material will drain to a sump(s). Any collected liquid can then be recovered and placed in another 55 gal drum. Bags of absorbent are available for use in any release.
Emergency Communication Equipment	The facility is equipped with the following communication capabilities: Telephone systems, UHF and/or VHF radio, and public address system and dedicated specialty telecommunications systems for communication. At the hazardous waste storage areas, two way radios and/or telephones are used to communicate between personnel working in the areas and other employees located in the facility.
Alarm Systems	The facility has an internal siren which can be used to notify employees of any emergency.
Decontamination Equipment	The facility is equipped to respond to spills and to decontaminate the hazardous waste storage areas. See Section 8, Management Practices, for a complete list of equipment. Spill cleanup equipment can be washed with water and detergent at the storage facility areas. The fluids will then drain to the collection sump. The sump will then be emptied.
Emergency Equipment Description	Personal protective equipment is available for each person who needs to work in the hazardous waste storage areas. Examples of PPE that is available to protect employees from accidental spills and releases include respirators, goggles, rubber boots, coveralls, gloves and hardhat. Specific spill equipment available consists of neutralizing solutions, spill response kits, etc.
Adequate Water Volume and Pressure To Operate Equipment	The facilities have adequate water volumes and pressure to operate equipment in the event of an emergency. The site has specific overhead water sprays in the event of a fire in the hazardous waste storage areas.

5.4.4 Testing and Maintenance Procedures

A program for the routine inspection and testing of safety and emergency equipment has been developed to ensure such equipment is available to perform its intended function. The inspection procedure is the SONGS Environmental Procedure S0123-IX- 2.206, Hazardous Material/Waste/Mixed Waste Inspections for the storage areas and several Repetitive Work Orders assist with the below and include:

- Inspection of spill response equipment.
- Testing of radio communication equipment.
- Testing of plant emergency siren and emergency signals.
- Inspection of emergency shower and eye wash stations.
- All firefighting systems are tested, flushed if applicable, and inspected regularly:
- Respirators are tested and cleaned routinely and after each use.
- Spill boxes throughout the site are inventoried and inspected to make sure that the equipment is available when needed. Any deficiencies are quickly corrected and the equipment is placed into a state of readiness.

5.4.5 Access To Communications Devices Or Alarms

Communications devices or alarms are strategically located in and around the hazardous waste storage areas. All personnel are trained in the use of the communication devices. Drums will not be placed in a manner that will preclude access to a communication device or alarm.

5.4.6 Required Aisle Space

The site will place drums for storage in rows no more than two drums high. All drums will be located on wooden or plastic pallets to minimize the possibility of corrosion occurring from adjacent drum leaks or spills. The drums will be placed in such a manner that unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment will not occur anywhere in the hazardous waste storage areas.

5.4.7 Lighting

Operations within the hazardous waste storage areas should not occur during night operations. However, in the event of an emergency, portable lighting is available to allow operations to take place, if normal lighting is inadequate.

5.5 General Hazard Prevention

5.5.1 Loading Hazards

The possible loading and unloading hazards associated with the hazardous waste storage areas are that drums might topple over, fall off the delivery truck, or be turned over by the vehicle when leaving. To minimize the occurrence of such events, no drums may be left at the unloading zone without the permission of the Environmental Protection Group (EPG). All drums are to be placed squarely on pallets to minimize the possibility of tipping or turning over. All drums placed on a vehicle for transportation on-site or off-site must be securely restrained prior to allowing a vehicle to depart.

5.5.2 Runoff and Flooding

The hazardous waste storage areas are surrounded by a berm and/or drainage system to prevent runoff and flooding. See the site design Section 4.

5.5.3 Contamination of Water Supplies

All drums are stored on a containment pad which drains to a sump(s). Any liquid accumulated in the sump(s) are removed. There are no water wells located in the vicinity of the plant.

5.5.4 Equipment Failures and Power Outages

The hazardous waste storage areas are for the management of drums only. Therefore, the potential for equipment failures and power outages to have a material impact on the operations is minimal. Should a power outage occur operations can cease until power is restored, or backup emergency power for lighting and/or other needs can be obtained.

5.5.5 Personnel Protection

Personnel have been trained in the use of personnel protective equipment. They have yearly training exercises in which the proper use of personal protective equipment is discussed.

5.5.6 Minimize Releases to the Atmosphere

All drums located in the hazardous waste storage areas are to be closed with bungs in place or a ring closure device. The drums are opened only when adding or withdrawing material. Additional measures and methods used to minimize releases to the atmosphere are described in section 4.45.

5.6 Hazards Associated With Ignitable, Reactive and Incompatible Wastes

During storage operations, all drums are identified as to their hazardous properties. All ignitable wastes are stored separately from reactive and/or incompatible wastes.

- No smoking signs have been conspicuously placed in the storage areas for ignitable wastes. The area will be protected from sources of ignition including but not limited to: open flames, smoking, cutting and welding, frictional heat, sparks, spontaneous ignition and radiant heat.
- Because of the fact that drums are not allowed to be stored in the storage areas without proper identification, inadvertent mixing will not occur. Furthermore, mixing of drums will not be allowed unless approved by the Supervisor, Environmental Services, or designee.
- Inadvertent mixing of incompatible wastes will not occur at the facility. There have not been any fires in the area.
- The hazardous waste storage areas are constructed such that no point within the perimeter is closer than 50 feet from the facility property line.
- There are no tank systems.

5.7 Compliance with the Uniform Fire Code

Facility is in compliance with the Uniform Fire Code.

5.7.1 Flammable Liquids are Stored under a Roof and/or in a Fire Cabinet

- Drums containing flammable liquids can only be double stacked.
- An overhead sprinkler system has been installed in the areas for the storage of flammable liquids.
- The secondary containment areas have an adequate capacity to collect and hold a 20-minute discharge from the sprinkler system.
- There are no water-reactive wastes stored in the areas.

5.7.2 Incompatible Wastes

- Non-combustible partitions have been constructed to separate incompatible wastes. The partitions extend at least 5 inches above and in front of the sides of the containers. See site drawing in Section 4.
- Storage cabinets can be used in the hazardous waste storage areas.
- Incompatible wastes are stored in areas which exceed 20 feet from each other.
- Fire extinguishers are located to minimize the travel distance in the hazardous waste storage areas.
- The hazardous waste storage areas are in full compliance with the Uniform Fire Code requirements. In addition, the facility has done an extensive Fire Hazards Analysis in which the hazardous waste storage areas were scrutinized to assure that all steps were taken to prevent potential fires.

- Both the HazMat Pad and MPHF fire suppression systems were designed and built under a Design Change Package (DCP) in accordance with the at-the-time-current Fire and Building Codes. Both structures have sprinkler systems, local alarms, as well as Alarm Company monitoring and assessment (24 hrs/7days a week). Both facilities also have a normal compliment of fire extinguishers that are inspected monthly and serviced per the applicable NFPA standards. In cases where flammable containers are stored in the MPHF, the utilization of flammable cabinets are added for additional protection.

Attachment 5-1

STORAGE AREA INSPECTION CHECKLIST
AND
SAMPLE INSPECTION FORMS

STORAGE AREA INSPECTION CHECKLIST

ITEM		PROCEDURES	FREQUENCY ¹
WASTE HANDLING EQUIPMENT	Forklifts	Good condition (body, paint, mirrors, suspension, tires, safety inspection, etc)	Weekly
	Ramps	Good condition	Weekly
	Pumps	Good condition (corrosion, leaks, joints condition, etc)	Weekly
	Trucks	Good condition (body paint, mirrors, suspension, tires, safety inspection, etc).	Weekly
	Overpacks	Good condition	Weekly
	Sumps	Good condition, any liquid must be removed, upon discovery	Weekly
	Lighting	Good condition (no light bulbs missing, electric wires condition, etc)	Weekly
SAFETY EQUIPMENT	Eyewash	Location (e.g. pathway to the station unblocked) and condition (gauge needle indicating positive reading, operability)	Weekly
	Showers	Location (e.g. pathway to the station unblocked) and condition (no leaks, operability, etc)	Weekly
	Fire Systems	Good condition (no leaks, visible corrosion, expiration date)	Weekly
	No Smoking Signs	Location (conspicuously displayed, etc.), good condition (visible corrosion, any damage, etc)	Weekly
PROCESS EQUIPMENT	Containers	Location and condition (bulges, large dents, holes, leaks, severe rust, etc), labeling (labeling information is included in Attachment 8-2, Section 6.2.4), non ignitable or reactive waste is allowed in the area, storage condition (fastened, overflowing or open, etc)	Weekly
MONITORING	Surrounding		

ITEM		PROCEDURES	FREQUENCY ¹
DATA	Area		Weekly
GENERAL AREA	Containment Pad	Corrosion, erosion, or signs of release of hazardous waste in the vicinity of the tank and containers as well as loading and unloading area.	Weekly
	Miscellaneous	Area should be free of trash, rags or debris as well as drips or spills (visible liquids). Smoke, steam, vapors, heat and other indicators of potential hazards.	Weekly

NOTES:

- Equipment is inspected on a weekly basis unless activities occur in the hazardous waste storage areas, in which case all items will be inspected daily.

HAZARDOUS MATERIAL/WASTE/MIXED WASTE INSPECTIONS

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HAZARDOUS MATERIAL/WASTE/MIXED WASTE INSPECTIONS

NOTE

Terms defined in Attachment 2 appear for the first time in this procedure in ***bold italics***.

1.0 **OBJECTIVES**

- 1.1 To describe requirements for conducting periodic inspections of the following areas and units:
- Storage Areas
 - Waste Accumulation Areas
 - Satellite accumulation areas
 - Tiered permit units
- 1.2 For malfunctions and deterioration, operator errors, and discharges which may cause or lead to:
- (1) Release of hazardous materials/waste and/or mixed waste to the environment or
 - (2) A threat to human health.
- 1.3 To monitor the level of oily waste tanks and sumps.
- 1.4 To monitor and ensure the proper use of secondary containment on all drums and tanks containing petroleum products (waste or material) equal to or greater than 55 gallons. (Reference 6.2.8 and 2.3.9)

2.0 **REFERENCES**

- 2.1 **NRC Commitments**
- 2.1.1 US Code of Federal Regulations, Title 40, Protection of Environment
- 2.2 **Order**
- 2.2.1 SO123-FP-1, Fire Protection Program
- 2.3 **Procedures**
- 2.3.1 SO123-VII-8.1.14, Radioactive Material Container Labeling
- 2.3.2 SO123-VII-20.11.1, Radiological Posting and Controls

- 2.3.3 SO123-IX-2.202, Hazardous/Mixed Waste/Material Shipments
- 2.3.4 SO123-IX-2.208, Hazardous Waste and Emergency Response Training Program
- 2.3.5 SO123-XIII-1.105, Common Facilities Area Fire Suppression System Inspection
- 2.3.6 SO1-XIII-1.113, Common Facilities Fire Suppression System Test
- 2.3.7 SO123-XIII-51, Surveillance Requirement Fire Hydrant Inspection
- 2.3.8 SO123-XIII-52, Portable Fire Extinguisher Inspection
- 2.3.9 SO123-XV-16, Spill Prevention, Control and Countermeasures Plan (SPCC)
- 2.3.10 SO123-XV-17.3, Spill Contingency Plan
- 2.3.11 SO123-XV-18, Mixed Waste Guidelines
- 2.3.12 SO123-XV-42, Chemical Control Program
- 2.3.13 SO123-XV-50, Corrective Action Program
- 2.3.14 SO123-XV-HU-3, Human Performance Program
- 2.4 Other
 - 2.4.1 California Code of Regulations, Title 26, Toxics
 - 2.4.2 California Health and Safety Codes
 - 2.4.3 Past Hazardous Material Inspection Attachments:
CDM #K920819S6021
 - 2.4.4 49 Code of Federal Regulations, Transportation

3.0 PREREQUISITES

- 3.1 Verify this document is current by using one of the methods described in SO123-XV-HU-3.
- 3.2 Verify level of use requirements on the first page of the document.
- 3.3 Only personnel authorized by the Supervisor, Plant Chemistry or designee and listed on Attachment 1 of SO123-IX-2.208 (Reference 2.3.4), **SHALL** perform this inspection.

- 3.4 Prior to conducting an inspection, contact the Supervisor, Plant Chemistry or designee to determine if any additional hazardous waste/mixed Waste Accumulation Areas (WAAs) [or satellite accumulation areas], oily waste tanks and sumps, or tiered permit units have been designated (see Definitions, Attachment 2).
- 3.5 Authorized personnel should obtain appropriate keys/combinations to locks for storage and staging areas.
- 3.6 All applicable Radiation Protection (RP) procedures **SHALL** be followed when handling mixed wastes.
- 3.7 Radiation Exposure Permits (REPs) may be required at some inspection locations as directed by RP.
- 3.8 Prior to entering areas containing hazardous materials, waste, or mixed waste, perform a visual inspection to alert workers to potential dangers. Look for bulging containers, leaks, spills, smoke, steam, vapors, heat, and other indicators of potential hazards per SO123-XV-17.3.
 - 3.8.1 If these indications exist, then prior to entry:
 - .1 Contact the Supervisor, Plant Chemistry (PAX 86278) or Environmental Specialist, or designee (PAX 83831 or 83051).
 - .2 If unanswered, contact by radio, beeper, or call PAX 86911 and request Operations use the site paging system.
 - 3.8.2 If emergency conditions exist, then prior to entry:
 - .1 Contact the Control Room (PAX 86911).
 - .2 Remain at a safe distance, upwind and updrift from the hazard and wait for Operations/Fire Brigade to arrive.
 - .3 Warn others in the area of impending dangers.
 - .4 Provide the Fire Brigade with the requested information.

4.0 PRECAUTIONS

- 4.1 Wear proper safety equipment when handling a hazardous waste/material. At a minimum, wear gloves and safety glasses or goggles.

5.0 CHECKLISTS

- 5.1 None

6.0 PROCEDURE

6.1 Responsibilities of Inspector

- 6.1.1 Environmental/Chemistry personnel **SHALL** complete all inspection forms, as follows:
- Attachments 4, 6, 7 and 8, weekly
 - Attachment 3, daily or weekly
- .1 Upon completion of inspections, review inspection forms (Attachments 3 through 8) to ensure all sections are completed properly.
- .2 Forward all inspection forms to the Supervisor, Plant Chemistry or designee, for review.
- 6.1.2 Per Step 3.4, manually add newly designated areas or tiered permit units on the appropriate inspection form (Attachments 3 through 8).
- .1 Update procedure if any additional areas are permanently designated.
- 6.1.3 Each day activity occurs, conduct inspections of the following areas:
- Batch Plant Hazardous Waste Pad
 - Batch Plant Mixed Waste Area
 - PA Radwaste/Waste Accumulation Area
 - PA Waste Accumulation Area (WAA) (East Road)
- .1 Document inspections using the appropriate sections from Attachment 3 and corresponding acceptance criteria from Section 6.2.

- 6.1.4 Conduct weekly inspections of all designated storage and accumulation areas using Attachment 3 and applicable Section 6.2 criteria.
 - .1 If inspection cannot be performed, then contact the Supervisor, Plant Chemistry or designee.
 - .2 Write **P** in each box passing the criteria.
 - .3 Write **F** and a number corresponding to the item in the comment section, in each box failing the criteria (e.g., F1, F2, etc.).
 - .4 If criteria is not met with either a P (Pass) or F (Fail) a NA (Not Applicable) may be entered with approval from Supervisor, Plant Chemistry or designee.
 - .5 Immediately correct any conditions failing to meet the criteria or inform the Supervisor, Plant Chemistry or designee, for follow-up.
 - .6 Indicate the date and time each location is inspected in the Date/Time (D/T) column.
 - .7 Describe the cause of any failures identified in the COMMENTS section.
 - .8 Describe any actions taken in the CORRECTIVE ACTIONS section.
 - .8.1 If follow-up is required, then document the date of completion on the inspection form.
 - .9 All weekly inspection failures **SHALL** be documented in SAP for trend analysis upon completion of the monthly review.
- 6.1.5 Inspect all oily waste tanks and sumps (Mesa and Units 2/3) weekly using applicable pages of Attachment 4.
 - .1 Record date and time of inspection(s).
 - .2 Report any discrepancies to the Supervisor, Plant Chemistry or designee.
- 6.1.6 Inspect all spill boxes A-G, weekly, and complete the inspection form (Attachment 8):
 - .1 Ensure each box contains the appropriate number of spill stopper(s) and bag(s) of absorbent material.
 - .2 Record SAT/UNSAT findings on Attachment 8.
 - .3 Report any discrepancies to the Supervisor, Plant Chemistry or designee.

- 6.1.7 Conduct weekly inspections of conditionally exempt (CE) tiered permit units using Attachment 3.
 - .1 If the unit appears to be in good working order with no visual deficiencies, then check the "SAT" column. |
 - .2 If deterioration, such as corrosion or leakage, or any condition that could cause the unit to malfunction is identified, then check the "UNSAT" column and document the cause condition and the corrective actions taken in the COMMENTS/CORRECTIVE ACTIONS section.
 - .2.1 If corrective actions cannot be immediately taken, then take the unit out of service, and report the condition to the Supervisor, Plant Chemistry or designee. |
 - .3 Indicate the date and time each unit is inspected in the Date/Time column.
 - .4 If follow-up is required, then document the date of corrective action completion on the inspection form.
- 6.1.8 Inspect acid/caustic sump(s) weekly using Attachment 6.
 - .1 Record date and time of inspection(s).
 - .2 Report any discrepancies to the Supervisor, Plant Chemistry or designee. |
- 6.1.9 Inspect all transformer areas weekly using Attachment 7.
 - .1 Record date and time of inspection(s).
 - .2 Report any discrepancies to the Supervisor, Plant Chemistry or designee. |
- 6.1.10 Upon completion of inspection, sign and date the appropriate inspection forms. |

6.2 Acceptance Criteria For Accumulation/Storage Areas

NOTE

Use Attachment 3.

6.2.1 General Area Inspection

- .1 Ensure phone(s) in designated storage areas are in good working order.
- .2 Ensure absorbent and Emergency Response equipment is present and in good working order in designated waste accumulation areas and storage areas.
- .3 Ensure the general area around and on containers is free of trash, rags, and debris.
- .4 Ensure the area is kept free of drips or spills (visible liquid).
- .5 Ignitable or Reactive waste containers (see Definitions, Attachment 2) **SHALL** be located at least 50 feet inside the Owner Controlled Area.

NOTES

- 1) NO SMOKING signs are not necessary for RMA's, since smoking is forbidden in those areas.
- 2) Inspections and tests of the systems described in Steps 6.2.1.6 through 6.2.1.9 are performed by Environmental/Chemistry. Additional inspections/tests are performed by groups other than Environmental/Chemistry (References 2.2.1, 2.3.5 through 2.3.8).

- .6 Verify fire suppression systems are in good condition (e.g., no leaks or visible corrosion).
- .7 Eyewash stations **SHALL** be located at all storage pads and WAAs.

6.2.1.8 **INSPECT** eyewash stations weekly, if present.

.8.1 Verify eyewash stations:

- Appear to be in a good condition
- Check pressure gauge and proper pressure (e.g., ENCON unit should be within GREEN BAR area; HAWS unit is at 90 psi)
- A pathway to the eye wash station is unblocked

.8.2 On all permanent eyewash stations, verify functionality of eyewash jets and face jets by depressing handle to ensure jets flow with *hands off* for 15 seconds.

.8.3 Use bucket, or cork-and-tube to verify operation of shower flow for five seconds.

.8.4 If any deficiencies exist, then identify location of eyewash.

.9 **Corrective Action:** If eyewash has deficiencies and/or is not operational, then a Notification and/or Order **SHALL** be written, a trouble call made, or replace with an operational unit.

6.2.2 Container Conditions

NOTE

Poor condition of containers may be indicated by bulges, large dents, holes, leaks, severe rust, or any other defects.

.1 Accumulation and storage containers **SHALL** be in good condition.

.2 **Corrective Action:** Containers in poor condition should be placed in recovery, overpack, or salvage drums and/or have their contents transferred to another container.

6.2.3 Container Management

NOTE

For bagged material used for accumulation, ensure no holes are present and ensure the bag top is taped securely closed.

- .1 Only Department of Transportation (DOT)-approved containers **SHALL** be used for storage.
- .1.1 Ensure the United Nations (UN) number is identified on the drum (Reference 2.4.4).
- .2 Containers **SHALL** remain closed except when waste is being added or removed.
- .2.1 Container **SHALL** be locked. This applies to the large roll-off box at the Mesa Hazardous Material pad only.
- .2.2 Funnels without closure devices **SHALL** be removed and bungs secured.
- .3 Containers **SHALL NOT** be opened, handled, or stored in a manner that may cause the container to rupture, leak, or spill.
- .4 All accumulation drums being used for ignitable liquid wastes **SHALL** have a grounding strap and bonding strap readily available.
- .5 If hazardous waste/mixed waste containers are located in an environment susceptible to flooding and standing water, then ensure the containers are elevated on pallets (or equivalent).
- .6 Maintain adequate aisle space (3 feet or greater).

6.2.4 Container Labeling

NOTE

The preferred location for markings and labeling of hazardous waste containers is on the top one-third to one-half of the container side.

- .1 If the top one-third to one-half of the container side is not appropriate/available due to container geometry or storage arrangement, then the markings/labels may be placed in a clearly visible location.

NOTE

All containers under five gallons **SHALL** be consolidated or lab packed into a larger container.

- 6.2.4.2 All waste containers for final disposal **SHALL** be marked or labeled, using a permanent pen, with the following:
- .2.1 The words Hazardous Waste
 - .2.2 Generator name and address:
 - San Onofre Nuclear Generating Station
 - P.O. Box 128, Pacific Coast Highway
 - 5000 Pacific Coast Highway
 - San Clemente, CA. 92674
 - .2.3 Environmental Protection Agency ID:
 - # CAD000630921
 - .2.4 A description of the contents
 - .2.5 The accumulation start date
 - .2.6 The storage start date, if being stored
 - .3 Mixed waste **SHALL** be labeled per SO123-VII-20.11.1 and SO123-VII-8.1.14.
 - .4 The appropriate DOT hazard label **SHALL** be added to each container prior to shipment off site per SO123-IX-2.202.
 - .5 Hazardous materials should have their original shipping and warning labels affixed and/or a Safety Data Sheet (SDS) attached.
 - .5.1 If not, the container(s) and contents **SHALL** be evaluated for disposal as a hazardous waste.
 - .6 National Fire Protection Association (NFPA) labels may also be used in conjunction with hazardous waste or mixed waste labels to aide in drum identification.

6.2.5 Waste Accumulation and Accumulation/Storage Start Dates

- .1 Satellite accumulation area wastes may be accumulated for up to one year from the accumulation start date (i.e., 270 days accumulation and 90 days storage).
- .2 The quantity limitation at each satellite accumulation area is 55 gallons of each waste type or one quart of extremely hazardous waste (see Definitions, Attachment 2).

NOTE

NRC commitments in Restricted Areas require that waste is considered radioactively contaminated until proven otherwise.

- .3 The storage start date is assigned within 72 hours (three days) of an accumulation container becoming full or when it is transferred from a satellite accumulation area to a Waste Accumulation Area.
- .3.1 A drum within a waste accumulation area **SHALL** have the accumulation start date and the storage date written on the label.
- .4 In the Protected Areas or North Industrial Area, a waste container of 55 gallons or more, filled or having reached the 270-day accumulation limit, **SHALL** be moved to a Waste Accumulation Area for radioactive sampling and then to the appropriate storage area.
- .4.1 Environmental personnel **SHALL** request Radiation Protection (RP) to sample containers in a Waste Accumulation Area in a timely manner.
- .5 In non-restricted areas, a 55-gallon container, filled or having reached the 270 day accumulation limit, **SHALL** be moved to a storage area and assigned a storage start date within three days.

NOTES

- 1) Batch Plant storage areas may serve as storage and/or accumulation areas.
- 2) Some mixed waste stored at the South Yard Facility (SYF) Batch Plant Mixed Waste Storage Area may not be disposed of due to the radiological/hazardous properties associated with the waste and the lack of treatment (See Definitions, Attachment 2) facilities.

- .6 Hazardous waste stored at the Batch Plant-West (non-radiological) Hazardous Materials Pad **SHALL** be disposed of in 90 days or less from the storage start date.
- .6.1 **Corrective Action:** Immediately notify the Supervisor, Plant Chemistry or designee of any containers nearing the 90-day storage limit.

6.2.6 Compatibility

- .1 Containers **SHALL** be constructed of materials that will not react with the waste to be stored, so the ability of the container to contain the waste is not impaired.

EXAMPLE: Do not store corrosives in metal containers.

- .2 Hazardous wastes **SHALL NOT** be placed in an unwashed container that previously held an incompatible waste or material.
- .3 Incompatible wastes **SHALL NOT** be mixed together (see SO123-XV-18).
- .4 Incompatible wastes **SHALL** be stored in areas separated by dikes, berms, walls, or secondary containers to prevent the potential for adverse reactions.

6.2.7 Security

- .1 Storage Area and Waste Accumulation Area walls and fences **SHALL** be in good repair with functioning gates and locks.

NOTE

Signage is not required at satellite accumulation areas.

- .2 Storage Areas and Waste Accumulation Areas **SHALL** have appropriate signage posted at each entrance, and at any other locations that can be seen from any approach (see Attachment 1).
- .3 Storage areas not in use do not require some signage to be posted. Supervisor, Plant Chemistry or designee, **SHALL** be notified of signage is not present, or is not necessary.

6.2.8 Containment Systems

- .1 Hazardous waste storage areas **SHALL** have a containment system free of cracks and gaps to contain leaks, spills, and accumulated precipitation per Reference 2.1.1.
- .2 Inspect the sump to the following criteria:
- .2.1 If any liquid exists, then note in comment section of Attachment 3 (i.e., rainwater or spill).
- .2.2 During the rainy season (October 1 - May 31), any amount over two inches of rainwater **SHALL** be considered a failure.
- .2.3 Any spilled hazardous waste **SHALL** be considered a failure and **SHALL** be removed as soon as practical.
- .2.4 During the dry season (June 1 - September 30), ANY liquid found **SHALL** be considered a failure.

6.2.8.3 General Containment

- .3.1 All temporary or permanent tanks and drums containing petroleum products (waste or material) equal to or greater than 55 gallons **SHALL** have secondary containment. (Temporary movement of drums from one area to another does not require secondary containment. (Reference 2.3.9)
- .4 If found, remove any spilled or any leaked waste and accumulated precipitation from the sump in a timely manner to prevent overflow and to return the containment to its designed capacity.
- .5 If used, remove any spilled or any leaked waste and accumulated precipitation from the spill containers in a timely manner to prevent overflow and to return the containment to its designed capacity.

6.3 **Review**

- 6.3.1 Completed inspection forms (Attachments 3 through 8) **SHALL** be Reviewed/Approved by the Supervisor, Plant Chemistry or designee.

7.0 **RECORDS**

- 7.1 Copies of the inspection forms **SHALL** be retained for three years.
- 7.2 Original inspection forms (Attachments 3 through 8) **SHALL** be transmitted to Records Management for retention annually.

SECURITY SIGNS

The following signs should be present per References 2.1.1, 2.4.2, and SONGS regulations.

For Hazardous Waste Storage Areas:

**DANGER
HAZARDOUS WASTE AREA
UNAUTHORIZED PERSONNEL KEEP OUT
ZONA DE RESIDUOS PELIGROSOS
PROHIBIDA LA ENTRADA A PERSONAS NO**

**DANGER
FLAMMABLES
NO SMOKING**

**WARNING
THIS AREA CONTAINS CHEMICALS KNOWN TO THE
STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH
DEFECTS, AND/OR OTHER REPRODUCTIVE HARM
CALIFORNIA HEALTH AND SAFETY CODE § 25249.6**

**EMERGENCY
EMERGENCY DIAL 86911 FIRE MEDICAL SECURITY**

**NOTICE
RESTRICTED AREA
AUTHORIZED PERSONNEL ONLY
PRIOR TO ENTRY CALL HAZMAT
IN CASE OF FIRE OR EMERGENCY CALL 86-911**

EMERGENCY EYE WASH STATION

SECURITY SIGNS (Continued)

Additional signs for Mixed Waste Storage Area (Batch Plant)/Multi-Purpose Handling Facility (MPHF):

**MIXED WASTE STORAGE AREA
AUTHORIZED PERSONNEL ONLY
CONTACT HAZMAT AND RP
BETWEEN
0700-1530 M-F PRIOR TO ENTRY**

**WARNING
THIS AREA CONTAINS RADIONUCLIDES KNOWN TO THE
STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH
DEFECTS, AND/OR OTHER REPRODUCTIVE HARM
CALIFORNIA HEALTH AND SAFETY CODE § 25249.6**

DEFINITIONS

Extremely Hazardous Waste - Any hazardous waste or mixture of hazardous wastes which, if human exposure should occur, may likely result in death, disabling personal injury or serious illness caused by the hazardous waste or mixture of hazardous wastes because of its quantity, concentration, or chemical characteristics.

Hazardous Waste - A waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may either:

- A. Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.
- B. Pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

Ignitable Liquid - A liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has a flash point less than 60°C (140°F), per a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80, etc. (Reference 2.1.1)

Mixed Waste - Mixed waste is defined as a chemical/material having hazardous properties, established by designated criteria and is also radiologically contaminated (low level) with licensed radioactive material (US Code of Federal Regulations, Title 40, Protection of Environment).

Primary Storage Area - The holding of hazardous waste for a temporary period (90 days), at the end of which the hazardous waste is sent to an appropriate treatment storage and/or disposal facility. Mixed waste is stored until suitable treatment, storage, and disposal facilities are available.

Reactive Waste - A waste is considered reactive if it has any of the following properties:

- Normally unstable and readily undergoes violent change without detonating.
- Reacts violently with water.
- Forms potentially explosive mixtures with water.
- When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

DEFINITIONS (Continued)

Reactive Waste - Continued

- A cyanide or sulfide bearing waste which, when exposed to pH conditions between two and 12.5, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
- Capable of detonation or explosive reaction if subjected to a strong initiating source or if heated under confinement.
- Readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.
- A forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53 or a Class B explosive as defined in 49 CFR 173.88. (Reference 2.1.1)
- The EPA Hazardous Waste Number of D003.

Satellite Accumulation Area - An area where generators of hazardous waste accumulate their waste prior to moving it to a Waste Accumulation Area. Accumulated wastes located in the Protected Area must go to the appropriate Waste Accumulation Area for radiological sampling prior to being moved to a primary storage area.

Tier Permits - A five-tiered program for authorizing hazardous waste treatment and/or storage at businesses required to have state authorization to treat or store hazardous waste but do not require a hazardous waste facility permit under Federal law.

Treatment - Any process or method designed to change the character or composition of a hazardous waste.

Waste Accumulation Area - An area for accumulated wastes to be held while Radiation Protection samples for radiological contamination. Once Radiation Protection has given sample results to Environmental/Chemistry personnel, hazardous waste/mixed waste containers may be moved to appropriate primary storage area, if samples permit movement.

ACCUMULATION/STORAGE AREAS INSPECTION FORM

FREQUENCY: Daily or Weekly

Indicate PASS (P) or FAIL (F) for each criteria in the appropriate box. Indicate the date and time each location is inspected in the D/T column. Record reason for any FAIL in the COMMENTS section and any actions taken in the CORRECTIVE ACTIONS section. An N/A (not applicable) may only be used with approval from the Supervisor, Plant Chemistry or designee.

LOCATION	6.2.1	6.2.2	6.2.3	6.2.4	6.2.5	6.2.6	6.2.7	6.2.8	D/T	PERFORMED BY: INSPECTOR
North Industrial Area Accumulation								N/A		

COMMENTS/CORRECTIVE ACTIONS: _____

PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
 Supervisor, Plant Chemistry or designee

ACCUMULATION/STORAGE AREAS INSPECTION FORM (Continued)

FREQUENCY: Daily or Weekly

Indicate PASS (P) or FAIL (F) for each criteria in the appropriate box. Indicate the date and time each location is inspected in the D/T column. Record reason for any FAIL in the COMMENTS section and any actions taken in the CORRECTIVE ACTIONS section. An N/A (not applicable) may only be used with approval from the Supervisor, Plant Chemistry or designee.

LOCATION	6.2.1	6.2.2	6.2.3	6.2.4	6.2.5	6.2.6	6.2.7	6.2.8	D/T	PERFORMED BY: INSPECTOR
PA Radwaste Waste Accumulation Area (Truck Bay)										

TIERED PERMIT UNITS INSPECTION

NOTE: On tiered permit units out of service, the inspection will be marked SAT with a note indicating status.

CE UNIT	DESCRIPTION	SAT	UNSAT	D/T	PERFORMED BY: INSPECTOR
U2-5	Reactor Lab-Units 2/3				

COMMENTS/CORRECTIVE ACTIONS: _____

PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
 Supervisor, Plant Chemistry or designee

ACCUMULATION/STORAGE AREAS INSPECTION FORM (Continued)

FREQUENCY: Daily or Weekly

Indicate PASS (P) or FAIL (F) for each criteria in the appropriate box. Indicate the date and time each location is inspected in the D/T column. Record reason for any FAIL in the COMMENTS section and any actions taken in the CORRECTIVE ACTIONS section. An N/A (not applicable) may only be used with approval from the Supervisor, Plant Chemistry or designee.

LOCATION	6.2.1	6.2.2	6.2.3	6.2.4	6.2.5	6.2.6	6.2.7	6.2.8	D/T	PERFORMED BY: INSPECTOR
PA Waste Accumulation Area										
K-10 Shop (South Services Building)							N/A	N/A		

TIERED PERMIT UNITS INSPECTION

NOTE: On tiered permit units out of service, the inspection will be marked SAT with a note indicating status.

CE UNIT	DESCRIPTION	SAT	UNSAT	D/T	PERFORMED BY: INSPECTOR
U2-6	Turbine Lab-Units 2/3				

COMMENTS/CORRECTIVE ACTIONS: _____

PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
 Supervisor, Plant Chemistry or designee

ACCUMULATION/STORAGE AREAS INSPECTION FORM (Continued)

FREQUENCY: Daily or Weekly

Indicate PASS (P) or FAIL (F) for each criteria in the appropriate box. Indicate the date and time each location is inspected in the D/T column. Record reason for any FAIL in the COMMENTS section and any actions taken in the CORRECTIVE ACTIONS section. An N/A (not applicable) may only be used with approval from the Supervisor, Plant Chemistry or designee.

LOCATION	6.2.1	6.2.2	6.2.3	6.2.4	6.2.5	6.2.6	6.2.7	6.2.8	D/T	PERFORMED BY: INSPECTOR
Switchyard										
South Yard Facility Areas							N/A	N/A		
SYF/Batch Plant Haz Waste Pad/West										

TIERED PERMIT UNITS INSPECTION

NOTE: On tiered permit units out of service, the inspection will be marked SAT with a note indicating status.

CE UNIT	DESCRIPTION	SAT	UNSAT	D/T	PERFORMED BY: INSPECTOR
OCA-1	Batch Plant Drum Crusher				

COMMENTS/CORRECTIVE ACTIONS: _____

PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
 Supervisor, Plant Chemistry or designee

ACCUMULATION/STORAGE AREAS INSPECTION FORM (Continued)

FREQUENCY: Daily or Weekly

Indicate PASS (P) or FAIL (F) for each criteria in the appropriate box. Indicate the date and time each location is inspected in the D/T column. Record reason for any FAIL in the COMMENTS section and any actions taken in the CORRECTIVE ACTIONS section. An N/A (not applicable) may only be used with approval from the Supervisor, Plant Chemistry or designee.

LOCATION	6.2.1	6.2.2	6.2.3	6.2.4	6.2.5	6.2.6	6.2.7	6.2.8	D/T	PERFORMED BY: INSPECTOR
SYF/Batch Plant Mixed Waste Storage Area										
Multipurpose Handling Facility (LSAW)										
Multipurpose Handling Facility (HSAW)										

COMMENTS/CORRECTIVE ACTIONS: _____

PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
 Supervisor, Plant Chemistry or designee

ACCUMULATION/STORAGE AREAS INSPECTION FORM (Continued)

CONTINUATION SHEET

COMMENTS/CORRECTIVE ACTIONS: _____

PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____

Supervisor, Plant Chemistry or designee

OILY WASTE TANK(S), SEPARATOR(S), AND/OR SUMP(S) INSPECTION FORM

FREQUENCY: WEEKLY

LOCATION: UNITS 2/3

PURPOSE: To determine content level of:

- (A) the waste oil collection sump located by the North East corner of B68
- (B) the waste oil tank, and Flocculator located on the west road by Unit 3 Intake

INSPECTION:

- (A) (1) Determine approximate level of oil (by using the depth vs. volume scale) in the waste oil collection sump. Location of the scale is inside the sump. Maximum waste oil capacity for the sump is 10,500 gallons.
- (2) Ensure an oil boom or pad is in place within the effluent section. (If Separator is not in service, oil boom is not required.)

Level of oil _____ gal. _____ ft. Replaced Boom: Yes ___ No ___

Boom in place: SAT _____ UNSAT _____ Boom Tag # _____

Date _____ Time _____ of Inspection

Corrective Action: If the level of oil is five feet or greater, and/or an oil boom or pad is not satisfactory (e.g., falling apart, missing or anything that would prevent it from performing its primary function), then notify the Supervisor, Plant Chemistry or designee. If UNSAT, pump the sump as soon as possible, and/or replace boom and document in section.

- (B) (1) Lift cover and count the number of ladder rungs showing above the liquid's surface. Use fractions to determine levels between rungs (i.e., 2-1/2 rungs or 3 rungs showing). Maximum waste oil capacity for the tank is 4000 gallons.
- (2) Ensure an oil boom or pad is in place within the effluent section of Flocculator and no foreign material in effluent channel.

Number of Rungs Showing: _____ Replaced Boom: Yes ___ No ___

Boom in place: SAT _____ UNSAT _____ Boom Tag # _____

Date _____ Time _____ of Inspection

Corrective Action: If one rung or less is showing, the tank is filled 80% or greater, and/or an oil boom or pad is not satisfactory (e.g., falling apart, missing or anything that would prevent it from performing its primary function), then notify the Supervisor, Plant Chemistry or designee. If UNSAT, pump the tank as soon as possible and/or replace boom, remove foreign material and write NN.

INSPECTION PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
Supervisor, Plant Chemistry or designee

PLANT MEDICAL OFFICES BIOHAZARD INSPECTION FORM

FREQUENCY: WEEKLY

LOCATION(s): D1P Plant AWS Medical

PURPOSE: To verify the presence of biohazard labels, symbols, and generators name and address.

INSPECTION:

LOCATION/OIL CAPACITY	LABELS AND SYMBOLS PRESENT ON SHARPS CONTAINERS AND RED BAGS?	GENERATORS NAME & ADDRESS ON SHARPS CONTAINERS, RED BAGS, AND COLLECTION CONTAINERS *	GENERAL INSPECTION: SEALED OR LEAKING? P / F	DATE - TIME	PERFORMED BY: INSPECTOR
D1P					

* Notify the Supervisor, Plant Chemistry or designee of any corrective action taken.

Corrective Action: If labels, symbols, or generator name and address are not on sharps containers, red bags, or trash receptacles, then label accordingly and notify supervision.

COMMENTS: _____

PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
Supervisor, Plant Chemistry or designee

Reference SO123-XV-17.2

ACID/CAUSTIC SUMP(S) INSPECTION FORM

FREQUENCY: WEEKLY

LOCATION: UNITS 2/3 9' LEVEL WEST ROAD

PURPOSE: To determine approximate depth and pH level of liquid in the acid/caustic sumps.

INSPECTION: Visually inspect sump(s) for liquid level and ensure pH level is greater than two and less than 12.5. (If no liquid, no PH is required.)

Corrective Action: If depth of liquid exceeds two inches and/or if pH level is less than 2 or greater than 12.5, then notify the Supervisor, Plant Chemistry or designee.

U-2 Acid Sump	U-2 Caustic Sump	U-3 Acid Sump	U-3 Caustic Sump
Depth: _____	Depth: _____	Depth: _____	Depth: _____
pH: _____	pH: _____	pH: _____	pH: _____
Date: _____	Date: _____	Date: _____	Date: _____
Time: _____	Time: _____	Time: _____	Time: _____

COMMENTS: _____

INSPECTION PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
 Supervisor, Plant Chemistry or designee

TRANSFORMER/GENERATOR/BERM INSPECTION FORM

LOCATION	FREQUENCY	DATE	TIME	SAT/UNSAT
Reservoir Transformers	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
Microwave Transformer	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
South Yard Facility Transformers	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
MPHF Transformer	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
K-50 Transformer	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
AWS Roof Top (south side)	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
Other:	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
	Weekly			<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT

Purpose: To determine the presence of liquid within the bermed areas.

Inspection: Visually inspect the liquid for oil content.

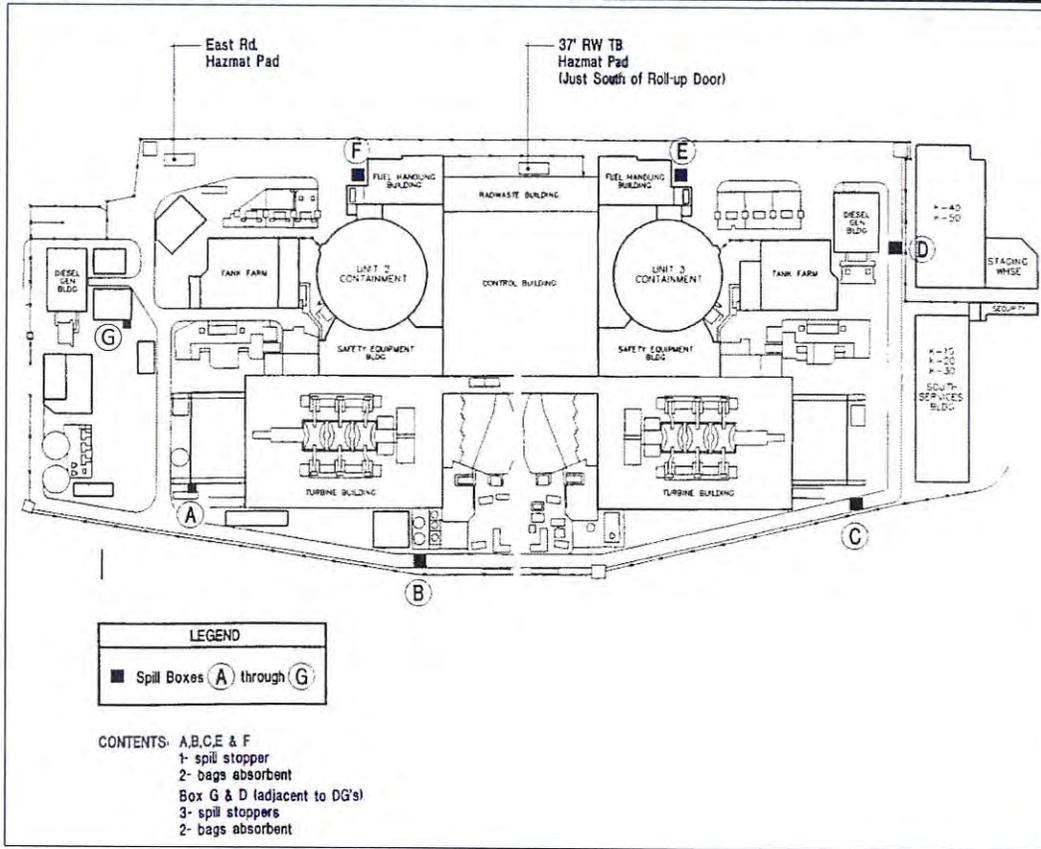
Corrective Action: If no contents found in the berm, mark "SAT." If contents are rainwater, note in comments section the depth and that there is no presence of oil. Drain the contents and mark "SAT." If oil is present, mark "UNSAT" and contact Supervisor, Plant Chemistry or designee.

COMMENTS/CORRECTIVE ACTIONS: _____

INSPECTION PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____
 Supervisor, Plant Chemistry or designee

UNITS 2/3 SPILL BOXES LOCATIONS AND INSPECTION FORM



SPILL BOX	LOCATION	SPILL STOPPER			ABSORBENT BAGS		DATE/TIME	PERFORMED BY: INSPECTOR
		IN USE (✓)	SAT	UNSAT	SAT	UNSAT		
A	N.W. Crane Bay Area							
B	Lube Area							
C	S. Seawall Area							
D	U-3 DG Bldg.							
E	U-3 Fuel Handling Bldg.							
F	U-2 Fuel Handling Bldg.							
G	U-2 Tank Farm							

NOTE: Spill boxes may be approximately 100 feet from locations shown on map above.

FREQUENCY: Weekly

Corrective Actions/Comments: _____

PERFORMED BY: _____ DATE _____

APPROVED BY: _____ DATE _____

Supervisor, Plant Chemistry or designee

DEVELOPMENTAL RESOURCES

Procedures

SO123-VII-20.11, Access Control Program

SO123-IX-2.201, Hazardous Materials/Waste/Mixed Waste Storage Areas

SO123-IX-2.208, Hazardous Waste and Emergency Response Training Program

SO123-XVI-15, Chemical Handling and Storage Guidelines

SUMMARY OF CHANGES

SO123-IX-2.206, REV 15

Author: J. Steven PAX: 89219 Location: D4D

NN, Order, or Other Action	Description of Change	50.59	Step, Section, Attachment or Page
202617882	References to building B66 removed	DNA	Attachment 3
203063159	Titles updated		Throughout
	Remove steps/sections referencing Mesa		Throughout
	Changed Reviewed by to Performed By for signoffs throughout		Throughout
	Change operability to functionality		9
	Remove step for conducting weekly inspection of conditionally authorized tiered permitting unit		7
	Remove inspection location for Maintenance Lube Oil Area and South B-43, AWS Building, CDM, South Yard Facility, Oil Process MWU, N-54		21, 22, 23, 28
	Add replaced boom yes/no to inspection		25
Betterment	Change QA to L1QA to match SAP attribute		1
Reviewer Comment Syef Hoque	Remove step for reporting to chemistry and creating notification for containers not having a consumable label during inspections		7

Document Reviewers	Organization
B. Churchill	NOD
S. Hoque	Chemistry
B. Metz	Environmental

Attachment 5-2

WASTE HANDLING EQUIPMENT LIST

WASTE HANDLING EQUIPMENT LIST

EQUIPMENT	SAFETY FEATURES
Forklifts	Equipped with seat belts, and roll-over protection devices
Ramps	Not applicable
Double diaphragm pumps	Not applicable
Trucks (stake bed, etc)	Equipped with seat belts
Overpacks	Not applicable
Lighting	Emergency lighting is available in the area if required. Normal operations in the areas take place during daylight hours.

Attachment 5-3

EMERGENCY EQUIPMENT LIST

EMERGENCY EQUIPMENT LIST

EQUIPMENT	SAFETY FEATURES
Safety shower	Used in case of emergency
Portable eye wash	Used in case of emergency
Grounding straps	Disipates static electricity and reduces explosion hazards
Explosimeter	Measures oxygen and volatile hydrocarbon concentrations
Particulate air sampler	Monitor atmospheric contaminants in a controlled work area
Monitoring equipment	Use in case of emergency
Polyethylene funnels	Used for splash protection
Manual and/or electric drum deheader	Non-sparking blades
Flashlights	Allows visual observation of drums contents
Polyethylene syphon and PVC hand pumps	Transport liquids providing a wide range of chemical compatibility
Drum upender	Provides a leverage when lifting containers



UNITED STATES MARINE CORPS
1000 14th Street, Washington, DC 20390
ATTENTION: PUBLIC AFFAIRS OFFICER
P.O. BOX 12118
ST. PETERSBURG, FL 33733

MEMORANDUM OF AGREEMENT
BETWEEN
THE SOUTHERN CALIFORNIA EDISON COMPANY SAN Geronimo
NUCLEAR GENERATING STATION
AND
THE UNITED STATES MARINE CORPS CAMP PENDLETON
FIRE DEPARTMENT

M32214-20140818-0075-1

This is a Memorandum of Agreement (MOA) between the Southern California Edison Company San Geronimo Nuclear Generating Station (SCE SONGS) and the United States Marine Corps Camp Pendleton Fire Department (USMC CPFD). When referred to collectively, SCE SONGS and USMC CPFD are referred to as the "Parties."

I. BACKGROUND

1.1. The SONGS facility, which is the subject of this MOA, resides on Marine Corps Base, Camp Pendleton, CA.

1.2. On June 9, 2008, the Parties entered into a Mutual Aid Assistance Agreement (MAAA), reflecting the Parties' agreement to provide aid to each other in the area of emergency services, which includes fire, emergency medical services (EMS), hazardous materials emergency response, and rescue.

1.3. In June 2013, SCE submitted a Certification of Permanent Cessation of Power Operations to the U.S. Nuclear Regulatory Commission (NRC), certifying the permanent cessation of power operations of SONGS.

1.4. As a result of ceasing power operations at SONGS, SCE has begun decommissioning of SONGS, the SONGS organizational and operational structure has changed, and SONGS personnel will not be able to perform several tasks presently stated in the June 2008 MAAA.

1.5. This MOA takes account of the current changes to SONGS organizational and operational structure, and supersedes and replaces the June 2008 MAAA, as described herein.

2. PURPOSE: Pursuant to this MOA, the USMC CDFC (including Emergency Medical Services/ EMS) hereby agrees, for good and sufficient consideration separately provided to USMC, to provide assistance to support the SCE SONGS nuclear plant's Emergency Plan, including the assistance expected to be provided in the event of an emergency. For purposes of this MOA, an emergency includes, but is not limited to, a radioactive release, hostile action, large scale fire or natural disaster (e.g., hurricane, tornado, earthquake or flooding), as may be more specifically described in the State and local emergency plans.

Assistance requests will be communicated from the SCE SONGS operations group/command center and/or on-site incident commander/fire brigade leader, to the Camp Pendleton Emergency Communications Dispatch Center.

3. RESPONSIBILITIES OF THE PARTIES

3.1. SCE SONGS will-

3.1.1. Ensure that there is a minimum of two incident fire brigade members on shift at all times 24 hours a day/7 days a week. At least one fire brigade member will be trained in understanding plant lay out, Pre-Fire Plan usage, mitigation strategies, ventilation systems and the locations of on-site radioactive material to provide initial direction to USMC CDFC response.

3.1.2. Provide a live fire roll over box to USMC CDFC. This live fire roll over box will be made available to SCE SONGS for additional/continued fire brigade drills as deemed necessary by SCE SONGS, for training evolutions.

3.1.3. Maintain and provide the foam notes and trailers (2), to be utilized at SCE SONGS for a large accelerant fire application, until the removal of transformer oil and diesel generator fuel.

3.1.4. Maintain and/or provide a fire suppression system including but not limited to a water source and connection point(s) to assist in normal fire suppression activities.

3.1.5. Maintain the Pre-fire Plans at SCE SONGS and provide updated versions to the Pre-fire Plans on a regular basis.

3.1.6. Offer and assist/engage with the offsite agency to participate/perform in a fire drill and/or Pre-Fire Plan walk downs; at least annually.

3.1.7. Provide training in site familiarization, radiation, mitigation strategies, and Pre-Fire Plans.

3.3. USMC CPFD will: Provide assistance to support the SCE SONGS nuclear plant's Emergency Plan, including the assistance expected to be provided in the event of an emergency. For purposes of this MOA, an emergency includes, but is not limited to, a radioactive release, hostile action, large scale fire or natural disaster (e.g., hurricane, tornado, earthquake or flooding), as may be more specifically described in the State and local emergency plans.

In the event of an emergency, the USMC CPFD agrees that the assistance expected to be provided by the Camp Pendleton Fire Department includes, but is not limited to:

- providing fire suppression
- providing search and rescue services
- responding and rendering assistance to affected parties, including responding to emergency calls for specialized services (e.g., hazardous materials handling and extrication and technical rescues that include confined spaces, high angle, below grade, swift water, trench and collapse)
- performing salvage operations
- providing back up route alerting
- providing decontamination services (including radiological and hazardous material)
- providing emergency lifesaving care to people who are seriously ill or injured, including contaminated injuries
- transporting patients to designated care facilities
- operating ambulances and quick response vehicles to support the foregoing activities
- other mitigation strategies/activities; such as providing fire pump/apparatus operation to maintain spent fuel pool inventory or fog patterns to prevent radioactive plumes
- respond with a goal of less than 30 minutes after notification from SCE SONGS

The USMC CPFD agrees that any resources or equipment expected to provide assistance will be maintained in a state of readiness suitable to support an emergency at the nuclear plant. If any such resources or equipment are damaged or destroyed in the course of the USMC CPFD providing assistance during an emergency at the nuclear plant, SCE SONGS agrees to reimburse USMC CPFD for repair or replacement costs.

In addition, the USMC CPFD agrees to acquire and retain knowledge of, and make its personnel aware of, any unusual hazards, characteristics, or features of the nuclear plant that are relevant in providing assistance to the nuclear plant. Subject to availability, the USMC

CPFD agrees to participate in training, drills and exercises when requested by SCE SONGS.

3.2. Both parties will agree to acquire and retain knowledge of, and make its personnel aware of, any unusual hazards, characteristics, or features of the nuclear plant that are relevant in providing assistance to the nuclear plant. The USMC CPFD agrees to participate in fire drills and/or pre fire plan walk downs; at least annually.

4. PERSONNEL: Each Party is responsible for all costs of its personnel, including pay and benefits, support, and travel. Each Party is responsible for supervision and management of its personnel. Exception shall be in accordance with paragraph 6.2.1.

5. GENERAL PROVISIONS

5.1. POINTS OF CONTACT: The following points of contact (POC) will be used by the Parties to communicate in the implementation of this MOA. Each Party may change its point of contact upon reasonable notice to the other Party.

5.1.1. For SCE SONGS-

5.1.1.1. SCE SONGS Plant Manager: (408) 398-9078

5.1.1.2. SCE SONGS Fire Marshal: (49) 398-7311

5.1.2. For USMC CPFD-

5.1.2.1. Fire Chief Camp Pendleton Fire Department:
(760) 390-2761

5.1.2.2. Deputy Fire Chief Camp Pendleton Fire Department:
(760) 390-2702

5.2. CORRESPONDENCE: All correspondence to be sent and notices to be given pursuant to this MOA will be addressed, if to SCE SONGS, to-

5.2.1. Southern California Edison Company, San Onofre
Attn: Plant Manager
5000 Pacific Coast Highway
P.O. Box 128 D4E
San Clemente, CA 92674

and, if to USMC CYFD, to-

5.2.2. USMC Camp Pendleton Fire Department Headquarters
Attn: Fire Chief
22121 Vandegrift Blvd.
P.O. Box 555211
Camp Pendleton, CA 92055-5211

or as may from time to time otherwise be directed by the Parties.

5.3. REVIEW OF AGREEMENT: This MOA will be reviewed by the Parties whenever a request is made by either Party based on a change in circumstances related to such Party's ability to meet its obligations hereunder.

5.4. MODIFICATION OF AGREEMENT: This MOA may only be modified by the written agreement of the Parties, duly signed by their authorized representatives.

5.5. DISPUTES: Any disputes relating to this MOA will, subject to any applicable law, Executive Order, Directive, or instruction, be resolved by consultation between the Parties.

5.6. TERMINATION OF AGREEMENT: This MOA may be terminated by either Party by giving at least 180 days written notice to the other Party provided that termination by USMC requires that SCE and USMC agree to a replacement response plan. The MOA may also be terminated at any time upon the mutual written consent of the Parties.

5.7. TRANSFERABILITY: This Agreement is not transferable except with the written consent of the Parties. Notwithstanding the prior sentence, SCE may assign this Agreement, without prior consent, to any entity that may be created or designated by SCE to oversee the Decommissioning of SONGS, provided such entity agrees to perform the obligations assumed by SCE herein.

5.8. ENTIRE AGREEMENT: It is expressly understood and agreed that this MOA embodies the entire agreement between the Parties regarding the MOA's subject matter and that this MOA is intended to be legally binding and that each Party acknowledges the consideration provided to each is sufficient for this MOA to be regarded as legally binding on both Parties hereto.

5.9. EFFECTIVE DATE: This MOA takes effect beginning on the day after the last Party signs.

5.10. EXPIRATION DATE: This Agreement will be reviewed every three (3) years per MCC P-11000.11 and will continue in effect, with any modifications that may be agreed to by the Parties, until the agreement is terminated pursuant to paragraph 5.6.

5.11. CANCELLATION OF PREVIOUS AGREEMENT: This MOA hereby and supersedes the previously signed agreement between the same parties with the subject, Mutual Aid Assistance Agreement, effective date of June 9, 2009.

6. FINANCIAL DETAILS

6.1. AVAILABILITY OF FUNDS: This MOA does not document the obligation of funds between the two Parties. Accordingly, SCE is responsible for all of the costs associated with MCINVEST-MCB CAMPEN provision of goods and services under this MOA. Additionally SCE attests that funding is available to pay for the requested support.

6.2. BILLING

6.2.1. MCINVEST-MCB CAMPEN Fire & Emergency Services (FES) will bill Southern California Edison (SCE) for goods and/or services rendered 30 calendar days after performance occurrence.

6.2.2. To the extent that costs to MCINVEST-MCB CAMPEN are increased as a result of support provided to the SCE, such costs will be borne by SCE, i.e. when overtime work is required to meet the demand of the required services being provided.

6.2.3. Invoices shall be sent to:

Southern California Edison Company
Accounts Payable Division
P.O. Box 700
Rosemead, CA 91770

6.3. PAYMENT OF BILLS: The payment due date is 30 calendar days from the date of the invoice. SCE will forward payment, to MCINVEST-MCB CAMPEN.

6.4. Checks will be made payable to the U.S. Treasury and sent to the following address.

Commanding General
Attn: AC/S G-8/Budget Office
Box 555011 Bldg 1160 Room 273
Camp Pendleton, CA 92055-5011

6.5. FINANCIAL POINT OF CONTACTS. The following are the financial point of contacts (POC) to be used by the Parties to communicate in the implementation of the financial details of this MOA. Each Party may change its POC upon reasonable notice to the other Party.

Section 6.0
CONTINGENCY PLAN

Section 6.0

CONTINGENCY PLAN

6.1 CONTINGENCY PLAN

The primary emergency response plan for the plant is the San Onofre Nuclear Generating Station Units 2, and 3 Permanently Defueled Emergency Plan (PDEP), which satisfies all NRC requirements.

The Contingency Plan describes the responsibilities and the actions which are taken to minimize hazards to human health or to the environment from any fires, explosions, or unplanned sudden or non-sudden release of hazardous waste, from a permitted unit to the air, soil, or surface water. It also describes reporting requirements following a release and corrective action to avoid reoccurrence. The Contingency Plan (General Procedure S0123-XV-17.3) is supplemented by the Hazardous Materials Emergency Response Protocol (S0123-IX-2.210). Plant and vendor personnel are trained to use these procedures in an actual emergency.

The operating procedures comply with several environmental regulations including, but not limited to 22 CCR 66264 Article 4, 8 CCR 5192, and HSC 25504. In accordance with 22 CCR 66264.52(b), these plans are included by reference to be part of this Application. The procedure for a permit modification (22 CCR 66270.42 and as further defined in Appendix I) will be followed if changes are made to the Contingency Plan which affect the mixed waste storage areas or this Application. Changes or revisions to the operating procedures, which do not affect the content of the Permit, will not constitute a modification of the Hazardous Waste Facility Permit.

The Contingency Plan is being revised, if necessary, under the following conditions:

- Applicable regulations or the facility permit are revised;
- Improvements are identified following implementation;
- There are critical complications in implementing the plan;
- The facility changes in design construction, operation or maintenance that could adversely impact emergency response;
- Changes occur in land use, road configurations, available technology, or response capabilities;
- The list of Emergency Coordinators/Alternates changes;
- The list of emergency equipment changes substantially; or,
- The biennial review cycle is implemented through the normal procedural process.

6.2 Responsibilities of the Emergency Coordinator

The Primary Emergency Coordinator is the Environmental Manager. This role is also currently filled by the Operations Shift Supervisor; or designee, since all emergency notifications are reported to the control room. The names of the primary and alternate Emergency Coordinators, and their addresses and phone numbers (office and home) are provided on the call out list in the Spill Contingency Plan (General Procedure S 0123-XV-17.3).

6.1.1 Role of the Emergency Coordinator

The Emergency Coordinator at SONGS is thoroughly familiar with the Contingency Plan, operations of the mixed waste storage areas, the locations and characteristics of wastes generated at the plant, the layout of the plant, and the locations of hazardous waste records. These personnel acquire and review this knowledge through the training program and through performing their normal job duties. The Emergency Coordinator has the authority to commit the resources needed to carry out the Contingency Plan. During an emergency, the Emergency Coordinator ensures that reasonable measures are initiated to control or contain fires, explosions, and that releases do not occur, recur, or spread to other locations at the facility. These measures include, where applicable, stopping processes and operations, collecting and containing hazardous or mixed waste, and removing or isolating containers.

6.1.2 Availability of the Emergency Coordinator

The primary and alternate Emergency Coordinator(s) are normally available on-site during regular business hours, 0600 a.m. to 4:00 p.m. Monday through Thursday. Since the power plant is manned 24 hours per day, 365 days per year, the Emergency Coordinator(s) are available on a "call out" basis at all times. In the absence of the Emergency Coordinator, the Operations Shift Supervisor, or designee, will be responsible for initiating and conducting emergency response activities at the facility until the Emergency Coordinator is contacted. These personnel are available via callback, 24 hours per day, 365 days per year. They have been trained in emergency response procedures and are thoroughly familiar with the decommissioning plant operations.

6.2 Emergency Procedures

6.2.1 Notification

Once control of the release or threatened release and emergency medical measures has been taken, the Emergency Coordinator, Operations Shift Supervisor or designee will determine what notifications are necessary. The Emergency Coordinator may request assistance and/or notify other appropriate personnel, public agencies, and outside contractors. The Spill Contingency Plan includes the list of notifications during an emergency. If warranted, the internal alarms will be activated.

If the Emergency Coordinator determines that the facility has had a "significant" incident, which could affect areas outside the facility, the Emergency Coordinator or Operations Shift Supervisor, or designee will report the assessment to the Camp Pendleton Fire Department, San Diego County Environmental Health Department and the State Office of Emergency Services and other agencies as determined necessary. The Emergency Coordinator, Operations Shift Supervisor, or designee is responsible for making all required immediate notifications associated with a "significant" incident. All notifications are documented in the Operations logbook in the control room and may use forms contained in the Spill Contingency Plan and/or the Hazardous Material Emergency Response Protocol.

The following incident information shall be provided:

- Name and telephone of reporter;
- Name and address of facility;
- Time and type of incident (e.g. release, fire, explosion);
- Name and quantity of material(s) involved, to the extent known;
- The extent of injuries, if any; and
- The possible hazards to human health, and the environment, outside the facility.

6.2.2 Identification of Hazardous Materials

Whenever a hazardous material incident occurs, the Emergency Coordinator immediately identifies the character, exact source, amount, and real extent of any released materials. The Emergency Coordinator may perform this assessment by observation, review of facility records, or by chemical analysis.

6.2.3 Assessment of Health Effects and Off-Site Emergencies

The Emergency Coordinator will determine whether the release of hazardous wastes might extend beyond the plant's boundary, enter the Pacific Ocean, create a fire or explosion hazard, or contaminate the atmosphere. If there is a hazard to the environment or to human health outside the plant boundary, the Emergency Coordinator, Operations Shift Supervisor, or designee will notify the National Response Center and State Office of Emergency Services. Concurrently, the Emergency Coordinator will assess possible hazards to human health or the environment that may result from a hazardous materials incident. This assessment considers both direct and indirect effects (e.g. the effects of any toxic, irritating, or asphyxiating gases that are generated or the effects of any hazardous surface run-off from water or chemical agents used to control fire and heat-induced explosions).

6.2.4 Prevention of Spread or Recurrence

Post emergency critiques will be conducted following any response actions. The purpose of critiques is to identify lessons learned in the implementation of the plan, and to provide new information for follow-up revisions to the procedures in the plan.

The format for the critiques is open forum, no-fault, and collaborative. Participants from any agencies or response contract groups involved will be included. The focus of the critique should be constructive and on the general response, not on individual performance. Topics may include the following:

- What actions/events helped or hindered the response activities?
- What were the pros and cons of the plan as applied to this event?
- What was left undone or could have been improved?

Refer to the Spill Contingency Plan for a description of actions to prevent spread of a fire, explosion or spill.

6.2.5 Monitor for Leaks or Pressure Buildup

If the facility stops operations in response to a fire, explosion or spill associated with the Mixed Waste Storage Areas, the Emergency Coordinator will monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

6.2.6 Storage, Treatment, and Disposal of Released Materials

After the release of hazardous waste has been brought under control, the Emergency Coordinator will initiate actions to:

1. Collect and retain the recovered hazardous waste and contaminated soil, water or other material in compliance with the regulations, taking care that no incompatible wastes were mixed.
2. Arrange for shipment of all hazardous waste and contaminated soil, water, or other material recovered during the emergency to an approved disposal facility by a registered hazardous waste transporter, accompanied by a Uniform Hazardous Waste Manifest.

6.2.7 Incompatible Waste

The Emergency Coordinator will ensure that no other waste that may be incompatible with the released material is brought into the affected area until cleanup procedures have been completed.

6.2.8 Post-Emergency Equipment Maintenance

The Emergency Coordinator will have all emergency equipment cleaned, restored to proper condition and returned to its proper location.

6.2.9 Notification before Operations Resume

The Emergency Coordinator, Operations Shift Supervisor, or designee will, after the cleanup has been completed, arrange to notify DTSC and, if applicable, other individuals or agencies who have been notified of the release. The notification will indicate that the cleanup has been completed and that the hazardous waste handling facilities are in compliance with the requirements of state and federal regulations. The notification that cleanup operations are complete and all emergency equipment is clean and fit for its intended use will precede the following:

- Storage of a potentially incompatible waste in the affected area
- Resumption of operations.

If operations are necessary to ensure plant safety, operational activities will resume and DTSC will be notified as practical. SONGS will notify the Department of Toxic Substances Control that it is in compliance with all applicable regulations before operations resume in the affected areas of the facility.

6.2.10 Operating Record

The time, date and details of any incident that requires implementing the Spill

Contingency Plan will be recorded in the Operating Record (see Section 10).

6.2.11 Written Report

Within 15 days after an incident involving a hazardous waste facility requiring implementation of the Spill Contingency Plan, a written report will be submitted to the California Department of Toxic Substances Control. The 15 days written report requirement indicated in this permit represents DTSC's discretion in 22 CCR 6670.30 to favor the 15 day time frame and waive the 5-day reporting requirement. This report will include:

- Name, address, and telephone number of the facility owner and operator;
- Name, address, and telephone number of the facility;
- Date, time, and type of the incident (i.e. fire, explosion, leak);
- Name and quantity of the materials involved;
- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environment outside the facility, where this is applicable; and
- The estimated quantity and disposition of recovered material that resulted from the incident.

6.3 Evacuation Plan

Due to the types and limited quantities of hazardous waste handled at SONGS, a site wide evacuation is unlikely. However, should an evacuation become necessary, the Contingency Plan provides for an orderly evacuation routes for personnel from the site.

The Plant Manager or his designee determines if it is appropriate to evacuate personnel not involved with the operation of the plant. Local evacuations are implemented using the plant public address system. If site evacuation were necessary, the site emergency siren would be activated. The siren alerts personnel to assemble in designated locations, where all individuals can be accounted for and from which personnel can be evacuated in an orderly fashion through the plant's normal access road.

6.4 Emergency Equipment

The emergency equipment at San Onofre Nuclear Generating Station meets all Contingency Plan requirements of Title 22 Section 66265.52(e). As described in Section 5.0 and in the Spill Contingency Plan, the plant provides first aid kits and personal protection equipment at numerous locations.

The emergency fire equipment at the plant has been downsized and agreements with the Marine Corps Base, Camp Pendleton for firefighting assistance are in place to handle all

classifications of fires with fixed, mobile, and portable extinguishers, and hose-line water systems. CPFDF also has a hazardous materials response unit. The locations of fire equipment near the storage areas are presented in the Spill Contingency Plan.

Emergency spill response equipment, including decontamination equipment, at the facility is capable of handling both small scale and large scale spills. This equipment is primarily located on the emergency response vehicles.

The plant's communication and alarm system consists of two-way portable radios, telephones, and a horn/siren system. These are available to response personnel at the facility in case of emergencies.

6.5 Copies of the Contingency Plan and Arrangements with Local Authorities

6.5.1 Copies of Plan

The Contingency Plan is available at the facility. SONGS has provided the emergency response agencies with site plans and procedures to familiarize them with the layout of the site, hazardous waste and hazardous materials handled at the site (Business Plan).

6.5.2 Arrangements with Local Authorities for Emergency Response Assistance

Medical/Fire Emergencies

A first aid treatment center that is equipped with normal industrial first aid supplies is provided at several locations within the facility. SONGS no longer maintains an ambulance or a site fire department, but on site personnel are trained to respond to small fires. For larger scale fires, hazmat and emergencies, SONGS has an agreement with the Marine Corps Base, Camp Pendleton for firefighting assistance. In the event of an emergency, SONGS also has agreements with several medical and transportation units that are listed in the Contingency Plan.

Agreements have been made with the Marine Corps Base, Camp Pendleton for firefighting and emergency Medical assistance. A copy of the Memorandum of Agreement between Camp Pendleton and SONGS regarding the provision of Emergency Response Services may be found in the previous section (5.0. Procedures to Prevent Hazards) in Attachment 5-3.

Additional Agreements for Emergency Response

Inter-relationships of the SONGS' PDEP with the emergency plans and agreements of off-site response organizations and jurisdictions include the following (this list is updated in the SONGS Permanently Defueled Emergency Plan).

- County of Orange
- Marine Corps Base, Camp Pendleton
- County of San Diego

Attachment 6-1
SPILL CONTINGENCY
CERTIFICATION

CERTIFICATION

Procedure SO123-XV-17.3, Spill Contingency Plan, was recently amended to comply with title 22, California Code of Regulations, Article 4



Paul Elliott
Environmental Specialist

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to be the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Brian D. Metz
Manager, Environmental

10/13/15

SPILL CONTINGENCY PLAN

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REFERENCE USE
QA PROGRAM AFFECTING
50.59 DNA/72.48 DNA

SPILL CONTINGENCY PLAN

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SPILL CONTINGENCY PLAN

1.0 OBJECTIVES

- 1.1 To comply with general information and elements of a contingency plan pursuant to Reference 2.3.3.
- 1.2 To minimize health and environmental hazards resulting from fires, explosions, or other unplanned hazardous releases to air, soil, or surface water (Reference 2.3.2). Portions of this procedure may be utilized with the implementation of the Emergency Plan (Reference 2.3.1).

2.0 REFERENCES

- 2.1 NRC Commitment
 - 2.1.1 10CFR50.72, Event Reporting Guide
- 2.2 Procedures
 - 2.2.1 SO123-IX-2.2, NPDES Reporting
 - 2.2.2 SO123-IX-2.201, Hazardous Materials/Waste/Mixed Waste Storage Areas
 - 2.2.3 SO123-IX-2.202, Hazardous/Mixed Waste/ Universal Waste/Material Shipments
 - 2.2.4 SO123-XVI-1, Occupational Safety & Health (OS&H) Program
 - 2.2.5 SO123-IX-2.206, Hazardous Material/Waste/Mixed Waste Inspections
 - 2.2.6 SO123-IX-2.208, Hazardous Waste and Emergency Response Training Program
 - 2.2.7 SO123-IX-2.210, Hazardous Materials Emergency Response Protocol
 - 2.2.8 SO123-XV-3.3, NRC Reporting Requirements and Assessments
 - 2.2.9 SO123-XV-16, Spill Prevention, Control and Countermeasures Plan (SPCC)
 - 2.2.10 SO123-XV-17.1, Hazardous Waste/Mixed Waste Minimization Program
 - 2.2.11 SO123-XV-18, Mixed Waste Guidelines
 - 2.2.12 SO123-0-A7, Notification and Reporting of Significant Events
 - 2.2.13 SO23-4-6, Containment of Oil, Hazardous Material, and Radioactive Spills
 - 2.2.14 SO123-XV-HU-3, Human Performance Program

2.3 Other

- 2.3.1 San Onofre Nuclear Generating Station Permanently Defueled Emergency Plan
- 2.3.2 California Code of Regulations, Title 22, Div. 4.5, Chapter 14, Article 4, Contingency Plan and Emergency Procedures
- 2.3.3 Code of Federal Regulations, Title 40, Protection of the Environment
- 2.3.4 NUREG 1022, Event Reporting Guidelines
- 2.3.5 Memorandum of Agreement between the Southern California Edison Company San Onofre Nuclear Generating Station and the United States Marine Corps Camp Pendleton Fire Department, M02214-20140818-00075-1
- 2.3.6 California Code of Regulations, Title 23, Water

3.0 PREREQUISITES

- 3.1 Verify this document is current by using one of the methods described in SO123-XV-HU-3.
- 3.2 Verify level of use requirements on the first page of the document.
- 3.3 SONGS' Business plan contains the complete listing of SONGS Hazardous Materials.

4.0 PRECAUTIONS

- 4.1 Prior to entering areas containing hazardous materials, hazardous waste, or mixed waste, a visual inspection **SHALL** be performed to alert workers to potential dangers. Look for bulging or leaking containers, spills, smoke, steam, vapors, heat, and other indicators of potential hazards. If these indications exist, then DO NOT ENTER and:
 - 4.1.1 Contact Emergency Services (949) 368-6911.
 - 4.1.2 Contact the Manager, Environmental (949) 368-7311, or designee.
 - .1 If unanswered, then contact by radio, beeper, or call (949) 368-9090 and request Operations to use the site paging system.
 - 4.1.3 Remain at a safe distance, upwind and updrift from the hazard and wait for Emergency Services to arrive.
 - 4.1.4 Warn others in the area of impending dangers.
 - 4.1.5 Provide Operations with requested information.

5.0 CHECKLISTS

- 5.1 None

6.0 PROCEDURE

NOTES

1. This procedure contains the methodology for implementing a spill contingency plan in compliance with State and Federal regulations. Refer to SO23-4-6 for more inclusive information regarding spill response operations.
2. PAX phone number (internal to Edison) portion of phone number is bold.

6.1 General Information

- 6.1.1 SONGS has a Spill Prevention, Control and Countermeasure Plan (SO123-XV-16) in accordance with Reference 2.3.3 and the Emergency Plan (Reference 2.3.1). This procedure is an addition to those plans and describes the management of hazardous waste emergencies.
- 6.1.2 If the Emergency Plan (Reference 2.3.1) is not implemented, then this contingency plan is designed for implementation in the event of a hazardous materials spill and/or emergency.
 - .1 If during the implementation of this contingency plan the Emergency Plan is put into effect, then the use of this contingency plan SHALL be limited, with only certain elements used in conjunction with the Emergency Plan (Reference 2.3.1).
 - .2 If directed by Operations, the Manager, Environmental, or designee, then other actions outside the scope of this contingency plan may be implemented.
 - .3 Even if the Emergency Plan is implemented, then reportability requirements per Section 6.7 SHALL be adhered.
- 6.1.3 The following applies to SONGS:
 - .1 Address:
San Onofre Nuclear Generating Station (SONGS)
5000 Pacific Coast Highway
San Clemente, CA 92672
(949) 368-3849 (949) 368-6911
 - .2 Chief Nuclear Officer: Tom Palmisano
 - .3 Environmental Protection Agency Identification No.:
 - CAD000630921 for the Site

6.2 SONGS Hazardous Waste

- 6.2.1 A hazardous waste minimization program (SO123-XV-17.1) is in place at SONGS to reduce the amount of hazardous waste generated on site.
- 6.2.2 Handling and processing of mixed waste is performed in accordance with SO123-XV-18.
- 6.2.3 Storage of hazardous waste is permitted at the following areas (Reference SO123-IX-2.201 and SO123-XV-18).
- .1 South Yard Facility (SYF)/Batch Plant (west) Hazardous Waste Storage Area
 - .2 SYF/Batch Plant Mixed Waste Storage Area
 - .3 Multi-Purpose Handling Facility (LSAW and HSAW)
- 6.2.4 All hazardous waste is disposed of using the Uniform Hazardous Waste Manifest (UHW) (SO123-IX-2.202) and is tracked per References 2.3.2 and 2.3.3.

6.3 General Employee's Actions During an Emergency

6.3.1 Fire Emergency Actions

CAUTION

When any fire alarm sounds, or verbal evacuation orders are given, then all personnel **SHALL** evacuate the building and assemble a safe distance away.

- .1 In the event of a fire emergency, pull the nearest fire alarm if the building is so equipped.
- .2 Retreat to a safe area and report the fire to Operations at (949) 368-6911 informing them of:
 - who you are
 - type of emergency (e.g., smell of smoke, fire, injury)
 - building and location within the building
 - report on any injuries to individuals
 - report on substance under combustion, if known (electrical, chemical fire)

- 6.3.1.3 After information is confirmed with Operations, then:
 - .3.1 Close all doors leading to the area without endangering anyone
 - .3.2 Assist any disabled individuals
 - .3.3 Use no elevators
 - .3.4 Evacuate the building using the nearest exit
 - .3.5 Move a safe distance away
 - .3.6 When possible, direct arriving firefighters to the location of the fire
 - .3.7 Report to your supervisor outside
- 6.3.2 Hazardous Materials Emergency Actions

NOTE

Primary/Alternate evacuation routes from waste areas may be found in Attachment 3.

- .1 In the event of a hazardous materials emergency, affected personnel **SHALL:**
 - .1.1 Evacuate and advise all others to evacuate the area
 - .1.2 Ensure no one enters the area
- .2 Call (949) 368-6911 and:
 - .2.1 Identify yourself and your location
 - .2.2 Report the nature of the emergency and any injured personnel
 - .2.3 Report substance and estimated quantity involved

NOTE

For non-emergency incidental drips, spills, and leaks (i.e., broken hoses, etc.) that are immediately cleaned by the work group, notify HAZMAT at (949) 368-7311, (949) 368-4112, or (949) 368-6278 and write a nuclear notification with details. Direct an assignment to HAZMAT to document and trend.

6.3.3 Evacuation Actions

NOTE

Site Evacuation routes are shown in Attachment 2.

- .1 Evacuation procedures are summarized in the San Onofre Nuclear Generating Station Permanently Defueled Emergency Plan (PDEP) and PDEP Implementing Procedures.
- .2 If the Shift Manager/Emergency Director determines evacuation to be necessary, then the Incident Commander **SHALL** be advised.
- .3 In the event of a declared emergency (Notification of Unusual Event or Alert), the following instructions given over the public address system, and the instructions of the Security Officers, Operations, or Radiation Protection Personnel **SHALL** be followed:
 - .3.1 Stop all work.
 - .3.2 Shut off all electrical equipment and machines, if possible (lights remain on).
 - .3.3 Walk to designated exit and exit building.
 - .3.4 Exit quickly; do not stop for personal belongings.
 - .3.5 Do not use the elevators.
 - .3.6 Once outside the building, move a safe distance from the building, and follow all Incident Commander (IC) or Security instructions.
 - .3.7 Immediately report any missing personnel to Security or IC, or the Environmental Coordinator.
 - .3.8 Avoid blocking access routes to the plant or fire hydrants.
 - .3.9 Avoid interference with the work of fire, security, maintenance, safety, medical or ambulance crews, unless assistance is required.

6.4 Fire Brigade Leader (FBL) / Incident Commander (IC) Responsibilities

NOTE

When the Environmental Coordinator cannot be reached, then alternate members of the Environmental team should be called. Refer to Section 6.5.

- 6.4.1 If an emergency is hazardous materials related, then the FBL/IC is responsible for contacting the Environmental Coordinator on duty.
- 6.4.2 The FBL/IC **SHALL** function as the on-site Incident Commander.
- .1 The Incident Commander **SHALL**:
- .1.1 Immediately call in the on-duty Environmental Coordinator (see Section 6.5).
- .1.2 Ensure implementation of this plan.
- .1.3 Brief the Environmental Coordinator of the event and actions taken to that point.
- .1.4 Become responsible for the event if the hazardous material incident involves fire and/or personnel injury.

6.5 Environmental Coordinators

- 6.5.1 The primary Environmental Coordinator and the alternate(s) are listed below in calling order: Environmental Coordinators are appointed by the Supervisor, Environmental Services and be an active Emergency Response Organizations (ERO) OSC HAZMAT Technician team member.

Primary: Brian D. Metz
37709 Early Lane (949) 368-7311,
Murrieta, CA 92563 (949) 368-3849,
Home Phone: (951) 696-7133 (949) 368-6829
Cell Phone: (714) 273-6418

Alternate: Syef M. Hoque (949) 368 6278
23191 Lindsay Drive
Trabuco Canyon, CA 92679
Cell Phone: (949) 230-6870

Alternate: Paul Elliott (949) 368-6375
32440 Cape Dr.
Lake Elsinore, CA 92530
Cell Phone: (949) 683-5042

6.6 Environmental Coordinator Responsibilities

- 6.6.1 The Environmental Coordinator is responsible and accountable for hazardous materials incidents and **SHALL** manage all incidents per Reference 2.2.7.
- .1 If the FBL/IC reaches the hazardous material emergency prior to the Environmental Coordinator, then the Coordinator may request an event briefing from the FBL/IC.
- 6.6.2 **Immediate actions** by the Environmental Coordinator **SHALL** include, (Depending on the nature of the incident):
- .1 Requesting Site or local public address (PA) system be used to notify employees of an emergency.
- .2 Requesting appropriate State or local agencies for assistance in emergency remediation.
- .3 Identification of the character, exact source, amount, and real extent of any released materials. This may be accomplished by observation or review of facility records or manifests and by chemical analysis. Refer to SO123-IX-2.210.
- .4 Briefing the on-site Incident Commander of the hazardous materials situation and the process the Environmental team is likely to undertake.
- .5 **Assessment** of the possible hazards to the public and employees, the environment, and property that may result from the release. Refer to SO123-IX-2.210.
- .5.1 All actions **SHALL** be taken to avoid harm to humans.
- .5.2 This assessment **SHALL** consider both direct and indirect effects of any hazardous surface water runoff from water or chemical agents used to control the vapors and/or fire.
- .5.3 If the assessment indicates evacuation of local areas is advisable, then refer to Section 6.3.3.
- .6 Ensuring notifications and reports are made per Section 6.7.

NOTE

The Manager, Environmental or designee retains an emergency purchase order to bring in contractor emergency response people or equipment.

- 6.6.3 **Mitigation** of the incident **SHALL** be directed by the Environmental Coordinator.
- .1 If there is no fire or other imminent threat to physical safety, then for other spills, direct assigned personnel to use absorbent and/or spill control methods to contain the spilled material.

- 6.6.4 The Environmental Coordinator ensures expeditious disposal/reuse of recovered material, contaminated soil or surface water, or any other material resulting from the release by a licensed hazardous waste hauler.
 - .1 Copies of disposal manifests used during an emergency cleanup **SHALL** be maintained in the Environmental Protection office. Refer to SO123-IX-2.202.
- 6.6.5 **Preventative measures:** The Environmental Coordinator **SHALL** ensure that in the affected area(s) of the plant:
 - .1 Material that may be incompatible with the released material is not stored or disposed of until clean-up procedures are completed.
 - .2 All emergency equipment listed in Attachment 1 is cleaned/decontaminated or replaced before normal operations are resumed.
- 6.7 Notifications and Reports of Hazardous Releases
 - 6.7.1 Once immediate control of the release or threatened release and emergency medical measures have been taken, the Manager, Environmental or designee **SHALL** determine, based on the assessment of the incident, what notifications are necessary.
 - .1 If the incident warrants notifications of any kind, then the Manager, Radiation Protection, Chemistry and Environmental, should be informed and Senior Management, if possible.
 - .2 If a spill is oil >1 gallon, then notify the affected Control Room or Shift Manager. (Reference 2.2.13)
 - 6.7.2 If the incident is determined to be significant, then the Manager, Environmental or designee **SHALL** contact the Shift Manager, "Significant" applies as follows:
 - .1 The environment has been significantly impacted.
 - .2 The health and safety of the public or onsite personnel are at significant risk.
 - 6.7.3 If the items in section 6.7.2 do not apply, then per 10 CFR 50.72(b)(2)(vi), Event Reporting Guide, and NUREG 1022 minor non-radioactive, onsite chemical spills do not generally need to be reported to the NRC.
 - 6.7.4 If the incident is such that media interest is likely, then Nuclear Communications should be contacted as soon as possible.
 - 6.7.5 Reports of significant environmental events to the NRC (both verbal and written) **SHALL** be made per References 2.2.8, 2.2.12, and 2.2.13.
 - .1 Required time frames for NRC notifications begin after the incident has been determined significant and the Shift Manager has been notified.

- 6.7.6 Following Shift Manager notification, Corporate Environmental Health & Safety or the Manager, Environmental or designee **SHALL** perform verbal notifications and written reports according to applicable regulations.

NOTE

Attachment 6 provides a list of the most common notifications required for oil and hazardous substance incidents.

- .1 Information per Section 6.7.7 **SHALL** be provided to the Agencies. Other information may be required; refer to the applicable regulation.
- .1.1 Written reports **SHALL** be completed within 15 or 30 days of the incident, as indicated on Attachment 6.
- .2 Written reports for NPDES exceedances/violations are accomplished per SO123-IX-2.2.
- .3 Written reports for SPCC violations meeting 40 CFR 112.4 criteria are in accordance with SO123-XV-16.
- .4 Written Emergency Release Follow-up Notices, verbal notifications to California Office of Emergency Services (Cal OES), **SHALL** be sent to the State Emergency Response Commission (SERC), using Form 304 (Attachment 6; use current Cal OES website for form).

Mail to:

State Emergency Response Commission (SERC)
Attention: Section 304 Reports
Hazardous Materials Unit
3650 Schriever Avenue
Mather, CA 95655

- 6.7.7 The following incident information **SHALL** be provided:
- .1 Your name, location, and how you can be reached
 - .2 Location of the incident
 - .3 Time and duration of the release
 - .4 Type of hazardous materials involved
 - .5 Quantity of hazardous materials involved
 - .6 Nature/description of the incident
 - .7 An assessment of actual or potential health and environment hazards associated with the incident
 - .8 What measures have been taken to respond to the emergency and what precautions are being taken

6.8 Typical Emergency Response Equipment/Medical Equipment

NOTE

Refer to Attachment 3 for specific locations for fire extinguishers, eyewash stations, and emergency response equipment.

- 6.8.1 In order to minimize hazards to human health or the environment, fire extinguishing equipment and emergency medical devices (AEDs) are available throughout the site.
- 6.8.2 Eye wash stations, and/or portable eye wash stations when performing work, and safety showers are located in reasonable proximity to all bulk chemical tanks, SYF/Batch Plant Hazardous Waste Storage Area, and other critical areas on site.
- 6.8.3 Emergency response equipment to meet the demands of a 30 gallon spill kit commonly includes:
- 2 rolls of folded chemical "Sorbent"
 - 30 absorbent pads
 - 3 5-gal. disposable bags
 - 3 plastic tie wraps
 - Bags of absorbent material (e.g., kitty litter)
- 6.8.4 SO123-IX-2.206 identifies spill box locations containing spill stoppers and absorbent to support incidental spill conditions occurring on site.

6.9 Medical and Decontamination Facilities

- 6.9.1 A first aid treatment center, equipped with normal industrial first aid supplies, is maintained at the
- 6.9.2 First Aid Room located in the AWS Building, D1P. First Aid response kit is maintained by Operations / Radiation Protection on a 24/7 basis and can be contacted by calling (949) 368-6911 or (949) 368-9090.

NOTE

For specific decontamination procedures, see SO123-IX-2.210.

- 6.9.3 Any radioactive or chemical decontamination would be performed by RP and/or USMC Camp Pendleton Fire Department (CPFD).

6.10 Communication Systems

- 6.10.1 All Fire Brigade members **SHALL** be equipped with a two-way radio.
- 6.10.2 Communications are centralized through the Control Room/Command Center.

6.11 Structural Equipment

- 6.11.1 A detailed description of structural equipment **SHALL** be maintained (SO123-XV-16) in accordance with Reference 2.3.3.

NOTE

"Structural Equipment" includes piping, berms, tanks, and other "equipment" used in SONGS processes.

6.12 Personal Protection Devices

- 6.12.1 Reference SO123-XVI-1 for personal protection devices and equipment.
- 6.12.2 Emergency response equipment/absorbent locations are identified in Attachment 3. If an emergency response is declared, then only trained individuals **SHALL** utilize the emergency response equipment/absorbent.

6.13 Emergency Services Agreement

6.13.1 **Memorandum of Agreement**

- 1 SONGS has a Memorandum of Agreement with the USMC Camp Pendleton Fire Department (Reference 2.3.5). Assistance provided by USMC CPFD includes, but is not limited to:
- Providing fire suppression
 - Providing search and rescue services
 - Responding and rendering assistance to affected parties, including responding to emergency calls for specialized services (e.g., hazardous materials handling and extrication and technical rescues that include confined spaces, high angle, below grade, swift water, trench and collapse)
 - Performing salvage operations
 - Providing backup route alerting
 - Providing decontamination services (including radiological and hazardous materials)
 - Providing emergency lifesaving care to people who are seriously ill or injured, including contaminated injuries
 - Transporting patients to designated care facilities
 - Operating ambulances and quick response vehicles to support the foregoing activities
 - Other mitigation strategies/activities; such as providing fire pump/apparatus operation to maintain spent fuel pool inventory or fog patterns to prevent radioactive plumes
 - Respond with a goal of less than 30 minutes after notification from SCE SONGS

6.14 Training

- 6.14.1 Employees or contractors at SONGS are trained in response/implementation of the Emergency Plan at least once a year.
- 6.14.2 All HazMat members are trained on this plan, emergency equipment at all Hazardous Waste and Mixed Waste Areas, physical descriptions and capabilities, per SO123-IX-2.208 and SO123-IX-2.210.

6.15 Copies of the Permanently Defueled Emergency Plan and Spill Contingency Plan

- 6.15.1 Copies of the Permanently Defueled Emergency Plan are maintained by Emergency Preparedness in accordance with Code of Federal Regulations, Title 10, Energy.
- 6.15.2 Copies of the Spill Contingency Plan **SHALL** be maintained at the Environmental office and are also available per SAP Express.

6.16 Critique of Response and Follow-up

- 6.16.1 The Environmental Coordinator **SHALL** ensure a critique of the incident response and follow-up is performed within two weeks of clean up. The following **SHALL** be discussed:
- Coordination of various onsite groups
 - Assessment of response
 - Appropriate notifications
 - Clean up
- 6.16.2 The critique will be documented in a Nuclear Notification..

6.17 Contingency Plan Revision

- 6.17.1 This contingency plan **SHALL** be amended when:
- .1 There are critical complications in implementing the plan.
 - .2 The facility changes in design, construction operation, maintenance, or other circumstances in a way that materially increases the potential for release of hazardous materials or hazardous constituents, or changes the response necessary in an emergency.
 - .3 Changes occur in land use, road configurations, available technology, or response capabilities.
 - .4 The list of Environmental Coordinators/Alternates changes.
 - .5 The list of emergency equipment changes substantially.
 - .6 The facility permit is revised.
 - .7 A review cycle is implemented through the normal procedural process.

7.0 RECORDS

7.1 Spills documented via nuclear notification and Attachment 7 of this procedure.

TYPICAL EMERGENCY EQUIPMENT

NOTE: This list is an **example** of typical emergency equipment and may not be all inclusive.

Safety Shower
Portable Eye Wash
Grounding Straps
Explosimeter
Particulate Air Sampler
Monitoring Equipment
Polyethylene Funnels
Manual and/or Electric Drum Deheader
Flashlights

Polyethylene Syphon and PVC Hand Pumps
Drum Upender
Lighting
Forklifts
Ramps
Double Diaphragm Pumps
Truck (Stake Beds ,etc.)
Overpacks

SITE EVACUATION ROUTES

See the following maps for typical site evacuation routes for North or South. Ensure compliance with all posted SPEED LIMITS, maintain a SAFE DISTANCE, and watch for BRAKE LIGHTS.

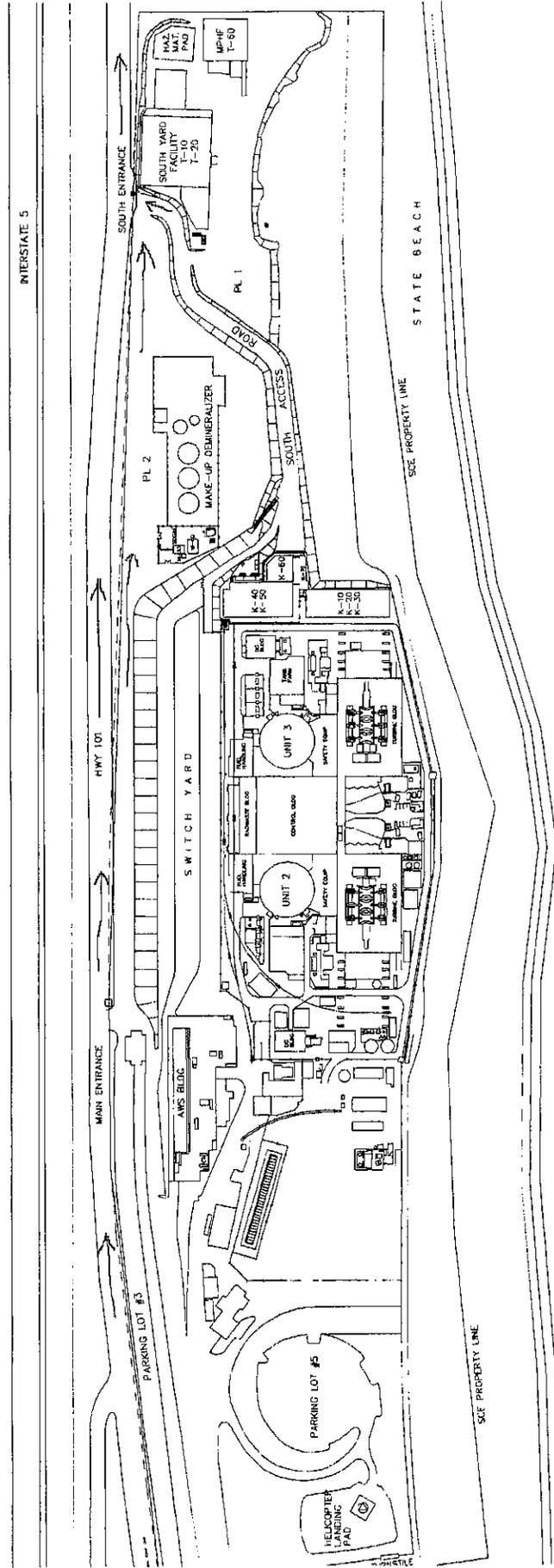
EVACUATION ROUTE NORTH:

1. Obey traffic signals unless otherwise directed by Traffic Control Officers.
2. Follow the directions of Traffic Control Officers in exiting parking lots.
3. Proceed to the North Interstate 5 on-ramp as directed.
4. Follow the directions of the CHP officers and be prepared to stop.

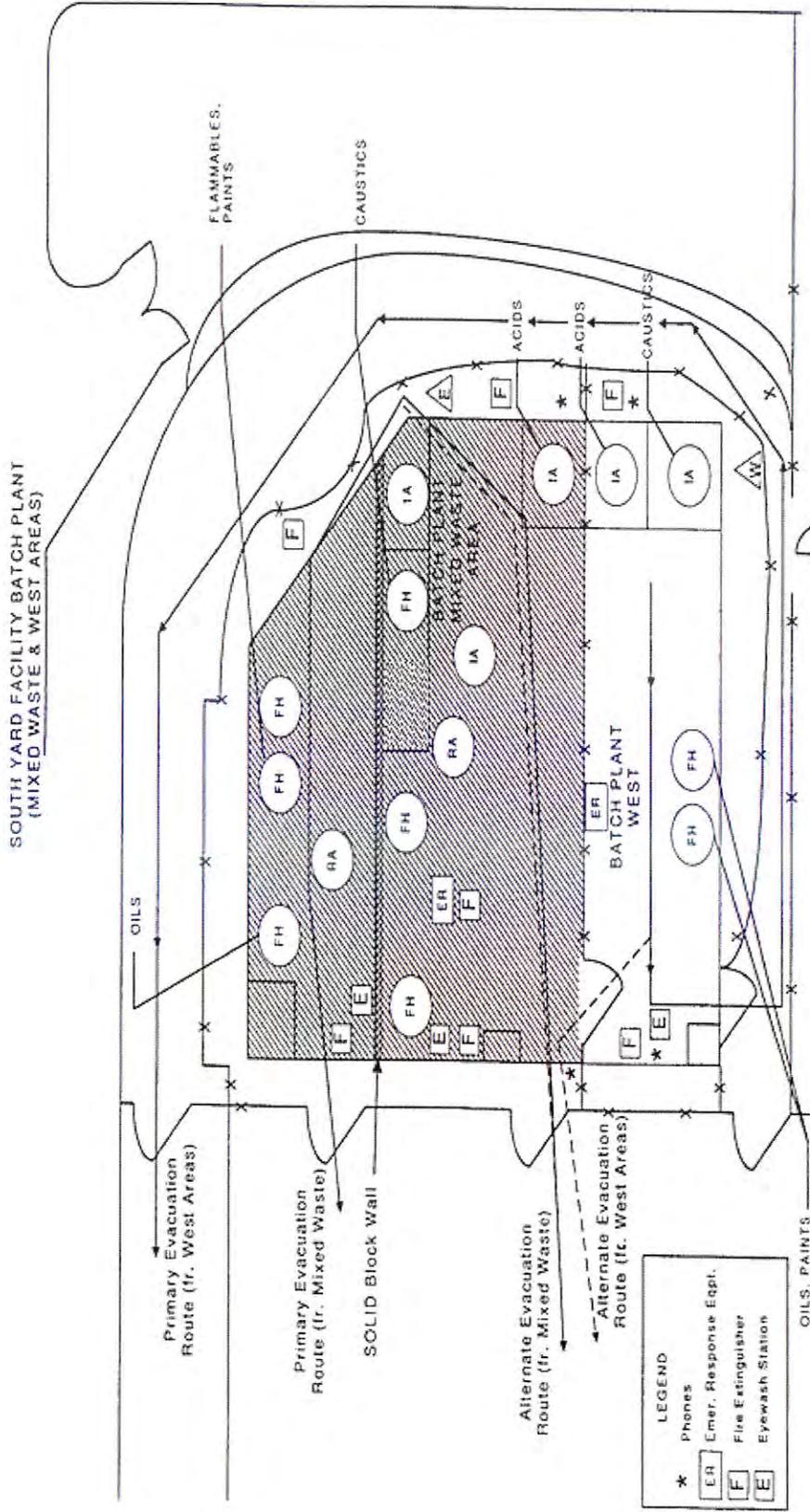
EVACUATION ROUTE SOUTH:

1. Obey traffic signals unless otherwise directed by Traffic Control Officers.
2. Follow the directions of Traffic Control Officers in exiting parking lots.
3. Proceed south through the USMC Base or State Park to South Interstate 5 as directed.
4. Follow the directions of the CHP officers and be prepared to stop.

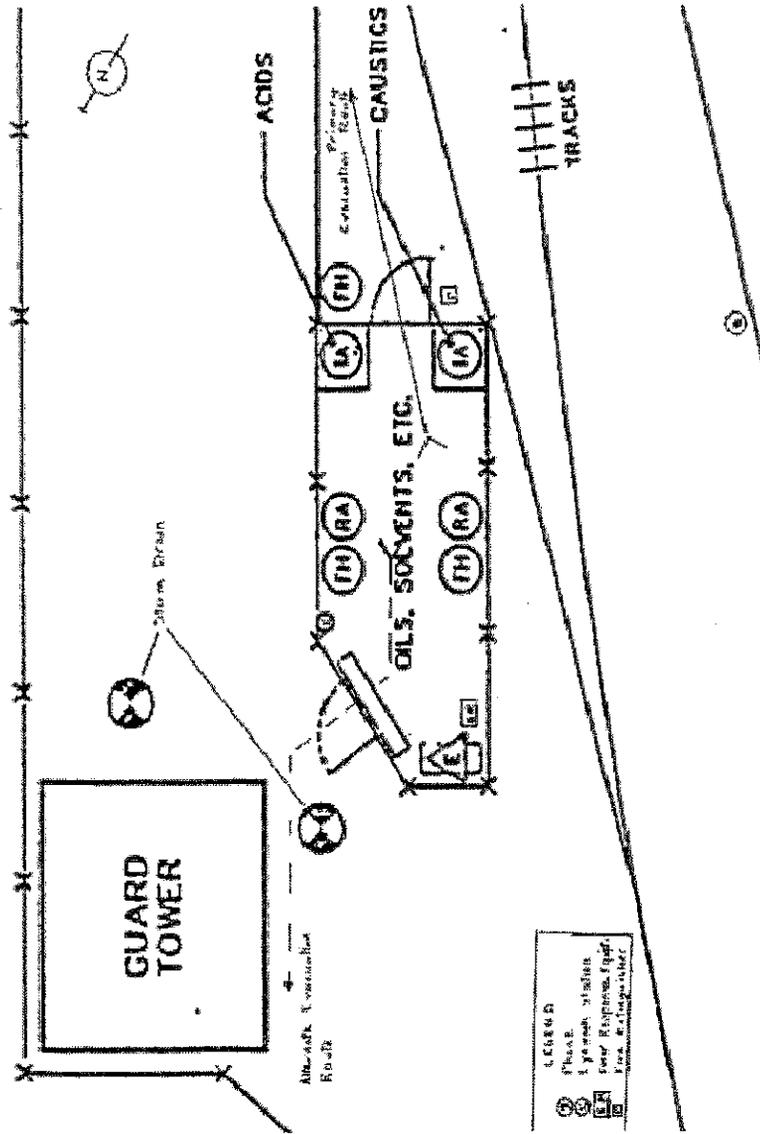
SITE EVACUATION ROUTES (SOUTH EVACUATION ROUTE)



HAZARDOUS WASTE LOCATIONS (SPECIFIC) EVACUATION ROUTES (PRIMARY/ALTERNATE)

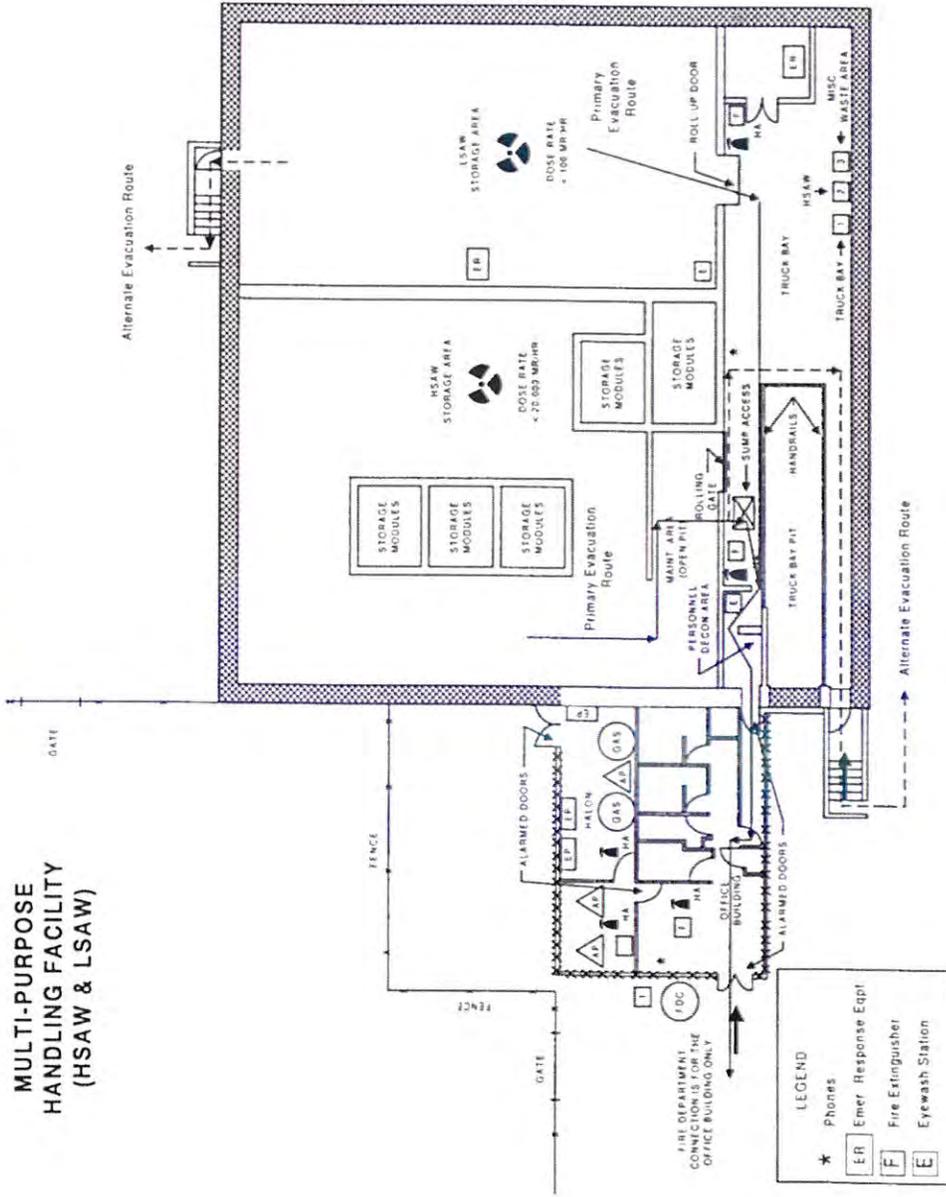


HAZARDOUS WASTE LOCATIONS (SPECIFIC) EVACUATION ROUTES
 (PRIMARY/ALTERNATE)



Note: PA Waste Accumulation Area may be relocated in the PA during decommissioning activities and design may vary depending on quantity/volume being generated during decommissioning. Updated locations would be addressed in the Hazmat Business Plan.

**HAZARDOUS WASTE LOCATIONS (SPECIFIC) EVACUATION ROUTES
(PRIMARY/ALTERNATE)**



EXAMPLES OF SONGS HAZARDOUS MATERIALS

Fuel Oil
cas#68476-30-2
DOT 1993
GUIDE# 128

Gasoline
cas# 68425-31-0
DOT 1203
GUIDE# 128

Oil
cas# 8030-30-6
DOT 1270
GUIDE# 128

Propane
cas# 74-98-6
DOT 1978
GUIDE# 115

Sodium Nitrite
cas# 63915-74-2
DOT 1500
GUIDE# 140

Nitrogen, Refrigerated Liquid
cas# 7727-37-9
DOT 1977
GUIDE # 120

DEVELOPMENTAL RESOURCES

A. Procedures

SO123-XIII-9,	SCOTT 4.5 Self-Contained Breathing Apparatus (SCBA)
SO123-XV-4.25,	Personal Injury
SO123-XV-41,	SONGS Respiratory Protection Program
SO123-XVI-7,	Eye and Face Protection
SO123-XVI-14,	Hand and Foot Protection
SO123-XVI-20,	Industrial Respiratory Protection Program

B. Other

Surviving The Hazardous Materials Incident, Emergency Resource, Inc.

California Code of Regulations, Title 8, Industrial Relations

California Code of Regulations, Title 29, Labor

California Code of Regulations, Title 49, Transportation

AGENCY NOTIFICATION REQUIREMENTS

- NOTES:** 1) Immediate notification is typically accomplished via a telephone.
2) Refer to specified regulation for the specific information required to be reported.

ITEM #	RELEASE TYPE	INCIDENT INVOLVES:	REG:	NOTIFY:	VERBAL:	WRITTEN:
1	Hazardous Material	Any release or threatened release of a hazardous material that poses significant present or potential hazard to human health and safety, property, or the environment.	19CCCR2703; 19CCCR2705; H&SC 25507; 42USC11004	Cal OES and the CUPA	Immediately, upon discovery.	Within 30 days submit a written "Emergency Release Follow-up Notice Reporting Form" to Chemical Emergency Planning and Response Commission (CEPRC). (19CCCR2705)
2	Hazardous Material	Hazardous Materials Transportation-related spill incidents involving a DOT Reportable Hazardous Material* with any Condition** as defined below. (See reference 2.2.3)	40CFR263.30(c); 49CFR171.15; 49CFR171.16; CVC23112.5 13 CCR 1166	NRC, Cal OES, the CUPA and agency with traffic jurisdiction (i.e. California Highway Patrol [CHP], police, sheriff)	Immediately, upon discovery, but in no case later than 12 hours after the incident.	Hazardous Materials Incident Report (DOT Form F 5800.1) - Within 30 days to NRC (40CFR263.30(c) and 49CFR171.16) If release onto highway (including streets): Hazardous Materials Incident Report (DOT Form F 5800.1) - Within 30 days to CHP (13 CCR 1166)
3	Hazardous Materials	Hazardous Materials Transportation-related spill incidents involving a Non-Reportable Hazardous Materials - Release of hazardous material onto highway (including streets).	CVC23112.5	Cal OES, CUPA and agency with traffic jurisdiction (i.e. California Highway Patrol [CHP], police, sheriff)	Immediately, upon discovery.	
4	Hazardous Substance	Release of a reportable quantity (RQ) of any extremely hazardous substance (EHS) or of a hazardous substance as defined by the CERCLA within any 24 hour period.	40CFR355 Subpart C; 42USC103 (CERCLA)	Local Emergency Planning Committee (LEPC), State Emergency Planning Committee (SERC), NRC, Cal OES, and the CUPA	Immediately, upon discovery.	Written follow-up Emergency Notification.
5	Hazardous Substances	Any hazardous substance discharged in or on any waters of the state, or discharged or deposited where it is, or probably will be discharged in or on any waters of the state.	CWC13271; H&CS5411; H&CS5411.5	NRC, Cal OES, Department of Fish & Game (Office of Spill Prevention & Response), RWQCB, Local Health Officer or the Director of Environmental Health, and the CUPA	Immediately, upon discovery.	

ITEM #	RELEASE TYPE	INCIDENT INVOLVES:	REG:	NOTIFY:	VERBAL:	WRITTEN:
6	Hazardous Substance	Any discharge of a designated hazardous substance from a vessel or onshore/offshore facility in quantities equal to or exceeding in any 24 hour period the federal reportable quantity.	40CFR117.21; 40CFR302.6; 33CFR153.203	National Response Center (NRC), U.S. Coast Guard (USCG), Cal OES, and the CUPA. If not practical to call NRC, report to USCG's or EPA's predesignated On Scene Coordinator (OSC), then NRC as soon as possible. If not practical to call NRC or EPA's predesignated OSC, report to USCG, then NRC as soon as possible.	Immediately, upon discovery.	
7	Hazardous Substance	Release of a hazardous substance has come or will come to be located on or beneath that real property.	H&SC25359.7	Property Owner	N/A	Submit Notice to the Property Owner.
8	Hazardous Substance	Release from a Underground storage tank system including a spill or overflow or an unauthorized release that escapes from the secondary containment, or from the primary containment, if no secondary containment exists, increases the hazard of fire or explosion, or causes deterioration of the secondary containment of the UST system.	40CFR280.61; 40CFR280.62(b); 40CFR280.63(b); 40CFR280.64(d); H&SC25295(a)(1); H&SC29595.5(a); 23CCR2650; 23CCR2651; 23CCR2652	Cal OES, and the CUPA	Immediately, upon discovery but, but in no case later than 24 hours of discovery.	Initial Abatement and Site Check Report - Within 20 days to the CUPA. (40CFR280.62) Initial Site Characterization Report - Within 45 days to the CUPA. (40CFR280.63) Free Product Removal Report - Within 45 days to the CUPA. (40CFR280.64) Unauthorized Release Report - Within 5 days to the CUPA. (H&SC25295 and 23CCR2352)
9	Hazardous Waste	Release, fire or explosion involving a hazardous waste which could threaten human health, or the environment, outside the facility and evacuation of local areas may be advisable.	22CCR66264.56; 22CCR66265.56	Department of Toxic Substances Control (DTSC), Cal OES and the CUPA	Immediately, upon discovery.	Within 15 days to the DTSC. (22CCR66264.56 and 22CCR265.56)
10	Hazardous Waste	Discharge of waste (including hazardous substances), or proposing to discharge waste within any region that could affect the quality of waters of the state other than into a community sewer system.	CWC13260; CWC13271	Cal OES, RWQCB, and the CUPA	Immediately, upon discovery.	Waste Discharge Report to the RWQCB.

ITEM #	RELEASE TYPE	INCIDENT INVOLVES:	REG:	NOTIFY:	VERBAL:	WRITTEN:
11	Hazardous Waste	Any release of hazardous waste into the environment from tank system or secondary containment that IS NOT less than or equal to a quantity of one pound and immediately contained and cleaned up.	40CFR264.196; 40CFR265.196	EPA Regional Administrator, Cal OES, and the CUPA	Immediately, upon discovery but in no case later than 24 hours of detection.	Within 30 days to EPA Regional Administrator.
12	Hazardous Waste	Any release of mixed waste and/or combined waste from the South Yard Facility Batch Plant or Multi-purpose Handling Facility [High Specific Activity Waste Storage Area (HSAW) or Low Specific Activity Waste Storage Area (LSAW)] that poses an immediate or potential threat to human health and/or the environment.	Cal EPA DTSC Hazardous Waste Facility Permit (No. 04-BRK-09; Expires 1/30/15)	DTSC	Immediately, upon discovery but no later than 24 hours of discovery.	Within 10 days to DTSC.
13	Hazardous Waste	Any unauthorized release of hazardous waste or in a situation in which hazardous waste release could reasonably occur from any component of the Waste Neutralization Tank (WNT) system.	Cal EPA DTSC Waste Neutralization Tank Variance (No. V08HQSCD016; Expires 9/29/18)	DTSC	Immediately, upon discovery.	Within 5 days to DTSC.
14	Oil	Any discharge of oil from a vessel or onshore/offshore facility and, the discharge of oil is in quantities that is deemed harmful to public health or welfare or the environment and: (a) violates applicable water quality standards; or (b) causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.	33CFR153.203; 40CFR110.3; 40CFR110.6; CWC13272	NRC, Cal OES, RWQCB, and the CUPA If not practical to call NRC, report to USCG's or EPA's pre-designated OSC, then NRC as soon as possible. If not practical to call NRC or EPA's pre-designated OSC, report to USCG, then NRC as soon as possible.	Immediately, upon discovery.	Immediately, upon discovery.
15	Oil	Discharge of any oil to be discharged in or on any waters of the state, or discharged in or on any waters of the state or discharged or deposited where it is, or probably will be, discharged in or on the waters of the state.	CWC13272	NRC, Cal OES, RWQCB, and the CUPA	Immediately, upon discovery.	
16	Oil	Release of 42 gallons or greater of oil into soil which is considered a threat to ground water.	CWC13172	Cal OES, RWQCB, and the CUPA	Immediately, upon discovery.	
17	Oil	Discharge or threatened discharge of one barrel (42 gallons) or more of oil to marine waters.	CGC8670.25.5; H&SC25507	NRC, Cal OES, RWQCB, and the CUPA	Immediately, upon discovery.	

ITEM #	RELEASE TYPE	INCIDENT INVOLVES:	REG:	NOTIFY:	VERBAL:	WRITTEN:
18	Oil	Discharge from a facility of more than 1,000 gallons of oil in a single discharge into or upon navigable waters or adjoining shorelines or a discharge of more than 42 gallons of oil in each of two discharges into or upon navigable waters or adjoining shorelines occurring within one 12-month period.	40CFR112.1(b); 40CFR112.4	NRC, EPA Regional Administrator, Cal OES, RWQCB and the CUPA	Immediately, upon discovery.	Within 60 days to EPA Regional Administrator.
19	PCBs	PCB spills greater than one pound is reportable under CERCLA.	40CFR761.125; 42USC103 (CERCLA)	NRC, Cal OES and CUPA If spill exceeds 10 pounds, notify EPA.	Immediately, upon discovery. If spill exceeds 10 pounds, notify EPA and proceed to decontaminate the spill area in accordance to 40 CFR 761.125 in the shortest possible time after discovery, but in no case later than 24 hours after discovery.	
20	PCBs	PCB spills \geq 50 ppm PCBs into a sensitive environment (surface water, sewers or drinking water supplies).	40CFR761.125	NRC, EPA, Cal OES, RWQCB, and the CUPA	Immediately, upon discovery. Reporting to EPA shall be in the shortest possible time after discovery, but in no case later than 24 hours of discovery.	
21	Petroleum	Discharge of any petroleum product to be discharged in or on any waters of the state, or discharged in or on any waters of the state or discharged or deposited where it is, or probably will be, discharged in or on the waters of the state.	CWC13272	NRC, Cal OES RWQCB, and the CUPA	Immediately, upon discovery.	
22	Petroleum	A spill or other release of one barrel (42 gallons) or more of petroleum from an Aboveground Storage Tank.	H&SC25270.8; CWC13272	Cal OES and the CUPA	Immediately, upon discovery.	
23	Storm Water	General Permit for Discharges of Storm Water Associated with Industrial Activities Permit violations.	40CFR122.41; 40CFR122.42; Order 97-03-DWQ (General Industrial Permit)	State Water Resources Control Board	Immediately, upon discovery but no later than 24 hours of discovery.	Violation to be included within SONGS General Industrial Permit Annual Report.

ITEM #	RELEASE TYPE	INCIDENT INVOLVES:	REG:	NOTIFY:	VERBAL:	WRITTEN:
24	Sewage	Release of 1,000 gallons or more of treated, partially treated, or untreated wastewater that is not authorized by Waste Discharge Requirements.	23CCR2250; 23CCR2260; CWC13271; H&SC5411; F&GC 5650; State General Waste Discharge Requirements (WDR) Order No. 2006-003-DWQ	NRC, Cal OES, Department of Fish & Game (Office or Spill Prevention & Response), RWQCB, Local Health Officer or the Director of Environmental Health, and the CUPA	Immediately, upon discovery.	
25	Sewage	Release of 999 gallons or less of treated, partially treated, or untreated wastewater that is not authorized by Waste Discharge Requirements.	CWC13271; H&SC5411; State General Waste Discharge Requirements (WDR) Order No. 2006-003-DWQ	Cal OES, Local Health Officer or the Director of Environmental Health, and the CUPA	Immediately, upon discovery.	
26	Sewage	Any sewage spill discharged in or on any waters of the state, or discharged or deposited where it is, or probably will be discharged in or on any waters of the state.	CWC13271; H&SC5411; State General Waste Discharge Requirements (WDR) Order No. 2006-003-DWQ	Cal OES Department of Environmental Health (CUPA)	Immediately, upon discovery.	

CPUC notification required for: (See Attachment 6 #12)

1. A plant-related incident that results in an emergency being declared at an NRC Alert level or higher.
2. A serious plant-related incident or property damage that results in significant public attention or media coverage when SCE has actual knowledge of the public attention / media coverage (subject to SCE Communications).
3. Fatalities (SCE / contract employee[s] or member[s] of the public).
4. Serious Injuries that may require overnight hospitalization (SCE / contract employee[s] or member[s] of the public).

KEY:

REPORTABLE HAZARDOUS MATERIALS *

- An unintentional release of a hazardous material during transportation (including loading, unloading, and temporary storage) related to transportation;
- A hazardous waste is released;
- A specification cargo tank 1,000 gallons or greater containing any hazardous materials that: (1) Received structural damage to the loading retention system or damage that requires repair to a system intended to protect the loading retention system as defined below, and (2) Did not have a release.

CONDITIONS **

- A person is killed;
- A person receives an injury that requires admittance to a hospital;
- The general public is evacuated for 1 hour or more;
- One or more major transportation arteries or facilities are closed for 1 hour or more; and/or
- There is a release of a marine pollutant in a quantity exceeding 450 liters (119 gallons) for liquids or 400 kilograms (882 pounds) for solids.

AGENCY NOTIFICATION REQUIREMENTS (Continued)

AGENCY PHONE NUMBERS

1. National Response Center: (800) 424-8802 [NOTE: Use this number for Department of Transportation also]
2. California Office of Emergency Services (Cal OES): (800) 852-7550
3. U.S. EPA Region 9: (800) 300-2193 (PCB clean-up)
4. Department of Environmental Health (local CUPA administering agency): (858) 505-6657 (day time) or (858) 505-6673 (Env. Emergency Hotline, Monday - Friday, 8:00 AM to 5:00 PM) or (858) 505-6657/6673 recorded message after hours.
5. California Regional Water Quality Control Board/San Diego, Regional Administrator: (858) 467-2952
6. Marine Safety Office (U.S. Coast Guard, San Diego): (619) 683-6495 (24-hour line)
7. Environmental Protection Agency: (415) 227-9500 or (800) 300-2193, Duty Officer, option #3
8. California Highway Patrol: 911
9. Fish and Game: (916) 445-0045 (24 hour line/Sacramento)
10. San Diego Gas and Electric (SDG&E) Emergency Notice System: (888) 555-3449 [if SDG&E equipment is involved]
11. WNT Spills/Releases
Alejandro Galdamez, Hazardous Substance Engineer
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200, Berkeley, California 94710
Attn: SONGS Secondary Containment Variance Notifications
12. CPUC – contact Jose Perez or designee for CPUC notifications.
13. Department of Toxic Substances Control (DTSC): (800) 728-6942
14. Local Emergency Planning Committee (LEPC): (858) 505-6693
15. California State Emergency Response Commission (SERC) (916) 845-8751

AGENCY NOTIFICATION REQUIREMENTS (Continued)

EMERGENCY RELEASE FOLLOW - UP NOTICE REPORTING FORM

A	BUSINESS NAME	FACILITY EMERGENCY CONTACT & PHONE NUMBER () -
B	INCIDENT DATE MO DAY YR	TIME OES NOTIFIED (use 24 hr time)
C	INCIDENT ADDRESS LOCATION	CITY / COMMUNITY COUNTY ZIP
D	CHEMICAL OR TRADE NAME (print or type)	CAS Number
E	CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A <input type="checkbox"/>	CHECK IF RELEASE REQUIRES NOTIFICATION UNDER 42 U.S.C. Section 9603 (a) <input type="checkbox"/>
F	PHYSICAL STATE CONTAINED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS	PHYSICAL STATE RELEASED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS
G	ENVIRONMENTAL CONTAMINATION <input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER	QUANTITY RELEASED TIME OF RELEASE DURATION OF RELEASE — DAYS — HOURS — MINUTES
H	ACTIONS TAKEN	
I	KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for addition information) <input type="checkbox"/> ACUTE OR IMMEDIATE (explain) _____ <input type="checkbox"/> CHRONIC OR DELAYED (explain) _____ <input type="checkbox"/> NOT KNOWN (explain) _____	
J	ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS	
K	COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)	
L	CERTIFICATION: I certify under penalty of law that I have personally examined and I am familiar with the information submitted and believe the submitted information is true, accurate, and complete. REPORTING FACILITY REPRESENTATIVE (print or type) _____ SIGNATURE OF REPORTING FACILITY REPRESENTATIVE _____ DATE: _____	

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AGENCY NOTIFICATION REQUIREMENTS (Continued)

**EMERGENCY RELEASE FOLLOW-UP NOTICE
REPORTING FORM INSTRUCTIONS**

(This form may be reproduced)

GENERAL INFORMATION:

Chapter 6.95 of Division 20 of the California Health and Safety Code requires that written emergency release follow-up notices prepared pursuant to 42 U.S.C. § 11004, be submitted using this reporting form. Non-permitted releases of reportable quantities of Extremely Hazardous Substances (listed in 40 CFR 355, appendix A) or of chemicals that require release reporting under section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [42 U.S.C. § 9603(a)] must be reported on the form, as soon as practicable, but no later than 30 days, following a release. The written follow-up report is required in addition to the verbal notification.

BASIC INSTRUCTIONS:

- The form, when filled out, reports follow-up information required by 42 U.S.C § 11004. Ensure that all information requested by the form is provided as completely as possible.
- If the incident involves reportable releases of more than one chemical, prepare one report form for each chemical released.
- If the incident involves a series of separate releases of chemical(s) at different times, the releases should be reported on separate reporting forms.

SPECIFIC INSTRUCTIONS:

Block A: Enter the name of the business and the name and phone number of a contact person who can provide detailed facility information concerning the release.

Block B: Enter the date of the incident and the time that verbal notification was made to OES. The OES control number is provided to the caller by OES at the time verbal notification is made. Enter this control number in the space provided.

Block C: Provide information pertaining to the location where the release occurred. Include the street address, the city or community, the county and the zip code.

Block D: Provide information concerning the specific chemical that was released. Include the chemical or trade name and the Chemical Abstract Service (CAS) number. Check all categories that apply. Provide best available information on quantity, time and duration of the release.

Block E: Indicate all actions taken to respond to and contain the release as specified in 42 U.S.C. § 11004(c).

Block F: Check the categories that apply to the health effects that occurred or could result from the release. Provide an explanation or description of the effects in the space provided. Use Block H for additional comments/information to meet requirements specified in 42 U.S.C. § 11004(c).

Block G: Include information on the type of medical attention required for exposure to the chemical released. Indicate when and how this information was made available to individuals exposed and to medical personnel for the incident, as specified in 42 U.S.C. § 11004(c).

Block H: List any additional pertinent information.

Block I: Print or type the name of the facility representative submitting the report. Include the official signature and the date that the form was prepared.

AGENCY NOTIFICATION REQUIREMENTS (Continued)

MAIL THE COMPLETED REPORT TO:
State Emergency Response Commission (SERC)
Attn: Section 304 Reports
Hazardous Materials Unit
3650 Schriever Avenue
Mather, CA 95655

NOTE: Authority cited: Sections 25503, 25503.1 and 25507.1, Health and Safety Code. Reference:
Sections 25503(b)(4), 25503.1, 25507.1, 25518 and 25520, Health and Safety Code.

INCIDENT/RELEASE ASSESSMENT FORM

INCIDENT/RELEASE ASSESSMENT FORM ¹

If you have an emergency, Call 911

Handlers of hazardous materials are required to report releases. The following is a tool to be used for assessing if a release is reportable. Additionally, a non-reportable release incident form is provided to document why a release is not reported (see back).

Questions for Incident Assessment:

	YES	NO
1. Was anyone killed or injured, or did they require medical care or admitted to a hospital for observation?	<input type="checkbox"/>	<input type="checkbox"/>
2. Did anyone, other than employees in the immediate area of the release, evacuate?	<input type="checkbox"/>	<input type="checkbox"/>
3. Did the release cause off-site damage to public or private property?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the release greater than or equal to a reportable quantity (RQ)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Was there an uncontrolled or unpermitted release to the air?	<input type="checkbox"/>	<input type="checkbox"/>
6. Did an uncontrolled or unpermitted release escape secondary containment, or extend into any sewers, storm water conveyance systems, utility vaults and conduits, wetlands, waterways, public roads, or off site?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will control, containment, decontamination, and/or clean up require the assistance of federal, state, county, or municipal response elements?	<input type="checkbox"/>	<input type="checkbox"/>
8. Was the release or threatened release involving an unknown material or contains an unknown hazardous constituent?	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the incident a threatened release (a condition creating a substantial probability of harm that requires immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment)?	<input type="checkbox"/>	<input type="checkbox"/>
10. Is there an increased potential for secondary effects including fire, explosion, line rupture, equipment failure, or other outcomes that may endanger or cause exposure to employees, the general public, or the environment?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer is YES to *any* of the above questions – report the release to the California Emergency Management Agency at 800-852-7550 and the local CUPA daytime: (858) 505-6657, after hours: (858) 565-5255. Note: other state and federal agencies may require notification depending on the circumstances. See CalEMA's "California Hazardous Material Spill/Release Notification Guide".

Call 911 in an emergency

If all answers are NO, complete a Non Reportable Release Incident Form (page 2 of 2) and keep it readily available. Documenting why a "no" response was made to each question will serve useful in the event questions are asked in the future, and to justify not reporting to an outside regulatory agency.

If in doubt, report the release.

¹ This document is a guide for accessing when hazardous materials release reporting is required by Chapter 6.95 of the California Health and Safety Code. It does not replace good judgment, Chapter 6.95, or other state or federal release reporting requirements.

INCIDENT/RELEASE ASSESSMENT FORM (Continued)

AGENCY NOTIFICATION LOG: (include Date, Time & Contact Name)

***Internal:**

Manager, Radiation Protection, Chemistry, and Environmental
or designee _____

Shift Manager _____

NRA _____

Corporate Environmental _____

Jose Perez (or designee) for CPUC notification _____

****External:**

S.D. Dept. Environmental Health (CUPA) _____

Cal OES (Office of Emergency Services) (SERC) _____

N.R.C. (National Response Center) _____

U.S. EPA Region 9 _____

Cal. Regional Water Quality Control Board _____

Marine Safety Office _____

Fish and Game _____

San Diego LEPC: _____

DTSC: _____

SDG&E _____

California Highway Patrol _____

Marine Safety Office _____

SUMMARY OF CHANGES

SO123-XV-17.3 REV 14 EC 1

Author: Carol Schmitt

NN, Order, or Other Action	Description of Change	Reviewer(s)	Step, Section, Attachment or Page
203276762	Add image of MPHf (HSAW & LSAW) accidentally removed in previous revision.	Hoque	Attachment 3 Page 3 of 3

SUMMARY OF CHANGES

SO123-XV-17.3 REV 14

Author: Syef Hoque

NN, Order, or Other Action	Description of Change	Reviewer(s)	Step, Section, Attachment or Page
203238973	Update for PDEP implementation.	Hoque Metz Churchill	Throughout
203063159	Update to reflect position titles of ODCM.		
Author changes	Revise procedure based on state of decommissioning.		