

## DOCKETED

<b>Docket Number:</b>	93-AFC-03C
<b>Project Title:</b>	Compliance - Application for Certification for SMUD's Campbell Soup Cogeneration Project
<b>TN #:</b>	207210
<b>Document Title:</b>	Sacramento Power Authority - Data Response HazMat 20160106
<b>Description:</b>	Data Response, Set 1 (Response to Hazardous Materials Data Requests 1 through 3)
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<b>Submitter Role:</b>	Applicant Representative
<b>Submission Date:</b>	1/7/2016 9:02:02 AM
<b>Docketed Date:</b>	1/7/2016

PETITION FOR MODIFICATION

# Use of Recycled Water and Associated Facilities

for the

## Sacramento Power Authority's Campbell Cogeneration Project

Sacramento, California  
(93-AFC-3C)

Data Response, Set 1  
(Response to Hazardous Materials Data  
Requests 1 through 3)

*Submitted to:*

California Energy Commission

*Prepared for*

Sacramento Power Authority

January 6, 2016

*With Assistance from*



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# Introduction

Attached are the Sacramento Power Authority's (SPA) responses to the California Energy Commission (CEC) Staff's Hazardous Materials Management data requests numbers 1 through 3 for the SPA's Campbell Cogeneration Project (93-AFC-3C). The CEC Staff served these data requests on December 1, 2015. The data request text used in this response has been extracted from the CEC's December 1<sup>st</sup> data request. The responses are presented in the same order as provided by CEC Staff and are keyed to the Data Request numbers (1 through 3).

Graphics are numbered in reference to the data request number. For example, the first figure used in response to Data Request 2 is Figure DR2-1, and so on. The figures are located at the end of this data response and are in numerical order of the data request number.



# Hazardous Materials Management

## Data Requests:

1. Please provide the size (dimensions and capacity) of the existing secondary containment structure for the sodium hypochlorite tank.

**Response:** There are six secondary containment basins at SPA; two large basins and four small ones. The two largest containment basins, where the sodium hypochlorite tanks will be located, are 12 feet x 12 feet x 2.5 feet = 360 ft<sup>3</sup>. Each large basin has a capacity of 2,700 gallons.

2. Please provide a plan view of the existing secondary containment showing the location of the new proposed sodium hypochlorite tank along with what will be the largest tank in the secondary containment, if it's not the proposed new 3,000-gallon sodium hypochlorite tank.

**Response:** A copy of the Chemical Containment Plan is provided as Figure DR2-1. An aerial photo of the site showing the location of the chemical containment area is provided as Figure DR2-2. The sodium hypochlorite tank is the largest existing tank and holds 2,000 gallons. Eventually, the largest tank in the existing containment will be the new 3,000-gallon tank that will replace the existing 2,000-gallon tank. Possibly a second 3,000 gallon sodium hypochlorite tank will be added in the other large containment just north of the existing sodium hypochlorite tank. Final design has not been completed but there are several options available to SPA:

- a. Use the existing containment basins for the chemicals needed. The existing 2,000-gallon sodium hypochlorite tank could be either replaced with a 3,000-gallon tank, or a 3,000-gallon tank could be placed in the other large containment area, or double-walled 3,000-gallon tanks could be used.
  - b. If sufficient containment is not available in the existing containment basins, the containment walls could be raised, or the basin areas enlarged by removing an interior wall to provide adequate containment capacity. However, the preference is to use the existing containment if possible.
3. Please confirm that the holding capacity of the secondary containment will be adequate to meet LORS for all tanks to be placed in it.

**Response:** There are no LORS requiring a specific capacity for secondary containment for non-flammable/combustible hazardous materials in Sacramento County, but containment should have sufficient capacity for the contents of the tank. It is also a good idea to have sufficient capacity for rainwater.

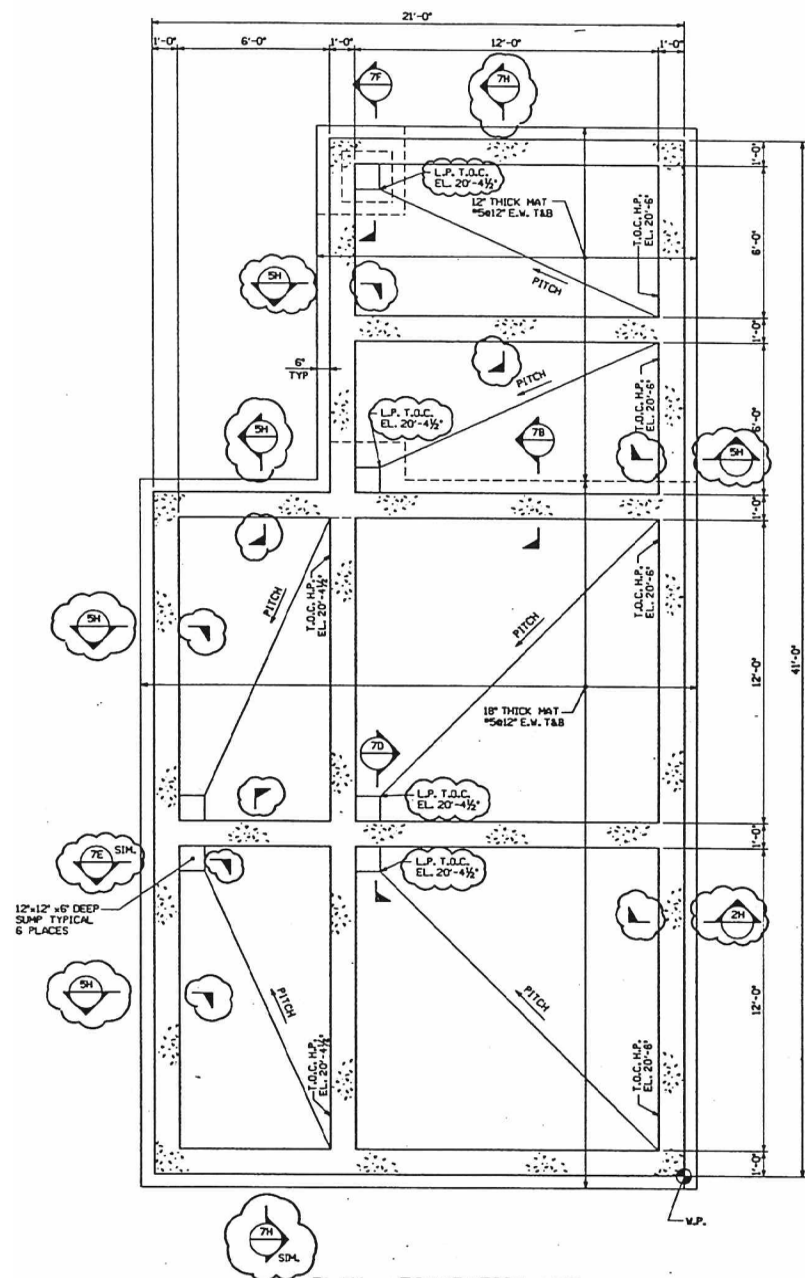
Currently the plant has a 550-gallon tank for the combined water treatment chemical. If additional chemicals are needed, that tank will be repurposed to contain a dispersant. If the 550-gallon tank were located in one of the small containment basins (each small containment basin has a capacity of 108 ft<sup>3</sup>, or 808 gallons), it would have sufficient capacity for rainwater.

The other (up to four), 150-gallon tanks (or totes) could all be placed in a single small containment area with sufficient capacity remaining for rainwater.

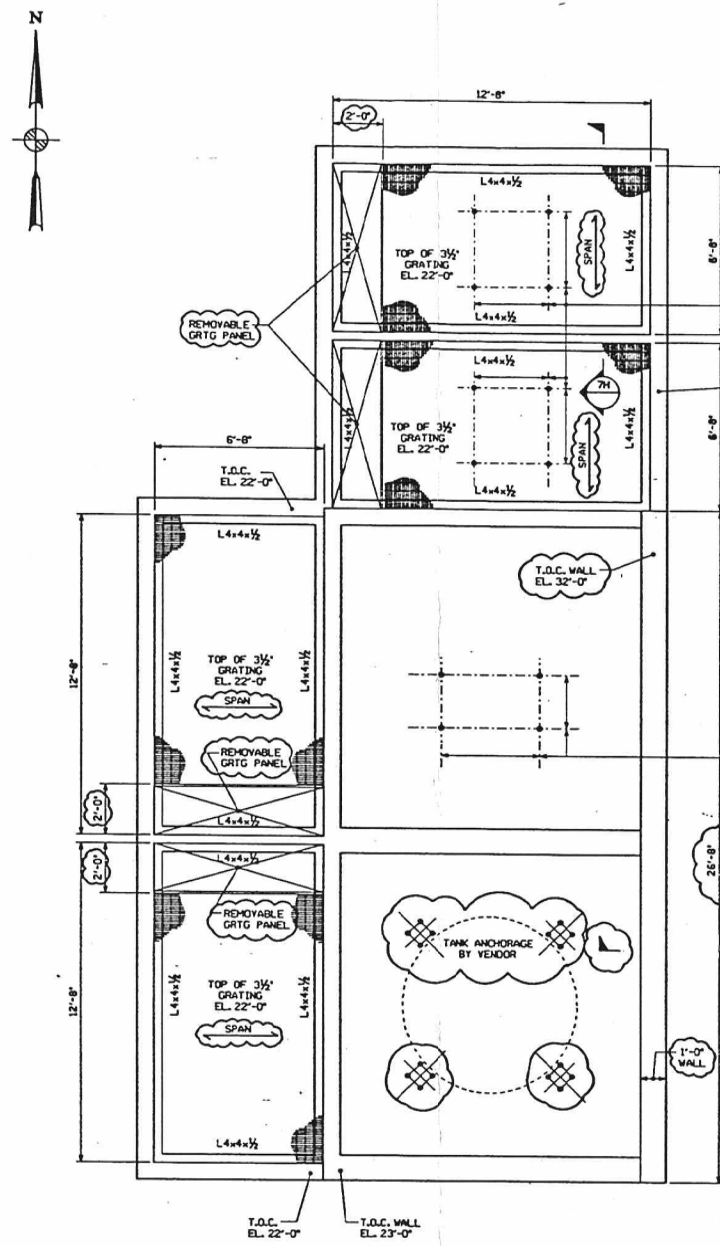
Regardless of the tanks and configuration, SPA commits to complying with the containment requirements for hazardous materials storage.



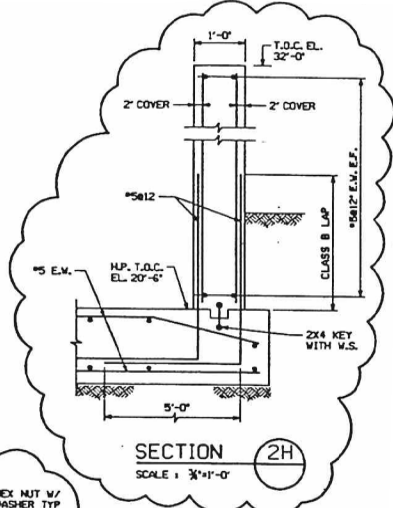




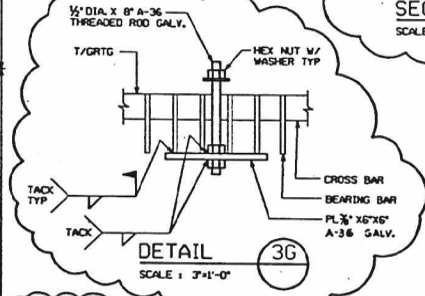
PLAN - FOUNDATION MAT  
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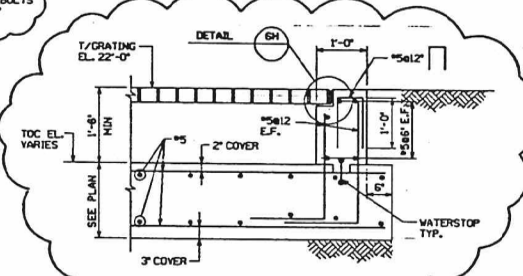
PLAN - BASIN  
SCALE: 3/4"=1'-0"



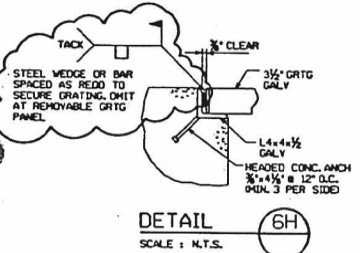
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DETAIL 3G  
SCALE: 3/4"=1'-0"

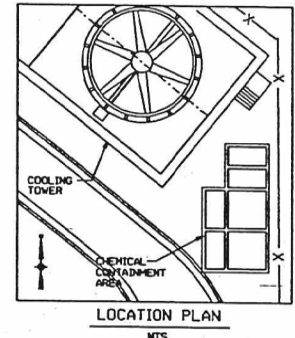


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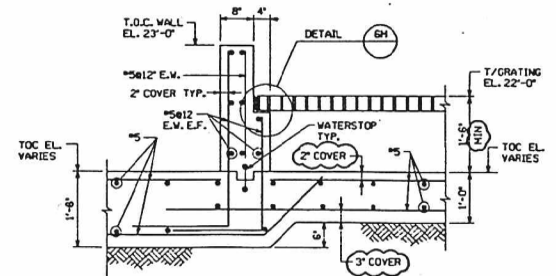


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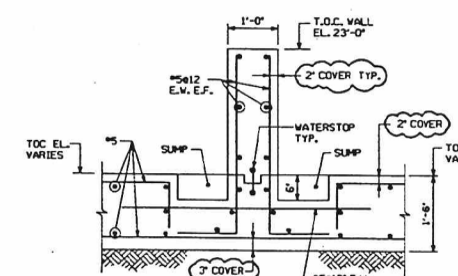
1. FOR GENERAL NOTES SEE DRAWING 520744-C-01.
2. ALL CONCRETE SHOWN HERE-IN SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. ALL REINFORCEMENT SHALL BE ACCORDANCE WITH ASTM 615, GRADE 60.
3. ALL CONCRETE REINFORCING ANCHOR BOLTS AND ATTACHMENTS ARE SUBJECT TO SPECIAL INSPECTION IN ACCORDANCE WITH UBC 94, CHAPTER 17. AS APPLICABLE.
4. FOUNDATION IS BASED ON AN ALLOWABLE SOIL BEARING OF 1 KIP PER SQUARE FOOT.
5. ALL FOUNDATIONS SHALL BE PLACED ON UNDISTURBED SOIL. ALL EXCAVATIONS FOR FOUNDATIONS SHALL BE INSPECTED AND APPROVED BY THE REGISTERED GEOTECHNICAL ENGINEER PRIOR TO CONCRETE PLACEMENT. THE GEOTECHNICAL ENGINEER SHALL CERTIFY THAT THE SOIL IS ADEQUATE TO ATTAIN THE DESIGN CAPACITY.
6. FOR UNDERGROUND PIPING REFER TO PIPING DRAWINGS FOR UNDERGROUND DUCT BANKS AND CONDUIT REFER TO ELECTRICAL DRAWINGS.
7. CONTRACTOR SHALL COORDINATE FOUNDATION CONSTRUCTION WITH EMBEDDED CONDUITS.
8. THE MISCELLANEOUS YARD FOUNDATIONS SHALL BE LOCATED ON SITE USING THE EQUIPMENT WORK POINT (WP) COORDINATES AS SHOWN ON THE MECHANICAL EQUIPMENT ARRANGEMENT DRAWINGS.
9. HIGHWAY GRATING SHALL BE WELDED CONSTRUCTION AND DESIGNED TO SUPPORT AN MS20 ASSHD. TRUCK LOAD. MAIN BEARING BARS SHALL BE 3/4 X 3/8 MINIMUM. ALL GRATING SHALL BE GALVANIZED AND HEAVY DUTY C16C 3/4 X 3/8 BY DKG BORDEN OR EQUAL. TOP OF GRATING ELEVATION 22'-0".



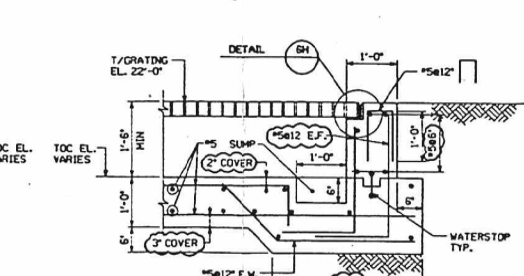
LOCATION PLAN  
N.T.S.



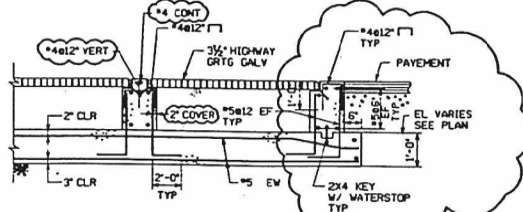
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SECTION 7D  
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SECTION 7F  
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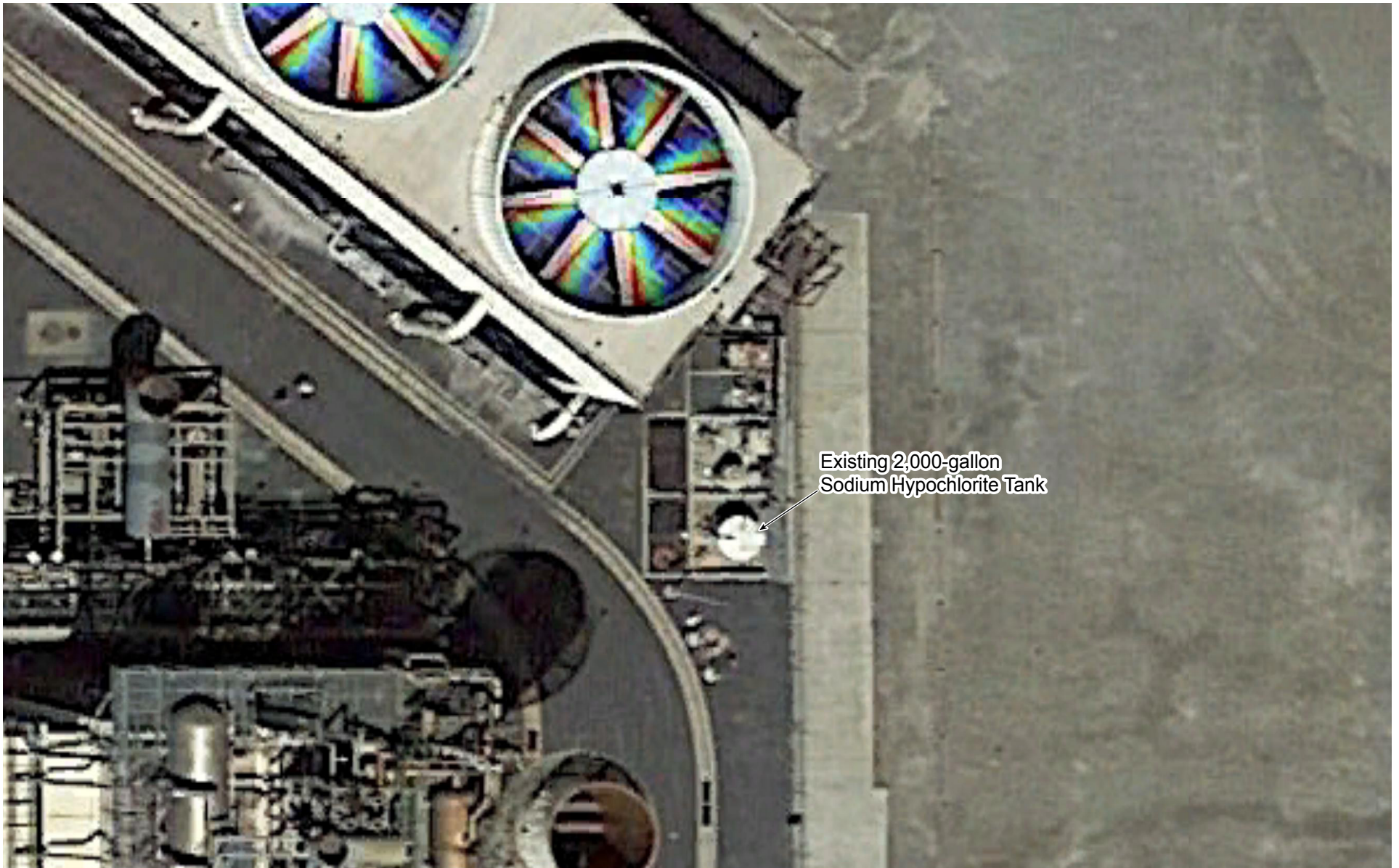
SECTION 7H  
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Figure DR2-1. Chemical Containment Plan  
SPA Campbell Cogeneration Project







Existing 2,000-gallon  
Sodium Hypochlorite Tank

Note: Locations are approximate.



0 10 20  
Approximate scale in feet

**Figure DR2-2. Chemical Containment Area**  
SPA Campbell Cogeneration Project

